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<table>
<tr><td colspan="3">Project title: Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems</td></tr>
<tr><td>Countries: Ecuador (Lead Country), Panama, Guatemala, Senegal, Morocco & Mauritania</td><td>Implementing Partner (GEF Executing Entity): Sustainable Fisheries Partnership (SFP)</td><td>Execution Modality: Civil Society (CSO)</td></tr>
<tr><td colspan="3">Contributing Outcome (UNSDCF/CPD, RPD, GPD): 4.1 Natural resources protected and managed to enhance sustainable productivity and livelihoods. 4.2 Public and private investment mechanisms mobilized for biodiversity, water, oceans, and climate solutions.</td></tr>
<tr><td colspan="2">UNDP Social and Environmental Screening Category: Substantial.</td><td>UNDP Gender Marker: GEN2.</td></tr>
<tr><td colspan="2">Quantum Award ID: 1400440</td><td>Quantum Project ID: 01004782</td></tr>
<tr><td colspan="2">UNDP PIMS ID number: 6591</td><td>GEF Project ID number: 11011</td></tr>
<tr><td colspan="3">LPAC meeting date: 20 February 2025</td></tr>
<tr><td colspan="3">Last possible date to submit to GEF: 22 September 2023</td></tr>
<tr><td colspan="3">Latest possible CEO endorsement date: December 2023</td></tr>
<tr><td colspan="3">Project duration in months: 60 months</td></tr>
<tr><td colspan="2">Planned start date: 1 September 2025</td><td>Planned completion date: 30 August 2030</td></tr>
<tr><td colspan="2">Expected date of Mid-Term Review (MTR) submission to the GEF: 1 September 2028</td><td>Expected date of Terminal evaluation (TE) submission to the GEF: 1 March 2030</td></tr>
<tr><td colspan="2">Expected Operational Closure Date: 30 May 2031</td><td>Expected Financial Closure Date: 30 November 2031</td></tr>
<tr><td colspan="3">Brief project description: The GMC2 project will aim to advance the transformation of the seafood market and to generate learning to be useful worldwide. The project contributes to confront the overexploitation of marine fishery resources, which is produced by three main causes: (1) the increasing global demand for seafood, (2) a deficient management of the fisheries that receive pressure from the markets, and (3) insufficient measures to protect key biodiversity elements of the marine environment (e.g., nurseries, breeding and feeding grounds, ETP species). The core of the project theory of change is that if the buyers integrate sustainability and ethical considerations into their demand for seafood, then the suppliers will be driven to comply with these market requirements and, therefore, they will implement improvements in their own operations and will encourage advances in the fisheries management framework like stronger fisheries governance and better conservation and</td></tr>
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management measures. These changes will improve fisheries production and the wellbeing of fishing communities that will, finally, contribute to have healthy marine ecosystems and sustainable livelihoods of fishing-dependent communities.
The project objective is "to mainstream ecological and social aspects of sustainability to foster sustainable fisheries production and improved wellbeing of coastal communities in support of emerging Blue Economies in the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems". The GMC2 project will intervene in 10 key seafood supply chains and eight Fishery Improvement Projects (FIPS). The target supply chains are small pelagic fish in Morocco, Mauritania and Senegal, octopus in Mauritania and Senegal, large pelagic fish in Guatemala, Panama and Ecuador, shrimps in Panama, and titi shrimp in Ecuador.
The project is organised into three components and 21 outcomes. The three components are:
Component 1 will support the promotion of demand for sustainable seafood products from the target supply chains in the CCLME and PACA.
Component 2 will support increasing the supply of seafood products that demonstrate (a) improved fisheries governance and stock health, (b) social responsibility, and (c) reduced bycatch and environmental impact from the target supply chains in the CCLME and PACA.
Component 3 will focus on (a) generating vital information to support decision making by the key stakeholders of the target supply chains (e.g., fishers, processors, traders, fisheries authorities), (b) documenting and disseminating the project learning worldwide, and (c) implementing project-level monitoring and evaluation in compliance with the GEF and UNDP requirements.
At the end of the intervention, it is expected that 1,417,500 t of seafood capture have improved management and that about 373,883 persons benefit from the project.

FINANCING PLAN	
GEF Trust Fund grant	USD 5,421,915
(1) Total Budget administered by UNDP	**USD 5,421,915**
(2) Total confirmed co-financing to this project not administered by UNDP	**USD 12,591,369**
(3) Grand-Total Project Financing (1)+(2)	**USD 18,013,284**

SIGNATURES:

Signature: *Signed Minutes from the Global LPAC attached, where all countries' assistants agree on moving forward with the signature of the ProDoc*	**Agreed by Government Development Coordination Authority**	**Date/Month/Year:**
Signature: Jim Cannon **Jim Cannon** - Executive Director from Sustainable Fisheries Partnership	**Agreed by Implementing Partner**	**Date/Month/Year:** 05 February 2026
Signature: DocuSigned by: 2F73EC1C896B47E... **Inka Mattila** - Resident Representative in Ecuador from the United Nations Development Programme	**Agreed by UNDP**	**Date/Month/Year:** 06-feb.-2026

DS VB DS MR

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Abbreviations

Acronym	English	French	Spanish
AMPEP	Mauritanian Association of Octopus Producers and Exporters	Association Mauritanienne the Producteurs et Exportateurs de Poulpe	Asociación Mauritana de Productores y Exportadores de Pulpo
ARAP	Aquatic Resources Authority of Panama	Autorité des ressources aquatiques du Panama	Autoridad de los Recursos Acuáticos de Panamá
ASOAMAN	Manta Shipowners Fishery Production Association	Association de la production halieutique des armateurs de Manta	Asociación de Producción Pesquera de Armadores de Manta
ATLAFCO	Ministerial Conference on Fisheries Cooperation Among African States Bordering the Atlantic Ocean	Conférence Ministérielle sur la Coopération Halieutique entre les Etats Africains Riverains de l'océan Atlantique	Conferencia Ministerial sobre Cooperación Pesquera entre Estados Africanos Ribereños del Océano Atlántico
BPPS NCE	Bureau for Policy and Programme Support - Nature, Climate and Energy (UNDP)	Bureau d'appui aux politiques et aux programmes - Nature, climat et énergie (PNUD)	Oficina de Apoyo a Políticas y Programas - Naturaleza, Clima y Energía (PNUD)
CAAP	Fisheries Management Support Commission (Mauritania)	Commission d'appui à l'aménagement des pêcheries (Mauritanie)	Comisión de Apoyo a la Gestión Pesquera (Mauritania)
CBD	Convention on Biological Diversity	Convention sur la diversité biologique	Convenio sobre la Diversidad Biológica
CCLME	Canary Current Large Marine Ecosystem	Grand écosystème marin du courant des Canaries	Gran Ecosistema Marino de la Corriente de Canarias
CCNADP	National Advisory Council for Fisheries Management and Development (Mauritania)	Conseil Consultatif National pour l'Aménagement et le Développement des Pêcheries (Mauritanie)	Consejo Asesor Nacional para la Gestión y el Desarrollo Pesquero (Mauritania)
CECAF	Committee for the Eastern Central Atlantic Fisheries	Comité des Pêches pour l'Atlantique Centre-Est	Comité de Pesca del Atlántico Centro-Este
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora	Convention sur le commerce international des espèces de faune et de flore sauvages menacées d'extinction	Convención sobre el Comercio Internacional de Especies Amenazadas de Fauna y Flora Silvestres
CLPA	Local Artisanal Fishing Council (Senegal)	Conseil Local de Pêche Artisanale (Sénégal)	Consejo Local de Pesca Artesanal (Senegal)
CNAPP	National Support Commission for the Development of Fisheries (Senegal)	Commission nationale d'Appui à l'Aménagement des Pêcheries (Sénégal)	Comisión Nacional de Apoyo al Desarrollo Pesquero (Senegal)
CNC-PP	National consultation commission for the management of small pelagics (Mauritania)	Commission nationale de concertation pour la gestion des petits pélagiques (Mauritanie)	Comisión nacional de consulta para la gestión de pequeños pelágicos (Mauritania)
CNPCM	National Advisory Council for Maritime Fisheries (Senegal)	Conseil National Consultatif des Pêches Maritimes (Sénégal)	Consejo Consultivo Nacional de Pesca Marítima (Senegal)

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Acronym	English	French	Spanish
CONIPAS	National Interprofessional Fisheries Council of Senegal	Conseil National Interprofessionnel de la Pêche au Sénégal	Consejo Nacional Interprofesional de Pesca de Senegal
COREMAHI	Regional Committee of Producers and Processors of mahi	Comité régional des producteurs et transformateurs de mahi	Comité Regional de productores y procesadores de mahi
COVID-19	Coronavirus Disease 2019	Maladie du coronavirus 2019	Enfermedad del coronavirus 2019
CRODT	Dakar-Thiaroye Oceanographic Research Centre	Centre de Recherches Océanographiques de Dakar-Thiaroye	Centro de Investigaciones Oceanográficas Dakar-Thiaroye
CSO	Civil society organisation	Organisation de la société civile	Organización de la sociedad civil
DGERH	Directorate General for the Exploitation of Fishery Resources (Mauritania)	Direction Générale d'Exploitation des Ressources Halieutiques (Mauritanie)	Dirección General de Explotación de los Recursos Pesqueros (Mauritania)
DIPESCA	Directorate of regulations for fishing and aquaculture (Guatemala)	Direction de la réglementation de la pêche et de l'aquaculture (Guatemala)	Dirección de normatividad de la pesca y acuicultura (Guatemala)
DOA	Delegation of Authority	Délégation de pouvoirs	Delegación de autoridad
DPM-M	Department of Maritime Fisheries (Morocco)	Département de la pêche maritime (Maroc)	Departamento de Pesca Marítima (Marruecos)
DPM-S	Directorate of Maritime Fisheries (Senegal)	Direction des Pêches maritimes (Sénégal)	Dirección de Pesca Marítima (Senegal)
ESMF	Environmental and Social Management Framework	Cadre de gestion environnementale et sociale	Marco de Gestión Ambiental y Social
ETP species	Endangered, Threatened and Protected species	Espèces en voie de disparition, menacées et protégées	Especies en Peligro, Amenazadas y Protegidas
EU	European Union	L'Union européenne	Unión Europea
FAF	Support Fund for the Operation of CLPAs	Fond d'appui au Fonctionnement des CLPA	Fondo de Apoyo al Funcionamiento de las CLPA
FAO	Food and Agriculture Organization of the United Nations	Organisation des Nations Unies pour l'Alimentation et l'Agriculture	Organización de las Naciones Unidas para la Agricultura y la Alimentación
FENETRANS	National Federation of Women Processors of Senegal	Fédération Nationale des Femmes Transformatrices du Sénégal	Federación Nacional de Mujeres Transformadoras de Senegal
FIP	Fishery improvement project	Projet d'amélioration de la pêche	Proyecto de mejora pesquera
FiTI	Fisheries Transparency Initiative	Initiative pour la transparence des pêches	Iniciativa de Transparencia Pesquera
GAP	Gender Action Plan	Plan d'action sur le genre	Plan de Acción de Género
GDI	Gender Development Index	Indice de développement du genre	Índice de desarrollo de género

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Acronym	English	French	Spanish
GDP	Gross Domestic Product	Produit intérieur brut	Producto Interno Bruto
GEF	Global Environment Facility	Fonds pour l'Environnement mondial	Fondo para el medio ambiente global
GEF OFP	GEF Operational Focal Point	Point Focal opérationnel du GEF	Punto Focal Operativo del GEF
GEFSEC	Global Environment Facility Secretariat	Secrétariat du Fonds pour l'environnement mondial	Secretaría del Fondo para el Medio Ambiente Mundial
GII	Gender Inequality Index	Indice d'inégalité entre les sexes	Índice de desigualdad de género
GMSR	Global mahi Supply Chain Roundtable	Table ronde mondiale sur la chaîne d'approvisionnement du mahi	Mesa redonda global de la cadena de suministro de mahi
GOSR	Global octopus Supply Chain Roundtable	Table ronde mondiale sur la chaîne d'approvisionnement du poulpe	Mesa redonda global de la cadena de suministro del pulpo
GRMI	Global Roundtable on marine ingredients	Table ronde mondiale sur les ingrédients marins	Mesa redonda mundial sobre ingredientes marinos
GTIEG	Regional Working Group for Gender Equality and Equity in Fisheries and Aquaculture of OSPESCA	Groupe de travail régional de l'OSPESCA sur l'égalité et l'équité entre les sexes dans la pêche et l'aquaculture	Grupo de Trabajo Regional de Igualdad y Equidad de Género en la Pesca y la Acuicultura de OSPESCA
IATTC	Inter-American Tropical Tuna Commission	Commission interaméricaine du thon tropical	Comisión Interamericana del Atún Tropical
ILO	International Labour Organisation	Organisation Internationale du Travail	Organización Internacional del Trabajo
IMROP	Mauritanian Institute of Oceanographic and Fisheries Research	Institut Mauritanien de Recherche Océanographique et des Pêches	Instituto Mauritano de Investigaciones Oceanográficas y Pesqueras
INRH	National Institute of Fisheries Research (Morocco)	Institut National de Recherche Halieutique (Maroc)	Instituto Nacional de Investigaciones Pesqueras (Marruecos)
IPIAP	Public Institute for Aquaculture and Fisheries Research	Institut public de recherche sur l'aquaculture et la pêche	Instituto Público de Investigación de Acuicultura y Pesca
LAP	Livelihood Action Plan	Plan d'action pour les moyens de subsistance	Plan de Acción de Medios de Vida
M&E	Monitoring and evaluation	Contrôle et évaluation	Monitoreo y evaluación
MSC	Marine Stewardship Council	Marine Stewardship Council	Marine Stewardship Council
MTR	Mid-term review	Examen à mi-parcours	Revisión intermedia
NDF	Non-Detriment Finding Report	Avis de Commerce Non Préjudiciable	Dictamen de Extracción No Perjudicial

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Acronym	English	French	Spanish
OSPESCA	Organization of the Fisheries and Aquaculture Sector of the Central American Isthmus	Organisation du secteur de la pêche et de l'aquaculture de l'isthme centraméricain	Organización del Sector Pesquero y Acuícola del Istmo Centroamericano
PACA	Pacific Central American Coastal Large Marine Ecosystem	Grand écosystème marin côtier du Pacifique d'Amérique centrale	Gran Ecosistema Marino Costero del Pacífico Centroamericano
PAN	National Action Plan	Plan d'action national	Plan de Acción Nacional
PAN condrictios	National Action Plan for the Management and Conservation of Sharks, Rays and Chimaeras of Guatemala	Plan d'action national pour la gestion et la conservation des requins, raies et chimères du Guatemala	Plan de Acción Nacional para la Ordenación y Conservación de Tiburones, Rayas y Quimeras de Guatemala
PAP-PP	Management plan for small pelagics in the Mauritanian ZEE	Plan d'aménagement des petits pélagiques dans la ZEE Mauritanienne	Plan de gestión de pequeños pelágicos en la ZEE de Mauritania
PAT-Ec	National action plan for the conservation and management of sharks in Ecuador	Plan d'action national pour la conservation et la gestion des requins en Équateur	Plan de acción nacional para la conservación y el manejo de tiburones de Ecuador
PIF	Project Identification Form	Formulaire d'identification de projet	Formulario de identificación del proyecto
PIR	GEF Project Implementation Report	Rapport de mise en œuvre du projet GEF	Informe de implementación del proyecto GEF
PMU	Project management unit	Unité de gestion de projet	Unidad de gestión del proyecto
POPP	UNDP Programme and Operations Policies and Procedures	Politiques et procédures relatives aux programmes et aux opérations du PNUD	Procedimientos y políticas de operaciones y programas del PNUD
PPG	Project Preparation Grant	Subvention pour la préparation de projet	Subvención para la preparación del proyecto
PRODOC	Project document	Document de projet	Documento de proyecto
PTA	Principal Technical Advisor (UNDP)	Conseiller technique principal (PNUD)	Asesor Técnico Principal (PNUD)
RFMO	Regional fisheries management organisation	Organisation régionale de gestion des pêches	Organización regional de ordenación pesquera
RIA	Regulatory Impact Assessment	Évaluation de l'impact de la réglementation	Evaluación de impacto regulatorio
RTA	Regional Technical Advisor (UNDP)	Conseiller technique régional (PNUD)	Asesor Técnico Regional (PNUD)
SAC	Scientific Advisory Committee of IATTC	Comité consultatif scientifique de l'IATTC	Comité Científico Asesor de la IATTC
SAP	Strategic Action Programme	Programme d'action stratégique	Programa de Acción Estratégica
SCI	Undersecretary of Quality and Safety (Ecuador)	Sous-secrétaire à la qualité et à la sécurité (Équateur)	Subsecretaría de Calidad e Inocuidad (Ecuador)
SCIP	Supply Chain Improvement Project	Projet d'amélioration de la chaîne d'approvisionnement	Proyecto de mejora de la cadena de suministro

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Acronym	English	French	Spanish
SEP	Stakeholder Engagement Plan	Plan d'engagement des parties prenantes	Plan de participación de las partes interesadas
SES	UNDP Social and Environmental Standards	Normes sociales et environnementales du PNUD	Estándares Sociales y Ambientales del PNUD
SESP	UNDP Social and Environmental Screening Procedure	Procédure de sélection sociale et environnementale du PNUD	Procedimiento de evaluación social y ambiental del PNUD
SIAP	Integrated Aquaculture and Fisheries System of Ecuador	Système intégré d'aquaculture et de pêche de l'Équateur	Sistema Integrado de Acuacultura y Pesca del Ecuador
SPRA	Social performance risk assessment (for FIPs)	Évaluation des risques liés à la performance sociale (pour les FIPs)	Evaluación de riesgos de desempeño social (para FIPs)
SRFC	Sub-Regional Fisheries Commission	Commission Sous Régionale des pêches	Comisión Subregional de Pesca
SRP	Undersecretary of Fisheries Resources (Ecuador)	Sous-secrétaire aux ressources halieutiques (Équateur)	Subsecretaria de Recursos Pesqueros (Ecuador)
STAP	GEF Scientific Technical Advisory Panel	Groupe consultatif technique scientifique du GEF	Panel Asesor Técnico Científico del GEF
SWP	Social workplan (for FIPs)	Plan de travail social (pour les FIPs)	Plan de trabajo social (para FIPs)
t	Metric tonnes (1,000 kg)	Tonnes métriques (1000 kg)	Toneladas métricas (1000 kg)
TAC	Total allowable catch	Total autorisé des captures	Captura total permitida
TDA	Transboundary Diagnostic Analysis	Analyse diagnostique transfrontalière	Análisis Diagnóstico Transfronterizo
TE	Terminal evaluation	Évaluation terminale	Evaluación final
TOR	Terms of reference	Termes de référence	Términos de referencia
UNDP	United Nations Development Programme	Programme de développement des Nations Unies	Programa de las Naciones Unidas para el Desarrollo
USD	United States dollar	Dollar américain	Dólar de los Estados Unidos

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DEVELOPMENT CHALLENGE

Overview

1. A third of marine fish stocks are fished at biologically unsustainable levels and increased demand in the following decades will continue to pressure for more extraction. Marine capture fisheries have a significant worldwide role by providing nutritious food, economic income, and employment. Seafood is crucial for food and nutrition security, particularly in low-income and developing economies (FAO, 2020).
2. The official figures indicate that in the past decades, the provision of marine food and ingredients has been stable. Since 1990 the annual global marine capture has fluctuated around 80 million tonnes (Figure 1). Between 2016 and 2018 it increased from 78.2 to 84.4 million tonnes (FAO, 2000; FAO, 2018; FAO, 2020). However, catch reconstruction shows a different trend, with a peak capture in 1996 (ca., 124 million tonnes) followed by a continuous decline to reach ca., 109.3 million tonnes in 2018 (Pauly & Zeller, 2016; Pauly et al., 2020) (Figure 3). Catch reconstruction reveals that between 1996 and 2018 the capture from industrial fisheries declined from 99.1 10^6 t to 80.9 10^6 t, while the capture from artisanal fisheries increased from 21.1 10^6 t to 25.0 10^6 t.
3. Despite important advances in improving fisheries management worldwide it was not possible to achieve by 2020 the target 14.4 of the Sustainable Development Goal 14. The percentage of fish stocks that are within biologically sustainable levels has continuously decreased since 1974 (Figure 2) and pressure on marine stocks is likely to further increase in the coming decades. The demand and prices of seafood have continuously risen since the 1990s and this trend is likely to continue during the following decade, considering that both population and purchasing capacity are expected to continue to increase. OECD & FAO (2020) estimate that nominal prices for capture fish, fishmeal and fish oil will increase during the 2020s. Similarly apparent fish consumption is expected to increase from 20.4 kg to 21.4 kg per person per year by 2029. Part of the projected increased demand will be caused by the generalised recommendation to substitute the consumption of red and processed meat for seafood because of its health and nutritious benefits as well as the reduction in dietary-related greenhouse gas emissions (Scarborough et al., 2014; Thomsen et al., 2018; Thomsen et al., 2019). For example, the U.S. dietary guidelines 2020-2025 recommend increasing the consumption of seafood to at least 8 ounces per week and introducing it to children when they are around six months old (USDA & HHS, 2020). The demand from international markets is a key driver. For example, in Europe and the USA more than half of their demand is covered with imports (Guillen et al., 2019). Currently, China is the largest seafood market and the leading global seafood exporter (de Jong, 2017; de Jong, 2019). However, by 2030 it is likely that China will have a seafood demand gap that will need to be covered with imports (Crona et al., 2020). All this will continue to press for more extraction from marine stocks and will put at risk food security in developing economies. In the main export markets (e.g., European Union, USA) seafood has become a culinary speciality. In contrast, seafood is a basic staple food in developing economies. Future seafood price increases will further limit access for poor and vulnerable local consumers.

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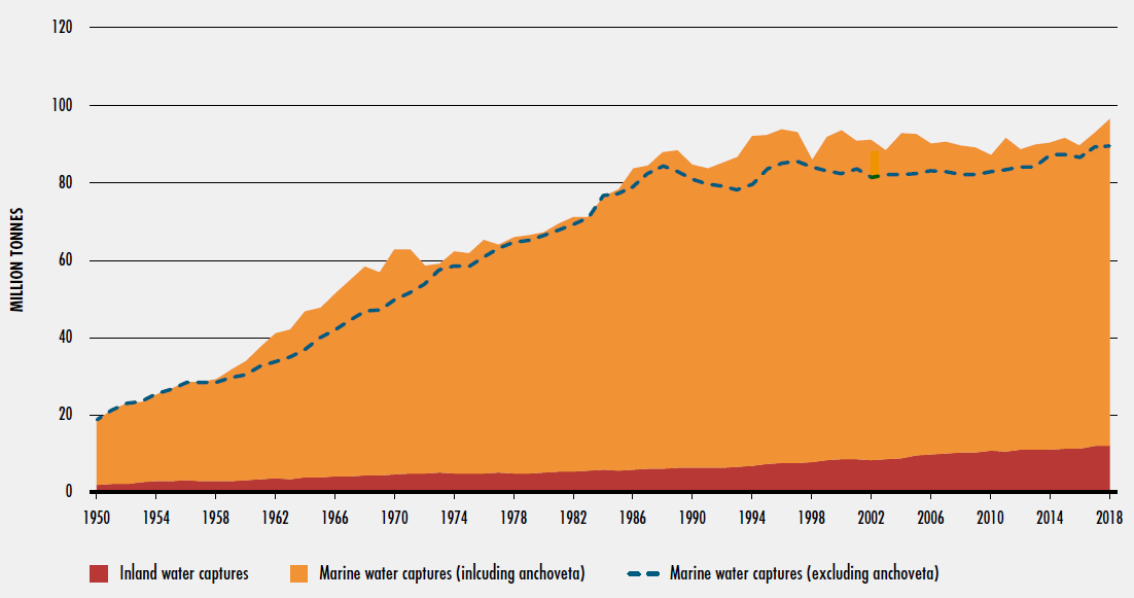


Figure 1. Trend in global captures (FAO, 2020).

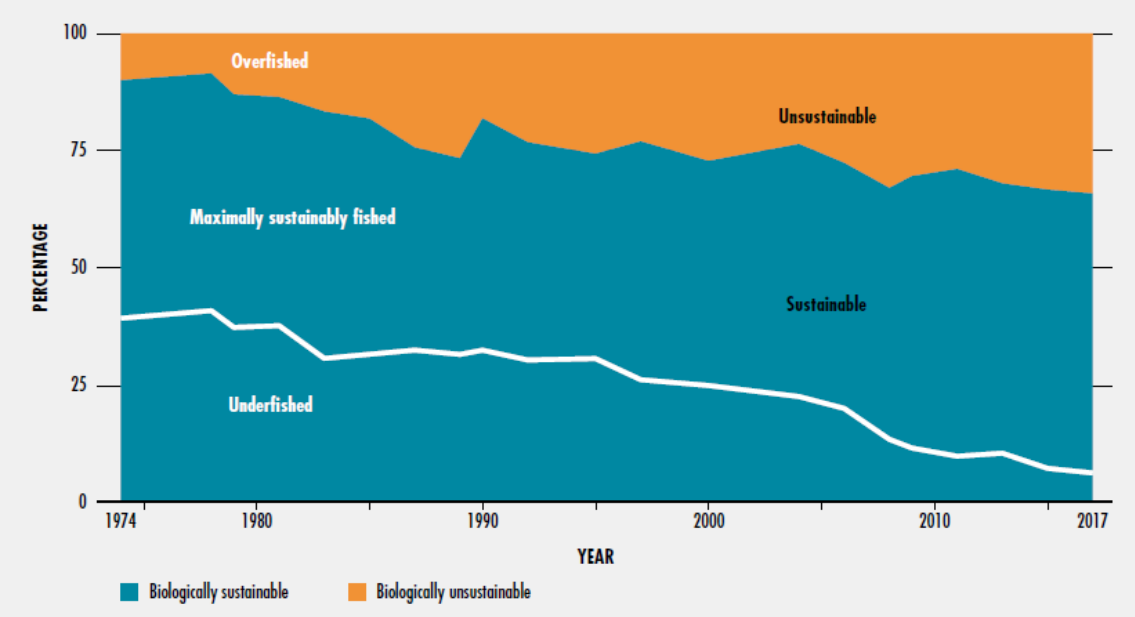


Figure 2. Global trend in the state of the world´s marine fish stocks between 1974 and 2017 (FAO. 2020).

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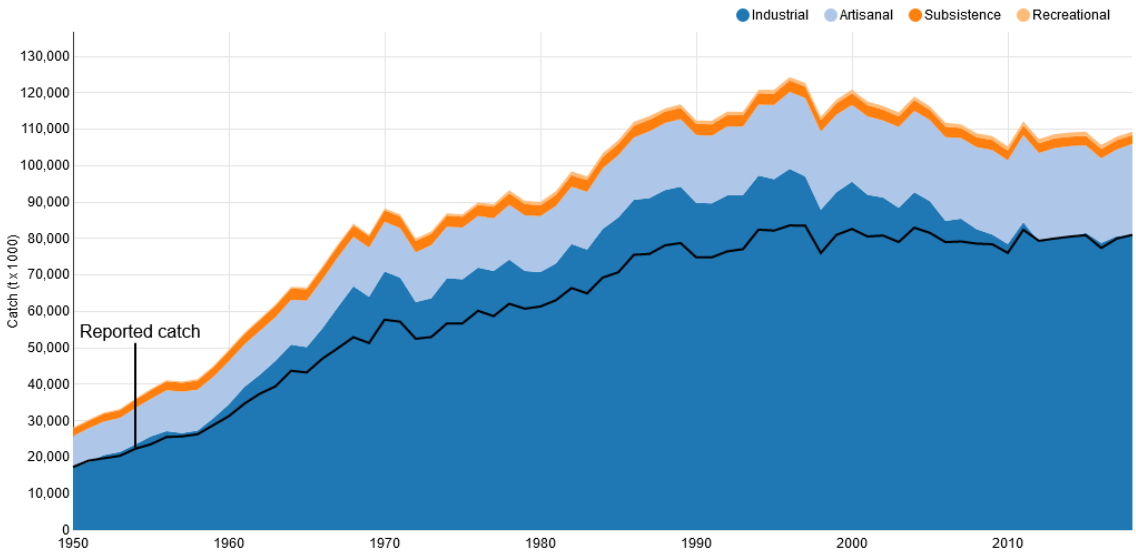


Figure 3. Catch reconstruction of marine global capture fisheries (Pauly et al., 2020).

4. Large marine ecosystems (LMEs) are extensive areas of ocean space characterised by distinct bathymetry, hydrography, productivity, and trophic relationships. LMEs encompass coastal areas out to the seaward boundary of the continental shelves and the outer margins of coastal currents (Sherman & Alexander, 1986; Sherman, 1991; Sherman, 2001). Pauly et al., (2008) estimated that, in 1968, about 91% of the world marine capture was produced within the 66 LMEs of the world. This figure declined to about 76% in 1990 (Pauly et al., 2008). In 2018, about 97% of the global catch was caught within the Exclusive Economic Zones (Sea Around Us, 2020).
5. The Canary Current LME (CCLME) is located in northwest Africa. It covers an area of 112,043,900 ha and 19,543,900 ha of continental shelf[1]. It is bordered by (from North to South): Morocco, Spain, Mauritania, Senegal, Cabo Verde, Gambia, and Guinea-Bissau.
6. The CCLME is a productive LME (class 3[2]); the average primary productivity is 323 g C m^{-2} y^{-1}. This productivity is caused by the Canary Current upwelling system that includes coastal upwellings, filaments and eddies (Johnsons & Stevens, 2000; Kämpf & Chapman, 2016).
7. The CCLME sustain important fisheries. The LME's reported annual catch reached a peak of about 7.7 million tonnes in 1977, fluctuating with a declining trend to reach about 4.4 million tonnes in 2018 (Figure 4). The industrial sector captures most of the catch. However, the capture from the artisanal sector has steadily increased over the past decades.
8. Small pelagic fish are the most abundant fisheries resources, they represent about 75% of the catches (Failler, 2020). Most stocks are shared by two or more countries and include species with an affinity for temperate waters (like the sardine, the chub mackerel, and the Atlantic horse mackerel) and species that prefer tropical waters (like the sardinella and the Cunene horse mackerel) (Braham & Corten, 2015). The main species are the sardine (*Sardina pilchardus*), the round and flat sardinellas (*Sardinella aurita* and *Sardinella maderensis*), the bonga (*Ethmalosa fimbriata*), the Cunene and Atlantic horse mackerels (*Trachurus trecae* and *T. trachurus*), the false shad (*Caranx rhonchus*), the anchovy (*Engraulis encrasicolus*) and the chub mackerel (*Scomber japonicus*).
9. The cephalopod fisheries are also important in the CCLME. The main species captured are the common octopus (*Octopus vulgaris*), the cuttlefish (*Sepia officinalis, S. hierredda* and *S. bertheloti*) and the squid (*Loligo* spp.) (Figure 5). The fishery for common octopus off northwest Africa is the largest world octopus fishery for a single species in the world. Octopus are captured by industrial and artisanal fleets and are mainly harvested in (from north to south) Morocco, Mauritania, and Senegal (Jereb et al., 2016; Sauer et al., 2021).

[1] Source: www.seaaroundus.org.
[2] The productivity range was grouped into five classes, where 1 is the lowest and 5 is the highest (IOC-UNESCO & UNEP, 2016).

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10. The conditions of the CCLME are affected by the Atlantic Multidecadal Oscillation (AMO) which drive shifts in ecological boundaries, primary production levels and species abundance (Nye et al., 2014). For example, the warm and cool phases of the AMO affect the abundance and migration patterns of small pelagic fish (Alheit et al., 2014).
11. IOC-UNESCO & UNEP (2015a) estimated that, in 2010, about 33.7 million people lived in the coastal area of the CCLME. It was estimated that the coastal population would more than double by 2100. The Human Development Index (HDI), average for the period 2009-2013, was "very low" (0.5834). The Transboundary Waters Assessment Programme (TWAP) estimated that the CCLME overall risk factor is "very high"[3], based on a combined measure of the HDI and the averaged indicators for (i) fish & fisheries and (ii) pollution & ecosystem health modules (IOC-UNESCO & UNEP, 2016).
12. The GEF sponsored the preparation of a Transboundary Diagnostic Analysis (TDA) (CCLME Project, 2015a) and a Strategic Action Programme (SAP) (CCLME Project, 2015b) for the Canary Current LME (GEF ID 1909[4]). An on-going FAO project (GEF ID 9940) is supporting the development of the regional governance mechanism for SAP implementation.

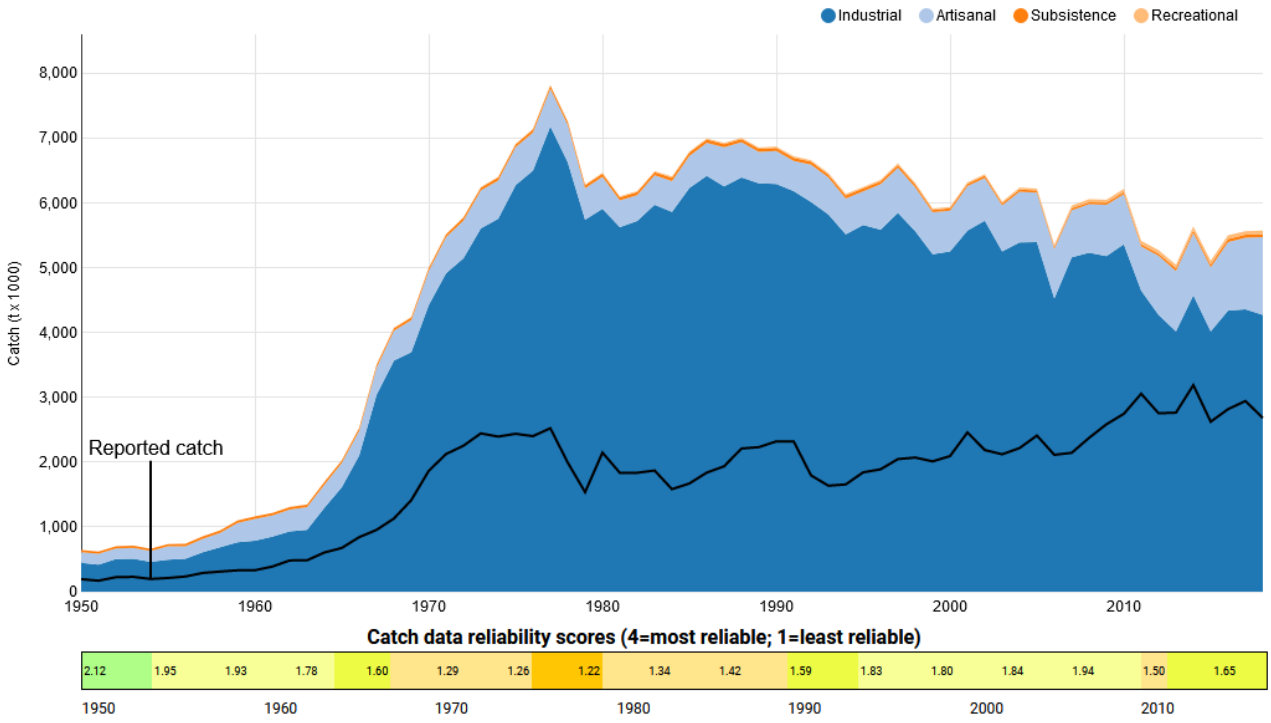


Figure 4. Total reported catch (line) and estimates of actual catch (reconstructed catch) by fishing sector from 1950 until 2018 in the Canary Current Large Marine Ecosystem. Source: Sea Around Us.

[3] Using a five-point scale: very low, low, medium, high, and very high.
[4] The project was implemented by FAO between 2010 and 2017. For more information see www.fao.org/gef/projects/detail/es/c/1056948/

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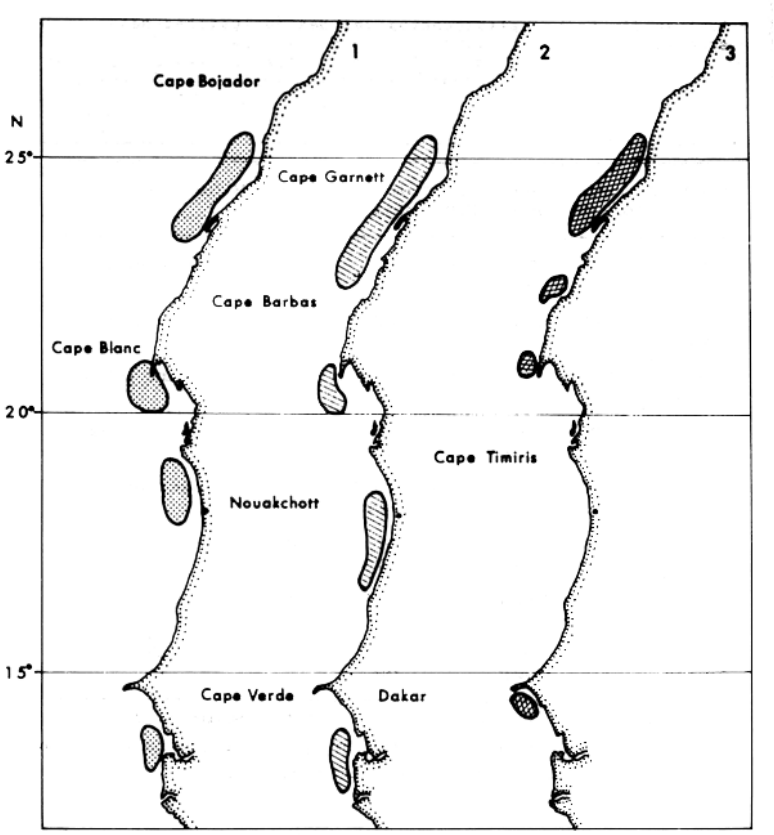


Figure 5. Main cephalopod fishing grounds between Morocco and Senegal. 1 = Octopus. 2 = Cuttlefish. 3 = Squid. Source: (FAO 1985)

13. The Pacific Central American Coastal Large Marine Ecosystem (PACA) extends from southern Mexico[5] (about 22° north) to Ecuador, encompassing a surface of ca., 199,665,900 ha of coastal and marine habitats (IOC-UNESCO & UNEP, 2015), and 20,853,000 ha of continental shelf[6] (ca., 10.4% of the total area). Nine countries border PACA (from north to south): Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panamá, Colombia, and Ecuador.
14. PACA is a very productive LME (class 4[2]); the average primary productivity is 407 g C m-2 y-1. This high primary production is caused by coastal upwelling. In Central America, upwelling develops as a result of locally intense jets of wind blowing from high pressure systems in the Gulf of Mexico and the Caribbean towards the Pacific Ocean; wind jets flow through four passages (i) the isthmus of Tehuantepec, (ii) the Gulf of Fonseca, (iii) the Lake Nicaragua, and (iv) the Panama Canal (Barton et al., 1993; Trasviña et al., 1995; Martínez Díaz de León et al., 1999; Ballestero, 2003; Belkin et al., 2003; Heileman, 2009).
15. PACA sustain important fisheries. The reconstructed annual catch shows a peak of about 2.9 million tonnes in 1985 followed by a fluctuating downward trend afterwards to reach about 1.3 million tonnes in 2018 (Figure 6). About 62% of the capture come from the industrial sector. However, the capture from the artisanal sector has greatly increased over the past decades.
16. The most conspicuous fisheries are small pelagic fish, tunas, and shrimp. In 2018, about a third of the total capture was small pelagic fish like *Sardinops sagax, Opisthonema* spp., *Engraulis ringens*, *Cetengraulis mysticetus* and *Scomber japonicus*. Tunas are a major fishery in the eastern Pacific Ocean (EPO), most of the capture is done by industrial purse-

[5] Includes the Mexican Pacific Transition and Middle American Pacific regions (Wilkinson et al., 2009). It roughly starts in the border between the States of Sinaloa and Nayarit.
[6] Source: http://www.seaaroundus.org

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seine and longline vessels in oceanic areas, but there is also coastal capture by artisanal fleets, a few pole-and-line boats, and sport fishers.

17. In 2010, the total catch of the three main tuna species in the EPO was 510,371 t, increasing to 681,488 t in 2015 (IATTC, 2016). The main fleets and processing capacity are based in Ecuador and Mexico. The tuna fleet also capture billfishes, mainly swordfish (Xiphias gladius) and blue marlin (Makaira nigricans). In 2014, the total capture of billfishes was 34,899 t; 80.1% of this was captured by the longline fleet (IATTC, 2016).
18. Large pelagic fish (LPF) are highly migratory species which are captured by artisanal fleets, industrial longline and sport fishers. There is a major commercial artisanal fishery for LPF that capture mahi mahi (*Coryphaena hippurus*, locally called dorado), billfishes and tunas (*Thunnus albacares* and *Thunnus obesus*) using longline and gillnets. The artisanal boats operate in coastal areas and the open ocean. Ecuador has an oceanic artisanal fleet that operates as far as 100°W (west of the Galapagos archipelago) and 15°S. A key component of the bycatch of these fisheries are sharks, mainly the blue shark (*Prionace glauca*), the thresher shark (*Alopias pelagicus*), the shorfin mako (*Isurus oxyrinchus*) and the smooth hammerhead shark (*Sphyrna zygaena*). Some of the captured sharks are "endangered, threatened or protected species" (ETP species) like the silky shark (*Carcharhinus falciformis*), the scalloped hammerhead shark (*Sphyrna lewini*), the great hammerhead shark (*Sphyrna mokarran*), the smooth hammerhead shark and all thresher sharks (*Alopias* spp.) that are listed in Appendix II of CITES, and the shortfin mako that is listed as "Endangered" in the IUCN Red List (Rigby et al., 2019).
19. On the other hand, LPF are valuable resources for the sport fishing industry, mainly from Mexico to Panama. Mexico has reserved mahi mahi, marlins, sailfish (*Istiophorus platypterus*), and swordfish for sport fisheries within the first 50 miles offshore. Guatemala reserves the sailfish only for sport fisheries. Similarly, Nicaragua reserve marlins and sailfish only for sport fisheries. Costa Rica declared marlins and sailfish as species of interest for sport fishing, and El Salvador declared marlins, sailfish, swordfish, mahi mahi, and tunas as objects for sport fishing.
20. Sport fisheries for billfishes and tuna can generate very high value for the local economies. In Costa Rica, sport fishing contributes more than commercial fisheries to the gross domestic product (Soto, 2010). In Panama, sport fishing generated USD97 million in 2011 (Southwick et al., 2013). Martin et al., (2016) estimated that the oceanic Eastern Tropical Pacific (excluding the continental platform) produce about USD2.7 billion year-1 in capture fisheries (10 most commercially fished species) and USD 1.6 billion year-1 in sport fisheries (three popular destinations).
21. The shrimp fisheries are important in all PACA countries. The industrial and artisanal fisheries are old long stablished operations that generate important contributions to coastal communities in terms of direct and indirect employment, income, and food security.
22. The PACA LME is frequently affected by El Niño Southern Oscillation (ENSO) events. El Niño produce intense warming of sea surface temperature in the Panama bight and northern South America, intense rain in Ecuador and Peru, and severe drought in Mexico and Central America. ENSO conditions have strong impacts in the biodiversity, society, and economy of the entire region. For example, the 1997 – 1998 El Niño, one of the strongest in record, produced USD7.5 billion in losses in five Andean countries (CAF, 2000a; CAF, 2000b; OPS, 2000).
23. IOC-UNESCO & UNEP (2015b) estimated that, in 2010, about 50.3 million people lived in PACA´s coastal area. It was estimated that the coastal population would almost double by 2100. The HDI, average for the period 2009-2013, was "low" (0.5834). The Transboundary Waters Assessment Programme found the PACA overall risk factor is "high"3 (IOC-UNESCO & UNEP, 2016).
24. A new five-year GEF project will contribute to the preparation of a TDA and a SAP for the PACA LME (GEF ID 10076). The project will start implementation in 2022, having UNDP as the GEF agency.

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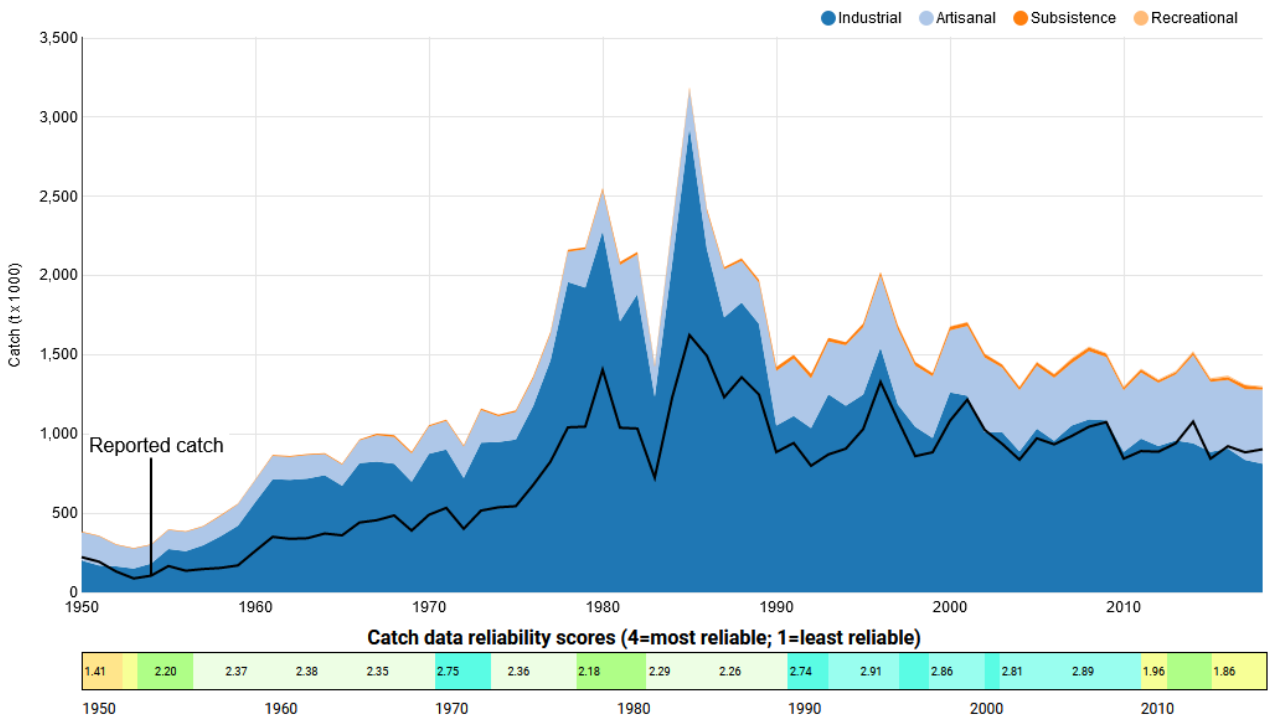


Figure 6. Total reported catch (line) and estimates of actual catch (reconstructed catch) by fishing sector from 1950 until 2018 in the Pacific Central American Coastal Large Marine Ecosystem. Source: Sea Around Us.

Global environmental problems, root causes and barriers to be addressed.

25. Overexploitation of marine fisheries is a major global issue and a key driver of changes in the marine environment, affecting both biodiversity and ecosystem services (Balvanera et al., 2019). Fisheries have changed the trophic structure of ecosystems and disturbed predator – prey relationships (Pauly et al., 1998; Jackson et al., 2001; Pauly & Palomares, 2005; Pauly et al., 2005). In addition, some fisheries affect non-target species by destroying habitats and capturing organisms that have no commercial use (e.g., sponges, marine worms), including species with high conservation value and endangered species such as sharks, sea turtles, and sea birds. Also, strong fishing pressure can cause the fish to alter their genetic composition and life-history traits (this is called fisheries-induced evolution) with consequences in the marine ecosystems and the fisheries (Kuparien & Hutchings, 2012; Eikeset et al., 2013; Belgrano & Fowler, 2013).
26. The global impact of fisheries on marine biodiversity is vast. For example, (1) Kroodsma et al., (2018) estimated that industrial fishing vessels operate in about 55% of the global oceans, (2) Tickler et al., (2018) reported that subsidised distant water fishing fleets operate in about 90% of the world oceans, and (3) Dulvy et al., (2021) estimated that about a third of chondrichthyan fish species are threatened by overfishing. In 2017, 34.2% of world fish stocks were overfished and 59.6% of stocks were fully fished (FAO, 2020). Human dependence on marine resource for food and income is high, especially in developing countries. Therefore, fisheries collapse is a serious threat for both biodiversity and society.
27. Overexploitation of fishery resources is caused by several interacting factors, including among others, excessive fishing pressure, open access to fishery resources, destructive fishing practices, increased demand for seafood, insufficient scientific knowledge, lack of awareness by fishers and consumers, harmful subsidies, and insufficient enforcement (UNEP, 2006; MARIBUS, 2010).
28. This project specifically focuses on one of these factors, “the demand for seafood” as a driver for overexploitation of marine resources. The harvest of marine seafood has reached a plateau, but the global demand continues to increase. According to the reported catch this plateau is about 80 million tonnes per year, however the reconstructed catch estimated that the global catch has been fluctuating around 105 million tonnes per year during the past decade (Figure 3).

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29. The underlying causes of the increase in seafood demand are many, among them (i) the expansion of the world population, (ii) an increased income in developing countries and emerging economies, (iii) increased urbanization and the associated demand for value-added nutritious products, and (iv) larger international trade.
30. The growing demand for seafood puts pressure on the entire value chain and therefore fishers increase the harvest of valuable resources (Figure 7). Most of the demand comes from developed countries, but also from some developing countries and upper middle-income economies like China, which have high purchasing power and cannot supply their demand with local sources. Export-oriented commodities (e.g., octopus, tuna, shark fins) are attractive because they command a higher price. However, there are seafood products with high value and demand in the local markets (e.g., shellfish, whitefish). The access to the fishery resources is regulated by national fisheries authorities, and by Regional Fisheries Management Organisations (RMFOs) in the case of shared stocks or highly migratory species like tunas. However, high prices and increased demand, coupled with insufficient conservation and management measures and ineffective control, can motivate overcapacity, illegal fishing, use of destructive fishing gear and practices, and seafood fraud.
31. There are a number of initiatives and tools to motivate that the demand focus on seafood from sustainable sources. In addition to consumer education and awareness (e.g., sustainable seafood guides), industry engagement, certification, ecolabelling and fisheries improvement projects[7] (FIPs) have shown promising results (Figure 7). However, despite interest from major buyers and members of the fishing industry, the amount of seafood from sustainable sources is still a small fraction of the total supply. A proxy is the Marine Stewardship Council[8] (MSC) certified landings. In 2012, this was 6.5 million tonnes equivalent to about 8% of the marine capture in the same year (MSC, 2013; FAO, 2014). In 2021, 14% of the marine capture was MSC certified (MSC, 2021).

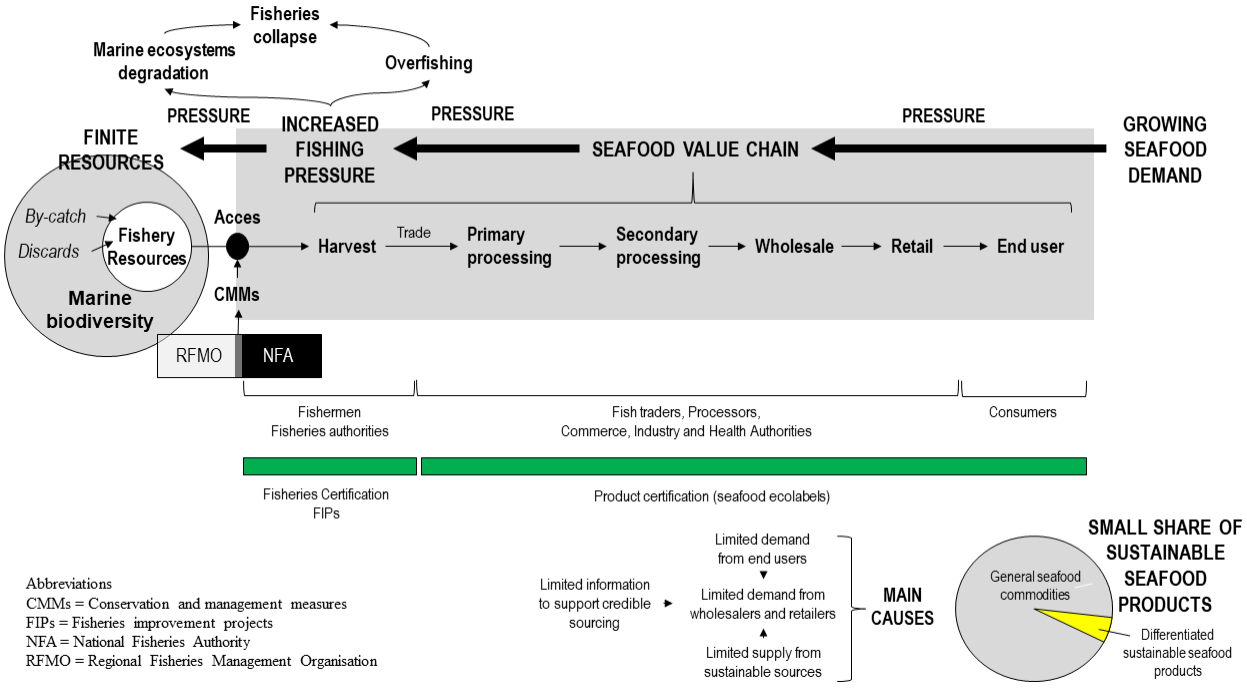


Figure 7. Effect of growing seafood demand on marine fisheries and biodiversity.

[7] The Conservation Alliance for Seafood Solutions define FIPs as follows: A fishery improvement project is a multi-stakeholder effort to address environmental challenges in a fishery. These projects utilize the power of the private sector to incentivize positive changes toward sustainability in the fishery and seek to make these changes endure through policy change (CASS, 2021). The Marine Stewardship Council define FIPs as follows: Fishery Improvement Projects (FIPs) are multi-stakeholder initiatives that aim to help fisheries work towards sustainability.

[8] The Marine Stewardship Council is a third-party certification system established in 1997. It is the largest seafood certification scheme, and its standard is used to guide Fisheries Improvement Projects. Based on the MSC's online database, as of 20 August 2021, 240 fisheries were certified, 3 were exiting, 15 were suspended, 114 had withdrawn and 38 were under assessment.

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32. Market transformation can be a powerful agent of change by increasing the demand for sustainable seafood. During the past decades, the Sustainable Seafood Movement has promoted the use of market forces to promote improvements in fisheries sustainability (Barnett et al., 2016). The basic theory of change of the Sustainable Seafood Movement is that by providing a market signal (e.g., price premium, market access), fishers and processors will be incentivised to adopt sustainable practices. Along this line, the tools for market transformation have proven to be highly effective. That is, instruments like (i) eco-labelling and fishery improvement projects, (ii) pre-competitive buyers' roundtables, (iii) seafood responsible procurement policies, and (iv) information to processors, retailers, and consumers (e.g., through rating systems). Increased demand for sustainable seafood products motivates positive changes along the value chain, like fisheries and product certifications or improved stock management. A recent case is the fishery for small pelagic fish in Ecuador. The increased demand for certified fish meal and fish oil from international aquaculture feed producers was the main incentive for the Ecuadorian industry to develop a FIP aimed at attaining the MarinTrust certification (UNDP, 2020) that led to verified improvements in the stock health of the target species.
33. Fisheries certification and ecolabelling (e.g., MSC, FairTrade, MarinTrust) have been a centrepiece of market transformation. However, it has been recognised that a more comprehensive approach is needed to include (i) a deeper transformation along the production chain, (ii) implementation of well-enforced policies and regulations for fisheries management, and (iii) ensuring access to safe and affordable produce for human nutrition (Bennet et al., 2018; Roheim et al., 2018; Bailey, 2019; Tlusty et al., 2019; Bennet et al., 2020; Belton et al., 2020). In addition, it has been identified that current market tools are not well suited for artisanal and small-scale fisheries, especially in developing economies (Sampson et al., 2015; Barnett et al., 2016; Pérez-Ramírez et al., 2016; Stoll et al., 2019):
    - In export-oriented fisheries, artisanal and small-scale producers have difficulties to cover the high costs of certification and to comply with certification standard requirements. For example, it has been observed that several Marine Stewardship Council certified fisheries struggle to access and maintain the certification.
    - In non-export-oriented fisheries, seafood is sold in local markets and not subject to the scrutiny of larger supply chains whose players need to deal with business risks, such as reputational risks derived from the purchase of unsustainable fishery products. The demand and willingness to pay for sustainable seafood in the domestic markets of developing economies is negligible.
34. The Global Marine Commodities project (henceforth GMC project, GEF ID 5271) aligned a range of market transformation tools into a comprehensive theory of change (UNDP, 2020a). The GMC model includes two approaches:
    - A top-down market-driven approach to build demand in international markets to "pull" the supply of sustainable seafood products. This includes working with major traders and buyers to increase awareness, provide sound information, implement responsible purchasing policies, and facilitate constructive dialogue through supply chain roundtables (SFP, 2021; SFP 2021a).
    - A bottom-up approach to build supply of sustainable seafood products. The core element is the sustainable marine commodity platform (a government-led co-management platform) to facilitate multi-level stakeholder dialogue and concrete action to improve fisheries management (UNDP, 2020b) (Figure 5). Complementarily, industry-led FIPs facilitate private sector engagement in practice (UNDP, 2021).
35. The GMC project was implemented between 2017 and 2021 by the fisheries authorities of Costa Rica, Ecuador, Indonesia and the Philippines, with support of UNDP and Sustainable Fisheries Partnership (SFP). The project generated experience and lessons of export-oriented industrial and artisanal fisheries in the four participating countries and enhanced sustainability performance of about 326,000 tonnes of fishery products. The tools and lessons from the GMC project can be found in the following website: globalmarinecommodities.org/en/library/
36. The terminal evaluation rated the project "highly satisfactory" and found that the GMC model is effective and highly replicable (Ryan, 2021). The terminal evaluation recommended to refine the GMC model and to apply it other fishery scenarios, giving particular attention to integrating artisanal and small-scale fisheries. The terminal evaluation also pointed out that one of the remaining challenges of the GMC model is to cover a broader range of sustainability areas that expand from the environmental focus to broader ecological concerns by placing greater attention on reducing bycatch of CITES Red-listed species and destruction of ecologically important bottom habitats, as well as addressing social aspects like gender equality.

Main barriers that need to be addressed

37. The long-term solution is to strengthen fisheries market transformation by contributing to increase the demand for and supply of sustainable seafood products. The present project proposes to refine the GMC model to include ecological and

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social aspects of sustainability into export-oriented and domestic market seafood value chains, and to apply it in key industrial and artisanal fisheries of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems. It is foreseen that the project will contribute to advance fisheries objectives of the CCLME SAP and to generate lessons to contribute to the development of PACA´s SAP. Regarding the CCLME SAP, the project will contribute towards general objective 1: sustainably manage fisheries, restore degraded fish stocks and reduce threats to vulnerable species by 2030. With specific contributions to the corresponding three specific objectives: (1) sustainably manage and restore the small pelagic resources, (2) sustainably manage and restore the demersal resources, and (3) reduce threats to vulnerable species and mitigate their impacts.

38. The main barriers that limit increasing the demand and supply of sustainable seafood products (paragraph 34) are:

Barrier 1. Limited demand from end users.

39. There are several important efforts to inform and educate consumers about the consequences of inadequate fisheries and to assist them to make more informed decisions. These efforts include, for example, seafood guides in various formats and languages (including mobile apps) from a number of organizations like WWF, the Marine Conservation Society, and the Monterey Bay Aquarium. These guides orient consumers and businesses (e.g., restaurants, catering services, fishmongers) to choose seafood from sustainable sources. Yet, these efforts are mainly focused on developed countries (e.g., USA, UK, Germany, Spain, and Australia). There are a few national focused promotion programmes in developing countries like "Pesca con Futuro" in Mexico and the "Southern African Sustainable Seafood Initiative" (SASSI) in South Africa.
40. In a number of market studies, it has been found that awareness has increased, and that sustainable seafood is a rising trend among consumers, restaurants, retailers and wholesalers. However, the demand from end users is not yet sufficient to drive the industry. The main limitations that have been identified are:
    - Consumer confusion because of the range of information, often contradictory, about seafood products (e.g., different forms of evaluation, differing ranking systems) (Schmitt, 2011; Jacewicz, 2017).
    - Lack of evidence of improved conservation status of the resources that are protected.
    - Environmental concerns are secondary to quality and price as purchase criteria.
    - In some markets, there is a strong concentration on a few species, offer and demand for less common seafood species are weak.
    - Consumers are not willing to pay an increase of more than 10% for sustainable seafood.
    - Consumer awareness and education has concentrated on developed countries. Consumers from producing countries and emerging markets (e.g., Latin America, Africa) are not targeted by awareness campaigns.

Barrier 2. Limited demand from wholesalers and retailers.

41. Because of the limited demand from end users, many retailers and wholesalers still do not see market opportunities in sustainable seafood. For these groups, like for consumers, environmental concerns are secondary to quality and price. Organizations like SFP and WWF have concentrated efforts in engaging major buyers by providing information and advice. This has resulted in corporate commitment by major buyers to purchase from sustainable sources (e.g., Walmart, McDonalds).
42. In the past years there have been significant advances in engaging major seafood buyers and retailers (SFP, 2021). For example, SFP (i) provide information through the FishSource platform and the Metrics system, (ii) facilitate public reporting about seafood sourcing through the Ocean Disclosure Project, and (iii) promote pre-competitive collaboration through Supply Chain Roundtables.
43. The main limitations to further increase the engagement of mayor buyers are:
    - Insufficient investment by supply chain stakeholders in Corporate Social Responsibility commitments and lack of genuine involvement in sustainability initiatives by private sector actors.
    - Insufficient uptake and investment by supply chain companies and private sector in general in information systems (e.g. sustainability rating systems) that enable decision-making (e.g. when purchasing or investing in specific fisheries) based on up-to-date information of the seafood sustainability performance of the source fisheries.
    - Limited information and practical tools to prepare and implement corporate policies and procedures for responsible sourcing of seafood.
    - Lack of traceability systems that guarantee that the providers are actually delivering sustainable seafood and do not incur in seafood fraud.

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- Inadequate monitoring and tracking systems about the conservation status of the fishery stocks.

Barrier 3. Limited supply from sustainable sources.

44. As mentioned before the supply of MSC certified seafood is ca., 14% of the total world production. There are a number of important seafood commodities that are not certified (e.g., mahi mahi, jumbo squid) or have serious limitations to be certified (e.g., small pelagic fish) by using any of the currently available third-party certification standards. Therefore, if more wholesalers and retailers want to buy sustainable seafood, they will not have sufficient supply.
45. In general, certification of sustainable fisheries and export-oriented fishery products seem overwhelming to fishers in developing countries. On the one hand, fishers and producers in developing countries still do not have sufficient information to make an informed decision about the convenience of certification. On the other hand, certification schemes are indeed complex and expensive, especially for artisanal and small-scale fisheries and those fisheries that harvest shared resources and highly migratory fish. Also, producers in developing countries usually do not have the technical and financial resources required to endure the certification process and sustain the certification afterwards. In addition, certified seafood does not necessarily command a price premium for the fishers, who are commonly the most vulnerable within the supply chains. Existing information indicate that producers benefit from improved market access but not from price premiums (FAO, 2014b; FAO, 2014c), as indicated before there is often little consumer awareness of certifications, which is a major reason why price premiums don't always follow certification. Finally, in developing countries, certification or ecolabelling of seafood products for domestic consumption has not yet been fully developed.
46. FIPs have been used to bridge the supply – demand gap for non-certified seafood. On the one hand, they allow interested buyers to purchase seafood from a fishery making verifiable improvements. On the other hand, implementing a FIP allows to address issues to comply with the ecolabelling and certification standards[8]. As a consequence, the number of FIPs has increased rapidly in the past years, from two in 2006 to 153 in 2019 (CEA, 2020). Several tools have been built to guide FIP development and to track their progress and performance (UNDP, 2021; SFP, 2021b). For example, FisheryProgress (fisheryprogress.org) provides a reporting platform and displays a progress rating to facilitate information to buyers. Until 28 March 2021, 154 active FIPs were listed in the FisheryProgress directory. Additionally, the MSC has an "in-transition to MSC" programme. Also, WWF offers an online training course on FIP development which is available in English and Spanish.
47. FIP development has been very successful in industrial fisheries and high value export-oriented commodities. However, their implementation in export-oriented seafood products from artisanal and small-scale fisheries from developing countries is still a major challenge (CEA, 2020; Samy-Kamal, 2021).
48. The main limitations to further increase the supply of sustainable seafood, from certified fisheries and FIPs, are:
    - Limited understanding on the actual market benefits from fisheries certification and ecolabelling for fisheries from developing countries.
    - For export-oriented seafood commodities, the cost of certification and sustaining it afterwards could be beyond the means of artisanal fishers in developing countries. For domestic-oriented seafood this cost will be nonviable.
    - The cost of implementing a FIP could be beyond the means of fishers and processors in developing countries. Consequently, FIP implementation, in not few cases, is still subsidised by NGOs and development projects. Some dedicated funds are available to aid during the initial phases, including the "Sustainable Fisheries Fund" of the Resources Legacy Fund or the "in-transition to MSC" programme for FIPs working towards MSC certification. SFP promotes industry-driven FIPs by which different actors within the supply chain cover the costs of improvements with the revenues of the fishery. However, this may not be feasible in low value commodities for export or domestic markets.
    - Limited dialogue and collaboration among public and private stakeholders of the value chain to collaboratively confront fisheries sustainability issues and aim towards fisheries improvements.
    - Despite the achieved progress, persists uncertainty about the quality of FIPs, the actual progress in fisheries improvement, and the traceability of the products.
    - Limited capacities for sustainable fisheries management (e.g., legal, technical, financial) and limited governmental support for fisheries improvement. Including, constraints to generate reliable fishery statistics and basic applied research that are the base for science-based decision making.
    - Insufficient leverage from major buyers to national fisheries authorities and RFMOs to promote sound fisheries management and stricter conservation and management measures.

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Barrier 4. Limited information to support verifiable sourcing and fisheries improvement.

49. Information is crucial to facilitate changes along the value chain. But different stakeholders have different interests and specific requests of information. Despite the significant advances achieved in the past years, there is a major need for reliable information about the status of seafood stocks and the availability of supply from certified sources or verifiable FIPs. The main limitations are:
    - In developing countries, fishers and value chain members have limitations to access available information because of language and cultural barriers and limited internet access.
    - Numerous countries have limitations to generate reliable fisheries information like basic landing statistics. This shortcoming is more acute in the case of non-export oriented or low-value fisheries. In some cases, there are also constraints to assess the condition of the fish stocks.
    - Knowledge and learnings of current FIPs is seldom captured and shared for the benefit of interested parties worldwide. The GMC project prepared “lessons learned” documents of the FIPs that they supported.

Barrier 5. Difficulties for the involvement of artisanal and small-scale fishers in FIP development and governance dialogue.

50. In addition to the financial barrier to develop FIPs (paragraph 48), fishers face constraints like:
    - Weak formal and informal organisations and collaborative arrangements to confront common issues and to take advantage of opportunities. There are also problems of legitimate representation and gaps in leadership of fisherfolk organisations.
    - Inadequate communication and trust bonds among supply chain actors derived from the power dynamics and multiplicity of roles played by some layers within the value chain, which may lead, for example, to debts and price fixing.
    - Limited capacities to engage into democratic dialogue with government authorities and to submit position statements and sound management proposals.
    - Limited capacities and tools to collect and contribute information about the fishery (e.g., catch, traceability). Though there are important developments in the use of simple applications like electronic logbooks (successfully used in the pomada fishery in Ecuador) and seafood traceability systems (e.g., the TrazApp application used in the mahi mahi fishery in Peru).

Barrier 6. Social considerations are not mainstreamed into certification, rating systems and FIP monitoring schemes.

51. Current seafood sustainability standards mainly address environmental performance criteria (e.g., resource condition, effective fisheries management). However, in the past years there has been a trend to include social responsibility into fisheries certification and FIPs. A turning point emerged from the scandals in Thailand’s industrial offshore fisheries (Hodal & Kelly, 2014; Hodal et al., 2014; Lawrence, 2014; ILO, 2014; Marschke & Vandergeest, 2016; Urbina, 2019) that prompted a rapid response from various seafood market stakeholders to develop tools to mainstream social considerations in their practice and to safeguard essential human rights and needs, especially in distant-water fishing fleets (Kittinger et al., 2017; Nakamura et al., 2018; Tickler et al., 2018). For example, SFP included a "Human Rights Risk Index" in their Metrix platform[9]. Yet, beyond the most egregious forms of human rights abuses, the Sustainable Seafood Movement is still in its infancy when it comes to mainstream social and economic issues (including gender equality) as part of their conceptualisation of sustainability.
52. A major conceptual advance was the development, in 2017, of a global framework for social responsivity called the “Monterey Framework” (Kittinger et al., 2017; CI, 2019). This framework (a social responsibility scorecard), supported by the Conservation Alliance for Seafood Solutions, is based on three principles: (1) to protect human rights, dignity, and access to resources, (2) to ensure equality and equitable opportunity to benefit, and (3) to improve food, nutrition, and livelihood security. The Monterey Framework has been operationalised through a socially responsibility assessment tool to be applied in FIPs that report in FisheryProgress (CI, 2019a), yet it still far from becoming a useful tool to inform market dynamics. Furthermore, FisheryProgress adopted in 2021 a Human Rights and Social Responsibility Policy (FisheryProgress,

[9] www.seafoodmetrics.com. Metrix is an information platform aimed at buyers and retailers to assist on tracking, monitoring and evaluating seafood sourcing performance.

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2021) which prompt FIP implementers to identify and reduce the risk of human and labour right abuses in their operations. All FIPs are required to sign the FisheryProgress Human Rights Code of Conduct.

53. The present challenge is the lack of systems (e.g., sustainability rating schemes widely used by the market) that can provide transparent, reliable, and accessible information about social responsibility performance in fisheries to support decision making to value chain businesses. For example, FishSource does not yet include social considerations in their scores. An issue to be taken into account is that the main concern so far has been human rights and labour violations. However, the social aspects of fisheries sustainability include other key aspects like women participation and empowerment, food security and social wellbeing of fishing communities.

The baseline scenario

54. Without an intervention, seafood demand will continue to contribute to exert pressure along the value chains, contributing to increase fishing pressure and undesirable practices that will eventually aggravate the condition of fishery stocks and the loss of marine biodiversity and ecological services.

55. The condition of the fishery stocks in the target LMEs is deplorable. In 2018, 50% of CCLME fishery stocks were collapsed and overexploited. In PACA, this figure was higher, 56% (Figure 8). The present project proposes to refine the GMC model and to apply it to two fisheries in the CCLME (small pelagic fish and octopus) and two fisheries in PACA (shrimp and large pelagic fish) (Table 1).

Table 1. Estimated annual catch (t) of the target fisheries in the CCLME and PACA large marine ecosystems. Overexploited fisheries are highlighted.

Countries	Small pelagic fish	Octopus	Cuttle fish	Shrimp	Large pelagic fish
Canary Current Large Marine Ecosystem					
Morocco	2,525,492				
Mauritania		30,540			
Senegal		3,791	4,099		
Pacific Central America Coastal Large Marine Ecosystem					
Panama				944	8,298
Ecuador				6,500	26,459
Total (t)	**2,525,492**	**34,331**	**4,099**	**7,444**	**34,757**

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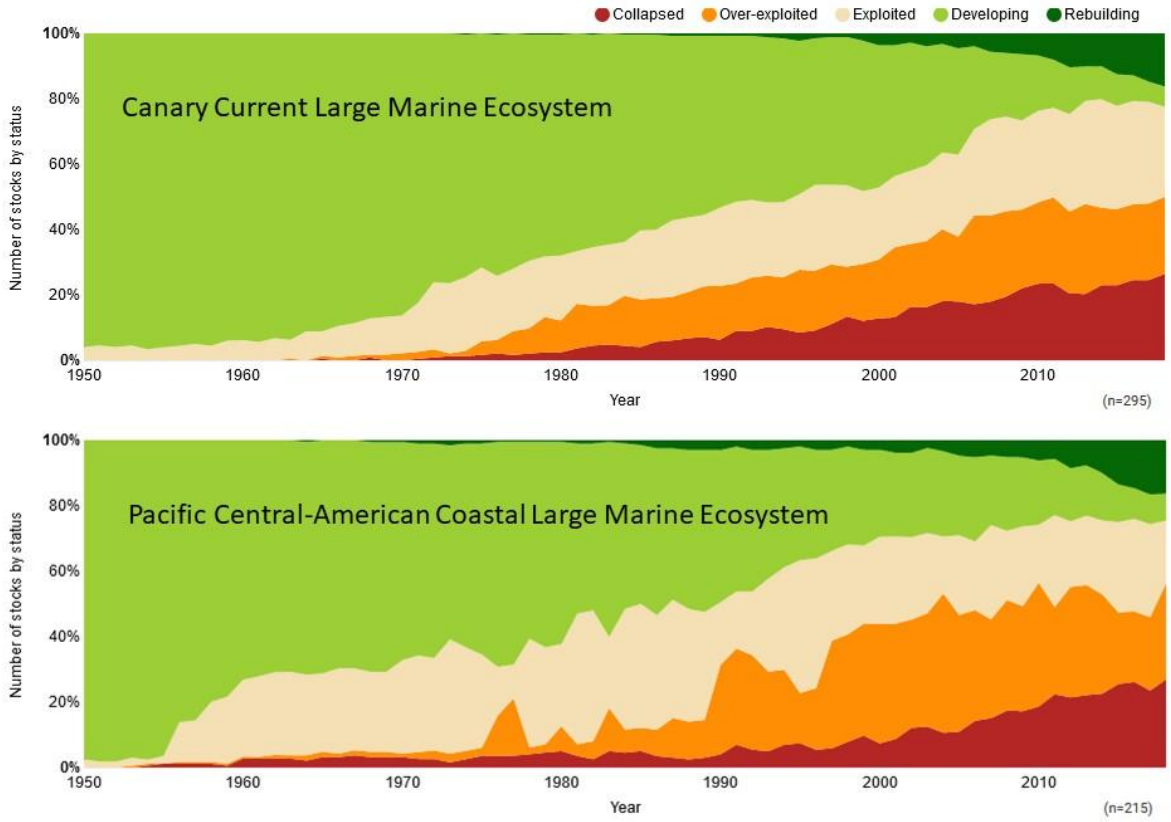


Figure 8. Stock status of fishery resources in the Canary Current and Pacific Central American Coastal Large Marine Ecosystems. Source: SeaAroundUs.

Fisheries in the CCLME

Northwest African small pelagic fishery.

56. This fishery operates mainly in Morocco, Mauritania and Senegal, the average annual catch (2014-2018) of these countries is about 951,387 t, 423,783 t and 233,104 t, respectively (FAO 2020a). The main captured species are the sardine (about 53% of the 2018 catch), the sardinellas (about 16%) and the Chub mackerels (about 11%) (Figure 9) (FAO 2020b). Small pelagic fish are a staple food across West Africa. Current public information indicates that the population of the round and flat sardinellas, the Atlantic horse mackerel, the Cunene horse mackerel and the bonga are overexploited.

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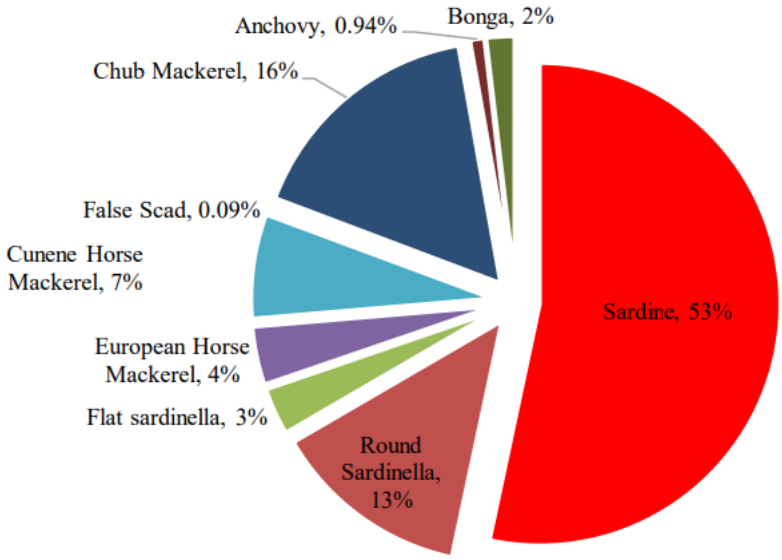


Figure 9. Percentage of each species in catches of small pelagic in the Northwest Africa region in 2018 (does not include Senegal catches).

57. In Morocco, small pelagic fish are captured by four fleets:
    - A coastal fleet of 688 medium-sized coastal seiners that conserve the fish in plastic trays with ice. This fleet take most of the Moroccan catch (Table 2).
    - A refrigerated seawater fleet of 24 pelagic trawlers that store the catch in refrigerated tanks.
    - A fleet of overseas freezer vessels that operate under international fisheries agreements. Thirteen Russian trawlers are authorised to operate in the South Atlantic area beyond 15 miles offshore. They have an overall annual quota of 140,000 tonnes. Fourteen industrial vessels from the European Union (pelagic and semi-pelagic trawlers, and purse seiners) operate with an annual quota of 85,000 tonnes. These vessels do not land their catch in Morocco.
    - An artisanal fleet of about 1,300 – 1,600 small seiner vessels (ca., three tonnes gross tonnage, ≤7m length) that capture sardines for local consumption.
58. The Moroccan catch is mainly exported (frozen or canned) to the European Union, Brazil, the USA, and South Africa.
59. In Mauritania, small pelagic fish are captured by three fleets:
    - An artisanal fleet which, in 2018, consisted of 6,809 boats. Of these, 4,080 (64%) fiberglass boats, 1,959 (31%) wooden boats, as well as aluminium canoes and Latin sailing boats called 'lanches'. It has been estimated that, in 2020, the artisanal fleet was composed by 8,003 vessels. Artisanal fishing uses a wide variety of gears, notably mullet nets and trammel nets. It is important to note that the artisanal fishery targets a wide range of species and that small pelagic represent ca., 20% of the catch.
    - A coastal fleet that is divided into three "segments" according to the length of the vessel: segment 1 (14.5-26 m), segment 2 (26-40 m) and segment 3 (40-60 m). Segment 1 are large canoes that use a spinning net (ca., 800-1000 m long with a 50m drop) or a felé-felé net used as a drift gillnet or seine net. There are about 650 vessels, ca., 400 are Senegalese boats authorised to fish in Mauritania. Segment 2 are 26 seiners, about 65% of them are Turkish vessels. Segment 3 are refrigerated seawater pelagic trawlers and purse seiners. In 2018 and 2019 there were 59 and 43 vessels respectively. About 30% are Mauritanian registered vessels and the rest are mainly Turkish and a few Chinese vessels.
    - An industrial fleet of pelagic freezer trawler longer than 60 m using onboard freezing facilities mainly from the European Union and Eastern European countries (e.g., Russia). The number of offshore pelagic boats fishing in Mauritanian waters has fluctuated around 70 vessels per year. In 2012, measures were implemented to keep pelagic

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trawlers away from the coast which led to a drop in the influx to the area, limiting the number deep-sea pelagic vessels to 50 boats per year on average.

60. The Mauritanian catch in 2018 was 695,353 tonnes (FAO 2020a). It is mainly used for the production of fishmeal and fish oil that is exported mostly to China (about 19% of all fishmeal and fish oil export value between 2014 and 2018), Turkey (15%), Norway (13%), and Denmark (11%). Mauritania also exports significant volumes of frozen small pelagic fish to neighbouring countries accounting for almost 90% of the exports by value between 2014 and 2018. Cote d'Ivoire (54% of 2014-2018 Mauritania's export value) is by far the main market for whole frozen small pelagic species from Mauritania. Nigeria (16%) is the second largest importer, followed by Cameroon (8%) and Ghana (6%).

61. In Senegal, artisanal canoes captured about 76% of the 192,621 t landings of small pelagic fish in 2018 (FAO 2020a). It is estimated that about 20,000 canoes operate, although only 11,000 have licences. The main fishing gears used are the purse seine and the encircling gillnet (filet maillant encerclant). In 2018, purse seines and encircling gillnets accounted for 55 – 64% and 7 – 13 % of the landings, respectively.

62. The industrial fleet fishery is made of Senegalese flagged or chartered trawlers and two small purse seiners of Dakar called "sardiniers". These fleets are not specialized and target a wide range of species. There are concerns about the entrance of new trawlers to the fishery (Anon, 2020).

63. A significant proportion of the Senegalese catch is either consumed (11%) or transformed (33%) locally. The balance (56%) is traded nationally and regionally. Most frozen fish is exported to Côte d'Ivoir, about 90% of 2014-2018 export value between 2014 and 2018.

64. Because of the critical condition of the small pelagic fish stocks, the creation of an RFMO has been strongly suggested by various groups. Following a recommendation by the Fisheries Ministers of the 22 COMHAFAT[10] member countries in 2018, a study on the modalities for the creation of a new RFMO was prepared (Caillart et al., 2019). The parties are still analysing the proposed options.

Table 2. Captures of small pelagic fish in Morocco (INRH, 2019).

	Sardines	Mackerel	Horse mackerel	Sardinella	Anchovies	Total	% by fleet
Coastal Seiners	643,250	109,362	6,694	4,325	19,590	783,221	55%
RSW Trawlers	319,138	98,130	9,793	1,319	3	428,383	30%
Russian Vessels	71,726	45,722	7,452	105		125,005	9%
EU Vessels	23,241	23,844	6,255	108	14	53,462	4%
Canoes	6,099	3,478	384	3	8	9,972	0.7%
Other Vessels	40	20	11,830	0	14	11,904	0.8%
Total	1,063,494	280,556	42,408	5,860	19,629	1,411,947	

Octopus fishery.

65. Octopus are captured by industrial trawlers and canoes operating with bottom trawls, octopus pots or jigs. Industrial fishing was initiated in the early 1970s by Spain and Japan and continued afterwards by Korean and Chinese vessels. The extension of the jurisdiction of coastal states in the 1980s allowed African coastal states to reappropriate their marine

[10] La Conférence Ministérielle sur la Coopération Halieutique entre les Etats Africains Riverains de l'Océan Atlantique (COMHAFAT) is a regional fisheries advisory body founded in 1989 that congregate 22 countries from Morocco to Namibia.

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resources. Today, the industrial companies of Morocco and Mauritania are the major players in the exploitation of octopus in the Central-East Atlantic.

66. The total average annual catch (2014-2018) of Morocco, Mauritania and Senegal was 89,509 t (FAO 2020a). The average annual catch of Morocco was 52,622 t (58.8%) and the catch of Mauritania and Senegal was, respectively, 30,540 t (34.1%) and 6,347 t (7.1%). Almost all Moroccan octopus is exported to Europe and Japan.
67. In Mauritania, octopus is captured by three fleets: (i) artisanal boats using pots, traps, and jigging, (ii) coastal vessels using pots and traps, and (iii) deep-sea bottom trawlers. Since 2012, foreign cephalopod vessels are not allowed, and the resource is reserved for local fishers.
    - The artisanal fleet, as indicated before, consisted of about 8,000 boats in 2020. The artisanal fleet produced about 65% of the 2018 landings (Figure 10Figure 10). The fleet of pirogues has largely increased in the past decade. Official estimates indicate that the fleet increased from about 2,000 boats in 2012 to about 6,809 boats in 2018 (IMROP, 2019). The latest estimates by the Institut Mauritanien De Recherches Océanographiques Et De Pêches (IMROP) for 2019 and 2020 are 7,831 and 8,003 boats in 2019 and 2020, respectively.
    - The coastal fleet is formed by 18 coastal ice vessels.
    - The offshore fleet (deep-sea bottom trawlers) is formed by 136 vessels.
68. Octopus is exported mainly to the EU, Japan, and South Korea. The value of exports between 2014 and 2018 was USD1.5 billion.
69. In Senegal, octopus is captured by industrial and artisanal fleets. The industrial fleet is formed by bottom trawlers The industrial fishery is made of Senegalese flagged or chartered trawlers. These fleets are not specialized, they target a wide range of species but capture significant quantities of cephalopods (octopus, cuttlefish, and squid). Octopus was about 10% of the landings between 1985 and 2007. In addition, shrimp trawlers (equipped with 40 mm mesh for deep-sea fishing and 50 mm for coastal fishing) capture significant quantities of octopus as bycatch. The artisanal fleet is formed mostly by motorized canoes using jigs.
70. Octopus is exported mainly to Spain, Italy, and Japan. The value of exports between 2014 and 2018 was USD250 million.

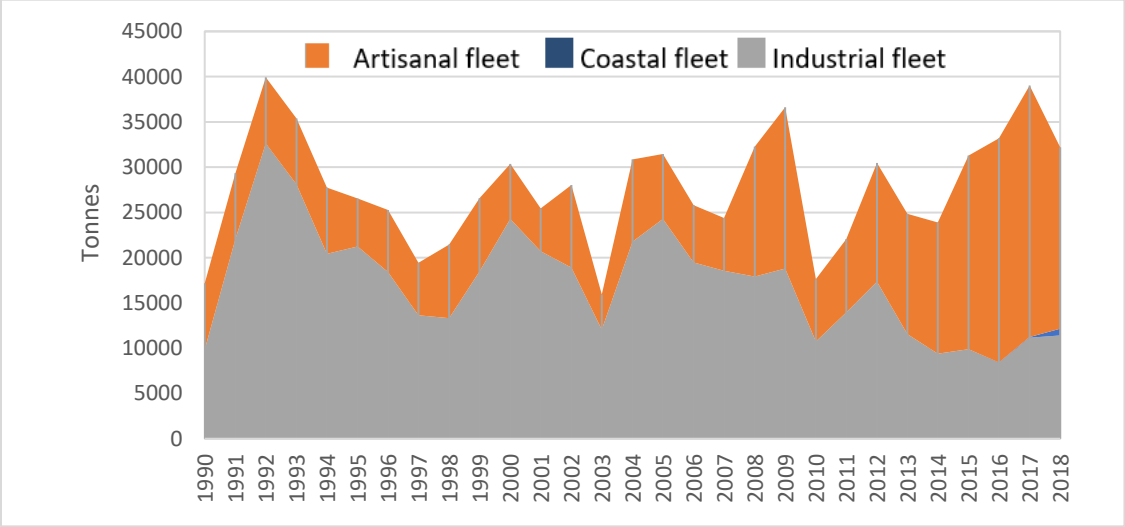


Figure 10. Octopus catches by the artisanal, coastal, and offshore fleets in Mauritania (IMROP, 2019).

Fisheries in PACA

Shrimp fisheries.

71. The fisheries in Panama and Ecuador are vital for the livelihoods of coastal communities. The project will focus on the white shrimp fishery in Panama and the titi shrimp fishery in Ecuador.
72. In Panama the fishery targets the white shrimp (*Litopenaeus vannamei* and *L. occidentalis*). This fishery generates about USD 80 million per year and 40,000 jobs (Castrejón & Bucaram, 2020). Both artisanal and industrial fleets operate. The

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artisanal fleet is composed of about 4,600 fiberglass boats with outboard engines that capture shrimp using gillnets. They capture mainly *L. occidentalis* and the yellowleg shrimp (*Farfantepenaeus californiensis*). The industrial fleet is composed of less than 150 Florida-style trawlers that fish in coastal waters between 25 and 100 m depth (ARAP, 2016; Castrejón & Bucaram, 2020). The main target species are *L. vannamei, L. occidentalis* and *L. stylirostris*. Secondary species are the Pacific seabob (*Xiphopenaeus riveti*), the crystal shrimp (*Farfantepenaeus brevirostris*) and the kolibri shrimp (*Solenocera agazzizi*). The main fishing grounds are the Gulf of Panama and the Gulf of Chiriquí (Abrego, 2009). Currently, the fleet is old because, in 1986, the government prohibited replacing these vessels to reduce the fishing effort on shrimp. As a result of a deficient cold chain, shrimp do not meet export quality requirements (Castrejón & Bucaram, 2020). The main landing port for the industrial fleet is Vacamonte (ca., 85% of the catch).

73. Artisanal fishers sell the catch to traders or processing plants, to be sold in the domestic market. The industrial fleet concentrates on high-value species that are generally exported to international markets. In recent years, the local market has absorbed an increasing amount of these species of high commercial value due to (i) augmented interest of a part of the population and (ii) the demand from hotels and restaurants (ARAP, 2016).
74. The status of the shrimp stocks is unknown. There are limited fisheries monitoring and control, in particular of the artisanal fleet.
75. In Ecuador, the fishery targets the titi shrimp (*Protrachypenaeus precipua*), which locally known as “pomada”. The fishery has two components, an industrial trawl fishery and an artisanal bag fishery. In addition, artisanal boats called “changas” operate without control.
76. Artisanal fishers use “bolsos” (i.e., bag nets or stake nets) set on estuarine banks in the Gulf of Guayaquil. The operation of 1,014 bags belonging to 617 organized fishers (i.e., belonging to 25 fishing organisations) is authorised. The regulation assigns the fishers of each organization the fishing site and the number and type of bolsos allowed. An unquantified number of unauthorized bolsos are known to operate. The catch is sold in the domestic market and to packing plants mainly for export.
77. The industrial fleet operates since 1956. At that time there were five trawlers, currently there ae 38 vessels. Most vessel owners belong to the “Primero de Mayo” association. The industrial fishery is well regulated and controlled. The fishing grounds are set, there is an annual quota of 500 t / trawler, it is mandatory the use of an electronic logbook, a vessel monitoring system, and turtle excluding devices. An onboard observer programme covers 20% of the fishing trips. The main landing port is Posorja. Traditionally, boat owners and traders peel the shrimp in artisanal and community shrimp peeling sites. It is estimated that about 1,200 women work on the peeling sites. Afterwards, the peeled shrimp is sold to packing plants that prepare peeled frozen shrimp for the domestic and export markets. Packing plants also source directly from fishing boats. About 75% of the landings of the trawlers is exported mainly to the USA and the European Union. A basic FIP for trawl fishery[11] was initiated in June 2020, involving a packing company and two overseas importers. The FIP cover 40% of the landings of the trawl fleet.
78. There has been only one stock assessment based on the information of the trawl fishery for 2014 – 2018 (Chicaiza et al., 2019). It was found that the resource is overfished.

<u>Artisanal longline fishery for large pelagic fish</u>.

79. All PACA countries target large pelagic fish, mainly mahi mahi, tunas and billfishes. In Panama, and Ecuador this is a very important fishery in terms of value, employment and food security. Tuna, mahi mahi and billfish have a high value and are exported to the USA and Europe (CEDEPESCA, 2018; FAO, 2014). The Panamanian seafood exports have increased due to the production of fresh and frozen tuna and mahi mahi, causing an important evolution in terms of revenues and employment (ARAP, 2016). However, these fisheries include large volumes of sharks as bycatch. The main commercial shark species that are caught in these fisheries are listed in Appendix II of CITES, which requires that PACA countries implement measures to ensure that exports of shark products will not affect the survival of these species.
80. In Panama, there is an artisanal fleet of ca., 8,700 vessels of which about 11% fish with longline. Landing of LPF is authorised only in the following ports: Agallito, Aguadulce, Armuelles, Boca de Parita, Caimito, Chorrillo, Coquira, Juan Díaz, Mensabé, Mutis, Pedregal, Puerto Panamá, Remedios y Puerto Vacamonte (Decreto 126, 2019). Longline fishing is regulated by the Executive Decree 126 of 2017 (modified by the Executive Decree 11 of 2019).

[11] https://fisheryprogress.org/fip-profile/ecuador-gulf-guayaquil-titi-shrimp-bottom-trawl

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81. There is an industrial longline fleet composed of coastal and high-seas vessels. In 2010, according to ARAP's statistics, the longline fleet landed 4,800 t of yellowfin tuna and 1,800 t of mahi mahi. Most of the mahi mahi and yellowfin tuna catches are exported mainly to the USA frozen and fresh market (CEDEPESCA, 2018). Regarding sharks, FAO's statistics reported that Panama caught around 1,780 t of sharks in 2013 (IATTC, 2016). The main destination of Panama shark meat is the USA, while the fins are mainly exported to Taiwan (Ross Salazar et al., 2019). There is a regional FIP focused on the longline fishery of mahi mahi, tuna and swordfish in Costa Rica, Panama and Ecuador that is driven by the Costa Rican company MARTEC[12].
82. In Ecuador, the artisanal fleet has two components: (i) an inshore fleet and (ii) an oceanic fleet. The inshore fleet is composed of about 7,000 fiberglass boats (7.5 – 9 m length) that fish within a two or three day range (maximum 200 nm). The main landing ports are Esmeraldas, Manta, Puerto Lopez, Santa Rosa and Anconcito. The oceanic fleet carries out an associated fishing operation that uses motherships (called "nodrizas") (11.5 - 25.9 m in length, mainly with wooden hulls) that operate individually or in an associated manner (towing between one and 10 fiberglass boats). Operations last about 15 to 30 days and reach west beyond the Galapagos Islands (100°W) and south to about 15°S. This fleet operates from the port of Manta. There are 148 motherships registered. The main landing ports are Manta and Jaramijó.
83. There are two types of artisanal large pelagic fish fisheries depending on the target species and gear used: (i) a fishery for mahi mahi that uses a surface longline (called espinel fino) during warm months, and (ii) a fishery for tunas, billfishes and sharks that uses a deep water longline (called espinel grueso) mainly during the cold months. Their fishing areas are different. The operations for mahi mahi fishing concentrate on the coastal zone and in the oceanic area to the southwest (Martínez et al., 2015). In contrast, the operations with espinel grueso extend to the west, between the continental coast and the Galapagos archipelago and between Galapagos and the border with Costa Rica.
84. There is an industrial longline fleet. The national vessel registry list 103 industrial long-line vessels, some of these are motherships. The IATTC regional vessel register records 22 large-scale longline vessels (>24 m length). This fleet lands in Manta.
85. There are not up-to-date accurate landing statistics. In 2012, the oceanic fleet landed 22,360 t, 65.6% were LPF (46.6% of the total landing was mahi mahi) and 34.4% were sharks. LPF and sharks are sold in the domestic market (fresh and frozen) and exported mainly to the USA.
86. Shark meat has been traditionally sold in local markets and consumed in various forms, but using other names or sold as "billfish". Shark capture is allowed as bycatch and its trade and export is regulated[13]. However, there is great concern regarding the large volume of shark landings and illegal trade of shark fins (Manrique, 2020; Carrere, 2021).
87. There are two national FIPs focused on LPF. A mahi mahi FIP led by a consortium of processing companies[14] and a swordfish FIP led by three fishing and processing companies[15]. It is known that the organisation of nodrizas owners is working to launch a FIP focused on mahi-mahi, tuna, and billfish fishery.

Baseline projects

88. There are several projects that relate to the GMC2 project (Annes 16). The most relevant ones are the following:
    - The Fisheries Transparency Initiative (FiTI) that include Ecuador, Mauritania, Panama and Senegal.
    - Towards Joint Integrated, Ecosystem-based Management of the Pacific Central American Coastal Large Marine Ecosystem (PACA) (GEF ID 10076) under implementation by UNDP. This regional project will prepare the TDA and SAP for this large marine ecosystem.
    - Towards Sustainable Management of the Canary Current Large Marine Ecosystem (CCLME) – Initial Support to SAP Implementation (GEF ID 9940) under implementation by FAO. This is a regional medium size project, channelled through the Fishery Committee for the Eastern Central Atlantic (CECAF). This project focus on developing enabling conditions to implement the CCLME SAP.
    - Strengthening decent work in the fishing sector in Ecuador and Peru executed by the International Labour Organization (ILO).

[12] https://fisheryprogress.org/fip-profile/eastern-pacific-large-pelagics-longline-martec
[13] Decree 486 of 2007.
[14] https://fisheryprogress.org/fip-profile/ecuador-mahi-mahi-longline. conservationmahimahi.org
[15] https://fisheryprogress.org/fip-profile/ecuador-south-eastern-pacific-swordfish-longline

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- "Habla tiburón" that will focus on shark conservation working with fishers from the Ecuadorian mainland and Galapagos. The project is executed by WWF and funded by USAID.
- Beyond 30x30: Securing resilience in the Eastern Tropical Pacific through enhanced transboundary cooperation (GEF ID 11267) to be implemented by Conservation International. The project will focus on strengthening the operation of the Eastern Tropical Pacific Marine Corridor (CMAR) and work with the fisheries sector.
- Senegal Dekkal Geej (Restoring the Sea), funded by USAID, that focus on strengthening fisheries governance and seafood value chains.
- Improved regional fisheries governance in western Africa (PESCAO) funded by the European Union and focused on improving regional fisheries governance in Western Africa through better coordination of national fisheries policies.
- West Africa Coastal Areas Management Program (WACA) implemented by the World Bank in collaboration with a range of national and international partners. This programme focusses on strengthening resilience of coastal communities in 17 countries (including Mauritania and Senegal).

89. The GMC2 project will have a national coordination group on each country to promote harmonised work with key partners and other projects and initiatives (paragraph 418).

The alternative scenario

90. The contribution of the GEF will expedite advancing a worldwide transformation of the seafood market that will increase the demand and supply of sustainable and responsible seafood commodities and products. This, in turn, will contribute to reduce pressure on fishery stocks and the marine environment, therefore adding to conserve marine biodiversity. Social considerations will be mainstreamed into the value chains therefore adding to encourage socially responsible seafood and improving the livelihoods of fishers' families and communities.
91. The project will refine the GMC model by (i) including ecological and social considerations into the demand and supply sides of seafood supply chains and (ii) adapting it to serve artisanal and small-scale fisheries and domestic-market focused supply chains in developing countries. The improved GMC model will be field tested in industrial and artisanal fisheries with clear indications of overexploitation (Table 1).
92. The alternative scenario will be improved conditions of key fisheries in terms of (i) better collaboration of the supply chain members to secure a sustainable fishery and socially responsible seafood commodities and products, (ii) strengthened governance and management arrangements, and (iii) reduction of bycatch and impacts on the marine environment. In addition, there will be a set of refined tools to be used to accelerate seafood market transformation in other scenarios. The improved GMC model will be available for worldwide application. Finally, it is expected that the work will contribute to advance the implementation of the CCLME SAP and the preparation of the PACA SAP.

STRATEGY

93. The main problem is the overexploitation of marine fishery resources, which is produced by three main causes: (1) the increasing global demand for seafood, (2) a deficient management of the fisheries that receive pressure from the markets, and (3) insufficient measures to protect key biodiversity elements of the marine environment (e.g., nurseries, breeding and feeding grounds, ETP species) (Figure 11). Overexploitation, in turn, generates depletion of fishery resources, disruption of the marine food web, deterioration of the populations of marine wildlife, food insecurity, and erosion of the livelihoods of fishing communities[16].
94. The GMC2 project proposes an intervention to transform the conditions of the market. The key idea is that if the buyers integrate sustainability and ethical considerations into their demand for seafood, then the suppliers will be driven to comply with these market requirements and, therefore, they will implement improvements in their own operations and will encourage advances in the fisheries management framework like stronger fisheries governance and better conservation and management measures. These changes will improve fisheries production and the wellbeing of fishing communities that will, finally, contribute to have healthy marine ecosystems and sustainable livelihoods of fishing-dependent communities.

[16] i.e., understood as a community which is substantially dependent on or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs, and includes fishers, fishing vessel owners, operators, crew, traders, and seafood processors that are based in such a community. Modified from the USA Magnuson-Stevens Act. See Jacob et al., (2001), Clay & Olson (2007), and Clay & Olson (2008).

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95. The core concept is to align the demand and supply of sustainable and responsible seafood in specific supply chains in the CCLME and PACA. Sustainable and responsible seafood is the commodity (e.g., headed and gutted fish) or product (e.g., frozen portions) that comes from : (i) a sustainable source (e.g., healthy stock, legal fishing), (ii) a socially responsible source (e.g., no violations of human rights, decent working conditions, no gender discrimination), and (iii) an operation with reduced ecosystem impact (e.g., use of bycatch reduction measures, no harm to the seafloor).
96. To achieve a transformation of the conditions of the market, the GMC2 strategy has the following five steps:
    - First, to focus on the mid-upper and upper level of the international and domestic supply chains (not on the consumers) because, from previous experience, these levels have strong leverage and influence (number 1 in Figure 11). The mid-upper and upper levels include importers of seafood, wholesalers, hospitality (e.g., restaurants, hotels), and retailers (e.g., fish mongers, seafood markets, shops, supermarkets). Hereon these groups will be called "the buyers".
    - Second, to engage the buyers into sustainable and ethical seafood sourcing (number 2 in Figure 11). For this, the first step will be to build their interest on the matter through a variety of channels like direct meetings and the provision of information about the dangers and consequences of fishery collapse and the reputational risks associated with unattended social issues (e.g., labour and safety conditions, child labour). Then, engage the buyers into action, by providing information and tools to aid them to change their attitudes and to make sound purchasing decisions, this, in turn, will lead to the implementation of a sustainable and ethical procurement process and, finally, the request to their suppliers to comply with the new conditions (e.g., no bycatch of ETP species, safe working conditions of fishers and seafood workers, no child labour).
    - Third, to engage the suppliers into improving their operations (number 3 in Figure 11). For this, the first step will be to build their interest on the matter and then to engage them into action. The key tool for the suppliers is the Fishery Improvement Project (FIP), a multi-stakeholder effort to improve the sustainability of the target fishery. To be recognised as a credible source the suppliers (i.e., fishers, processors, exporters) must comply with the international standards for FIPs (e.g., an assessment of the condition of the fishery, to make public their improvement plan and progress). The suppliers that implement the FIP can improve their operations by, for example, implementing transparent monitoring and traceability systems (e.g., electronic logbooks and monitoring) and improving working conditions of fishers and processing plant personnel. However, complying with all the international requirements for fishery improvement requires advances in areas that are beyond the means of the suppliers alone, like the application of a harvest strategy and the existence of a responsive management system.
    - Fourth, to strengthen fisheries governance and management (number 4 in Figure 11). For this, the suppliers will encourage that the pertinent authorities support the improvement of the fishery. The improvements will imply, depending on the situation of the fishery, actions like strengthening the management framework, the regulations, and the surveillance and enforcement mechanism. The GMC2 project will:
        i. First, strengthen fisheries governance through (i) the creation or consolidation of formal government-led co-management platforms that integrate the key stakeholders of the fishery and its value chain, and (ii) support the vulnerable groups to have representation and a voice in the co-management platforms.
        ii. Then, through the co-management platforms and building upon the experience of the FIPs, develop or update fisheries management plans that integrate considerations on social, economic and reduced ecosystem impacts and a whole-of-government approach.
        iii. Finally, through the co-management platforms develop or update conservation and management measures based upon a whole-of-government approach.
    - Fifth, to facilitate access to key information to support decision-making. This is a cross-cutting action which includes:
        i. That buyers use the indicators and scores of the FishSource and FisheryProgress portals to support their purchase decisions.
        ii. That suppliers report through the FisheryProgress portal and foster that the information about the fishery (e.g., vessel and fishers registers, catch statistics, stock assessments, regulations) is made public and accessible.
        iii. That the public and private stakeholders of the supply chains use the indicators and scores of the FishSource and FisheryProgress portals to track progress.

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iv. That the pertinent authorities make public and accessible the information about the fishery (e.g., IUU vessel list, register of offenders).
v. That the key stakeholders of the target supply chains exchange experience and lessons.
vi. That the learning of the GMC2 project is systematically documented and shared.

97. Figure 12 shows how the project outcomes and outputs (Table 3) are embedded into the GMC2 strategy:

- Component 1 focus on the demand side. At project start the key stakeholders of the mid-upper and upper levels of the domestic and international markets will be identified (step 1 of the project strategy, Figure 12). Then engagement strategies will be designed and implemented for international (outputs 1.1.1, 1.2.2, and 1.31.) and domestic buyers (outputs 1.1.2, 1.2.3, and 1.3.2) (step 2 of the project strategy, Figure 12). The project will assist the buyers with information (e.g., use of the FishSource and FisheryProgress portals), tools and guidance to motivate that they adopt sustainable and ethical procurement processes. The buyer engagement actions will introduce the novel FishSource indicators and scores for social responsibility and reduced ecosystem impact (outcomes 1.2 and 1.3).
- Component 2 focus on the supply side. The project will assist that the suppliers implement industry-led FIPs (step 3 of the project strategy, output 2.1.2) and that the key public and private stakeholders engage into strengthening fisheries governance and management (step 4 of the project strategy). A core action will be the development or strengthening of government-led co-management platforms (output 2.1.1). There will be support to vulnerable groups and affirmative actions so that they can be part of the fisheries governance process (output 2.1.3). These multi-level multi-stakeholder platforms will be the basis to develop fisheries management plans and conservation and management measures that integrate social, economic, and reduced ecosystem impacts considerations (outputs 2.2.2 and 2.3.1). The project will introduce the use of Regulatory Impact Assessment (RIA) (output 2.2.2) so that the countries can develop plans and measures based upon a whole-of-government approach, therefore building policy coherence.
- Component 3 focus on facilitating access to information to support decision-making (step 5 of the project strategy, Figure 12). The project will motivate those buyers, suppliers, and other stakeholders of the supply chains: (i) to fully use the public information available on the FishSource and FisheryProgress portals, and (ii) to facilitate information to feed these information portals (e.g., make public the analysis of the stock status) (outcome 3.1). In addition, the project will foster experience exchanges and will systematically document and disseminate learning (outcome 3.2).

98. Figure 13 presents a schematic view of the outputs and outcomes of the theory of change.

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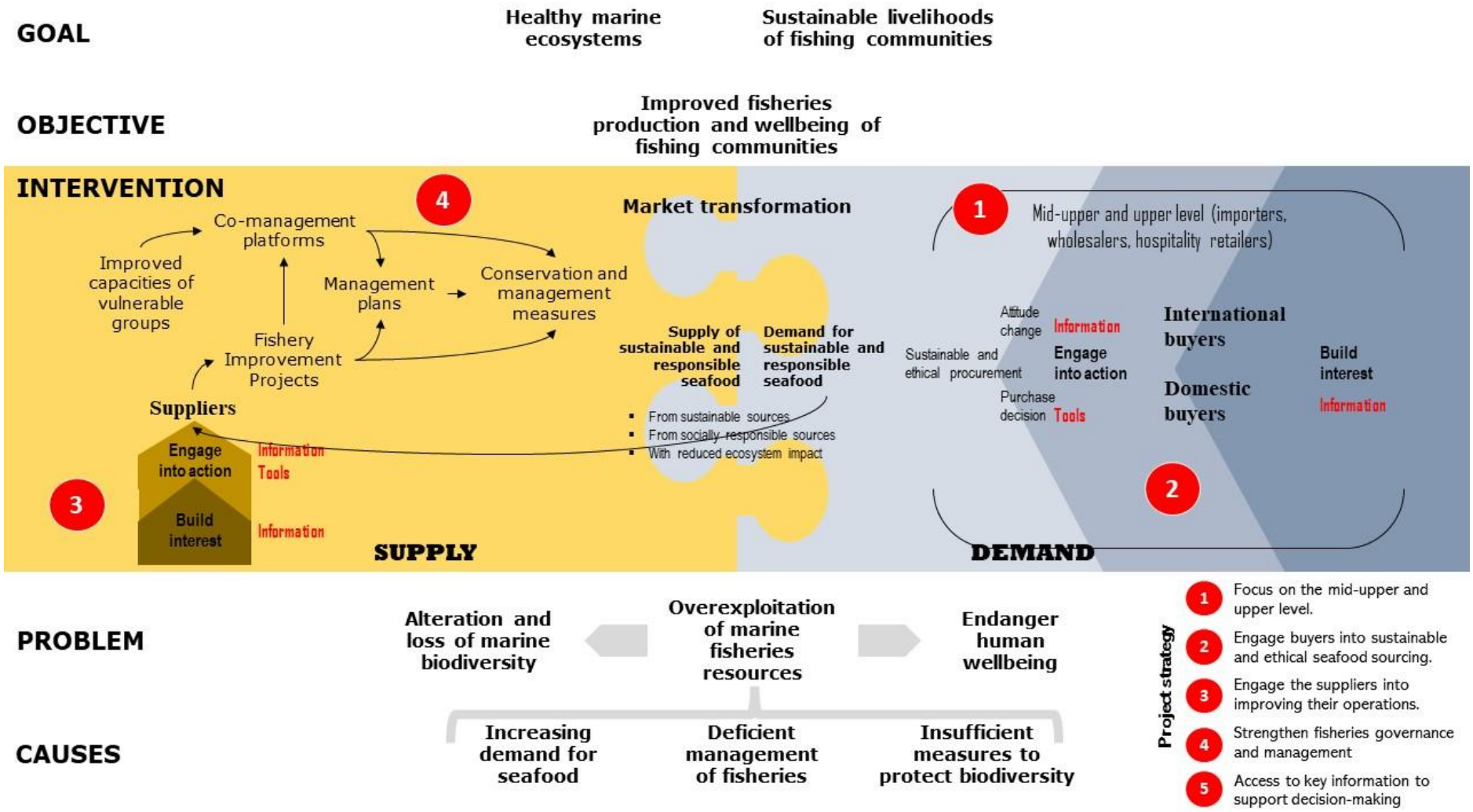


Figure 11. Overview of the GMC2 theory of change.

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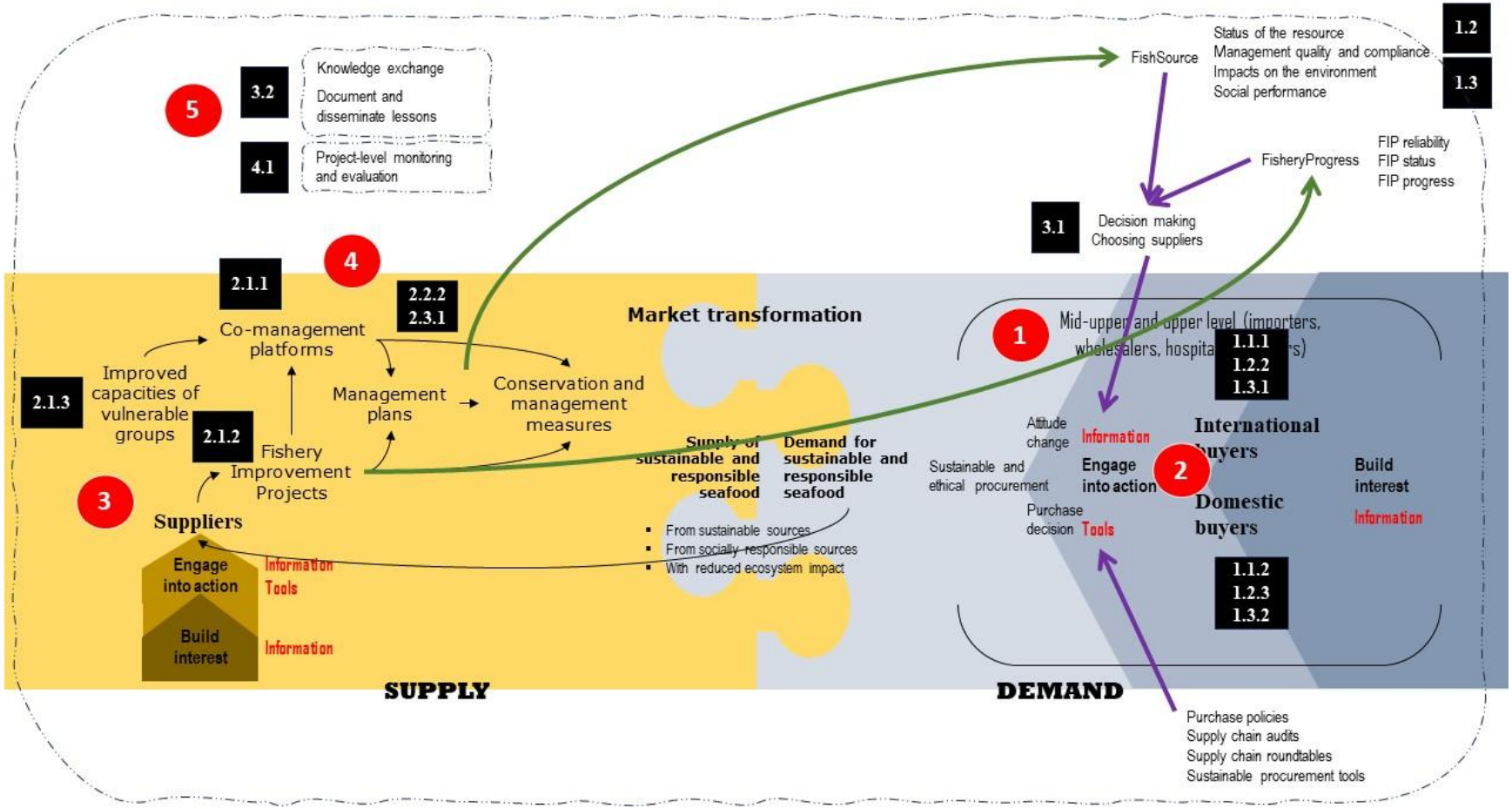


Figure 12. Contribution of outcomes and outputs to the GMC2 theory of change.

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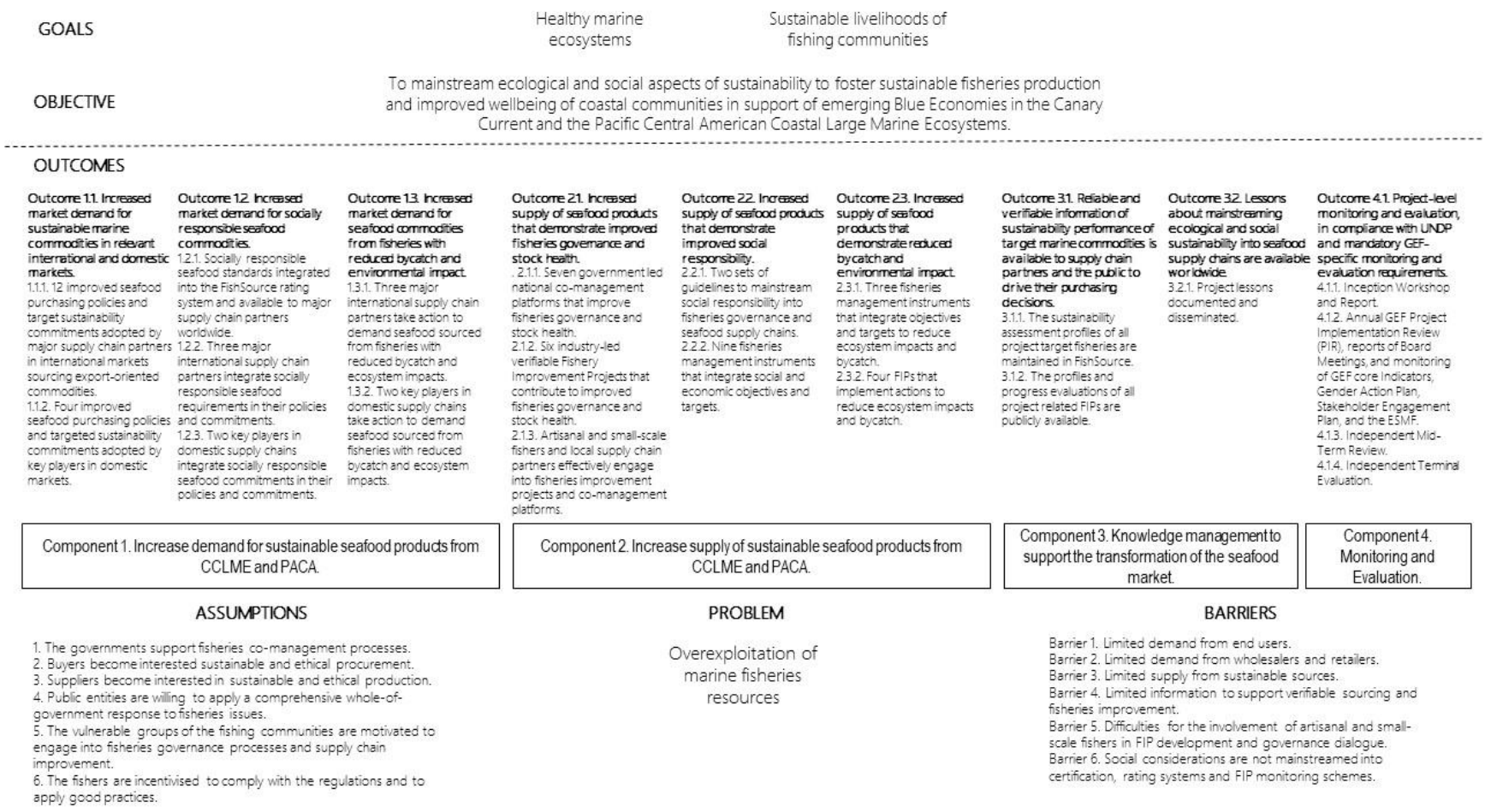


Figure 13. Schematic view of the GMC2 project theory of change.

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RESULTS AND PARTNERSHIPS

99. The project objective is "to mainstream ecological and social aspects of sustainability to foster sustainable fisheries production and improved wellbeing of coastal communities in support of emerging Blue Economies in the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems". The UNDP and SFP will join their expertise and experience to advance the seafood market transformation and to generate new tools and lessons for future worldwide application.
100. The project is organised into four components and 21 outcomes (Table 3). The four components are:
    - The component 1 will support the promotion of demand for sustainable seafood products from the target supply chains in the CCLME and PACA.
    - The component 2 will support increasing the supply of seafood products that demonstrate (a) improved fisheries governance and stock health, (b) social responsibility, and (c) reduced bycatch and environmental impact from the target supply chains in the CCLME and PACA.
    - The component 3 will focus on (a) generating vital information to support decision making by the key stakeholders of the target supply chains (e.g., fishers, processors, traders, fisheries authorities), and (b) documenting and disseminating the project learning worldwide.
    - The component 4 will focus on implementing project-level monitoring and evaluation in compliance with the GEF and UNDP requirements.
101. The project will focus on ten target supply chains (Table 4) and eight FIPs (Table 5).

Table 3. Project outcomes and outputs.

Outcomes	Outputs
Component 1.	**Increase demand for sustainable seafood products from CCLME and PACA.**
Outcome 1.1. Increased market demand for sustainable marine commodities in relevant international and domestic markets.	1.1.1. 12 improved seafood purchasing policies and target sustainability commitments adopted by major supply chain partners in international markets sourcing export-oriented commodities. 1.1.2. Four improved seafood purchasing policies and targeted sustainability commitments adopted by key players in domestic markets.
Outcome 1.2. Increased market demand for socially responsible seafood commodities.	1.2.1. Socially responsible seafood standards integrated into the FishSource rating system and available to major supply chain partners worldwide. 1.2.2. Three major international supply chain partners integrate socially responsible seafood requirements in their policies and commitments. 1.2.3. Two key players in domestic supply chains integrate socially responsible seafood commitments in their policies and commitments.
Outcome 1.3. Increased market demand for seafood commodities from fisheries with reduced bycatch and environmental impact.	1.3.1. Three major international supply chain partners take action to demand seafood sourced from fisheries with reduced bycatch and ecosystem impacts. 1.3.2. Two key players in domestic supply chains take action to demand seafood sourced from fisheries with reduced bycatch and ecosystem impacts.
Component 2.	**Increase supply of sustainable seafood products from CCLME and PACA.**
Outcome 2.1. Increased supply of seafood products that demonstrate improved fisheries governance and stock health.	2.1.1. Seven government led national co-management platforms that improve fisheries governance and stock health. 2.1.2. Eight industry-led verifiable Fishery Improvement Projects that contribute to improved fisheries governance and stock health. 2.1.3. Artisanal and small-scale fishers and local supply chain partners effectively engage into fisheries improvement projects and co-management platforms.

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Outcomes	Outputs
Outcome 2.2. Increased supply of seafood products that demonstrate improved social responsibility.	2.2.1. Two sets of guidelines to mainstream social responsibility into fisheries governance and seafood supply chains. 2.2.2. Nine fisheries management instruments that integrate social and economic objectives and targets.
Outcome 2.3. Increased supply of seafood products that demonstrate reduced bycatch and environmental impact.	2.3.1. Three fisheries management instruments that integrate objectives and targets to reduce ecosystem impacts and bycatch. 2.3.2. Four FIPs that implement actions to reduce ecosystem impacts and bycatch.
Component 3.	**Knowledge management to support the transformation of the seafood market and project monitoring and evaluation.**
Outcome 3.1. Reliable and verifiable information of sustainability performance of target marine commodities is available to supply chain partners and the public to drive their purchasing decisions.	3.1.1. The sustainability assessment profiles of all project target fisheries are maintained in FishSource. 3.1.2. The profiles and progress evaluations of all project related FIPs are publicly available.
Outcome 3.2. Lessons about mainstreaming ecological and social sustainability into seafood supply chains are available worldwide.	3.2.1. Project lessons documented and disseminated.
Component 4.	**Monitoring and Evaluation**
Outcome 4.1. Project-level monitoring and evaluation, in compliance with UNDP and mandatory GEF-specific monitoring and evaluation requirements	4.1.1. Inception Workshop and Report. 4.1.2. Annual GEF Project Implementation Review (PIR), reports of Board Meetings, and monitoring of GEF core Indicators, Gender Action Plan, Stakeholder Engagement Plan, and the ESMF. 4.1.3. Independent Mid-Term Review. 4.1.4. Independent Terminal Evaluation.

Table 4. Target supply chains in the CCLME and PACA.

Canary Current Large Marine Ecosystem (CCLME)	Pacific Central American Coastal Large Marine Ecosystem (PACA)
▪ Mauritania. Small pelagic fish[a] from all fishing gears. Currently mostly used for fish meal and oil for export. ▪ Mauritania. Octopus (*Octopus vulgaris*) from all fishing gears, for the most part for export. ▪ Morocco. Small pelagic fish from all fishing gears. Emphasis on European pilchard (*Sardina pilchardus*). Mostly used for direct human consumption for export and domestic market. ▪ Senegal. Small pelagic fish from all fishing gears. Currently mostly used for direct human consumption (ca., 74%) and the rest for fish meal and oil. ▪ Senegal. Octopus (*Octopus vulgaris*) from all fishing gears, for the most part for export.	▪ Ecuador. Large pelagic fish[b] from deep-water longlines (espinel grueso) for export and domestic market. ▪ Ecuador. Pomada (*Protrachypene precipua*) from trawlers and bolsos for export. ▪ Guatemala. Dorado (*Coryphaena hippurus*) and sharks[c]. Dorado mainly for export and a small amount for domestic market. Shark meat for domestic market, while fins, and parts for export. ▪ Panama. Shrimps from trawlers and artisanal gear[d] for domestic market and export. ▪ Panama. Large pelagic fish [e] from longlines for export and domestic market.

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[a] Bonga (*Ethmalosa fimbriata*), Chub mackerel (*Scomber colias*), European pilchard, Flat sardinella (*Sardinella maderensis*), Round sardinella (*Sardinella aurita*).

[b] Yellowfin tuna (*Thunnus albacares*), bigeye tuna (*Thunnus obesus*), skipjack tuna (*Katsuwonus pelamis*), swordfish (*Xiphias gladius*). Includes as bycatch the following shark species that are sold in the national and international markets: pelagic thresher (*Alopias pelagicus*), bigeye thresher (*Alopias superciliosus*), blue shark (*Prionace glauca*), silky shark (*Carcharhinus falciformis*), oceanic whitetip shark (*Carcharhinus longimanus*), and shortfin mako (*Isurus oxyrinchus*).

[c] Silky shark (*Carcharhinus falciformis*), scalloped hammerhead (*Sphyrna lewini*), pelagic thresher (*Alopias pelagicus*), and bull shark (*Carcharhinus leucas*).

[d] Western white shrimp (*Litopenaeus vannamei*, *Litopenaeus occidentalis*), western blue shrimp (*Litopenaeus stylirostris*), crystal shrimp (*Penaeus brevirostris*), northern nylon shrimp (*Heterocarpus vicarius*), kolibri shrimp (*Solenocera agassizii*).

[e] Dorado (*Coryphaena hippurus*), Yellowfin tuna (*Thunnus albacares*), swordfish (*Xiphias gladius*).

Table 5. Target fishery improvement projects (FIPs).

Project target FIP [*]	FIP name in FisheryProgress	Country	FIP number [a]	FIP status as of July 2023 [b]	FIP type [c]	FIP stage [d]	Progress rating [e]	Social performance risk assessment [f]	Social workplan [g]
Dorado and sharks FIP	Guatemala dorado and sharks FIP [°]	Guatemala	Not assigned	Not started	To be determined	0	NA	Not prepared	Not executed
LPF FIP Ecuador	Ecuador large pelagic fish longline ASOAMAN [°]	Ecuador	Not assigned	Not started	To be determined	0	NA	Not prepared	Not executed
LPF FIP Panama	Eastern Pacific large pelagics – longline (MARTEC)	Panama	14707	Active	Comprehensive	4	A	Not prepared	Not executed
	Panama large pelagics-longline (MARPESCA)	Panama	11639	Active	Comprehensive	3	D	Not prepared	Not executed
Octopus FIP Mauritania	Mauritania octopus - bottom trawl, jig & pot/trap	Mauritania	20987	Active	Prospective	1	NA	Not prepared	Not executed
Octopus FIP Senegal	Senegal Octopus FIP [°]	Senegal	Not assigned	Not started	To be determined	0	NA	Not prepared	Not executed
Pomada FIP	Ecuador Gulf of Guayaquil titi shrimp - bottom trawl	Ecuador	13553	Active	Basic	4	D	Not prepared	Not executed
Shrimp FIP	Panama Northern nylon shrimp - bottom trawl	Panama	17641	Active	Comprehensive	3	E	Not prepared	Not executed
	Panama shrimp – bottom trawl	Panama	12718	Inactive	Basic	2	NA	Not prepared	Not executed
SPF FIP Mauritania	Mauritania small pelagics - purse seine	Mauritania	9490	Active	Comprehensive	4	A	Not prepared	Not executed

[*] Abbreviated name used in the PRODOC.

[°] Provisional name.

[a] Project identification number in FisheryProgress.

[b] Not started, active, completed, inactive.

[c] Prospective, basic, comprehensive, to be determined.

[d] Stage 0 (initial conversations among potential partners). Stage 1 (FIP development). Stage 2 (FIP launch). Stage 3 (FIP implementation). Stage 4 (improvements in fishing practices or fishery management). Stage 5 (improvements on the water).

[e] 0 – Not available. A - Advanced Progress. B - Good Progress. C - Some Recent Progress. D - Some Past Progress. E - Negligible Progress. NA – Not available.

[f] Not prepared, prepared.

[g] Not executed, in progress, completed.

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Expected results.

Component 1. Increase demand for sustainable seafood products from CCLME and PACA.

102. To advance towards a market transformation of the target supply chains, this component will focus on increasing the demand for sustainable seafood products in the mid-upper and upper-end levels of the international and domestic markets. The project will motivate that buyers adopt purchasing policies to demand seafood that demonstrates sustainability (outcome 1.1), social responsibility (outcome 1.2) and reduced bycatch and environmental impact (outcome 1.3). The aim is that seafood buyers assess their existing sources of products and then engage their suppliers on improvement initiatives to address key issues. Ultimately, it is expected that the buyers will shift sourcing toward suppliers that show commitment and progress towards good fishing practices and management.
103. At the international level, the project will: (i) work mainly with traders and wholesalers in the destination markets of export-oriented commodities and products to promote their interest for sustainable seafood from the target fisheries (i.e., octopus, pomada, shrimp, large pelagic fish, small pelagic fish) (output 1.1.1), (ii) develop and introduce a socially responsible seafood score (output 1.2.1), and (iii) introduce a reduced bycatch and ecosystem impacts score (output 1.3.1).
104. At the national level, the project will implement buyer engagement trials in Ecuador, Guatemala and Senegal and a buyer engagement pilot in Morocco. In all these initiatives the focus will be fostering that domestic buyers (wholesalers and end buyers[17]) adopt purchasing policies to demand seafood that demonstrates sustainability (output 1.1.2), social responsibility (output 1.2.3) and reduced bycatch and environmental impact (output 1.3.2) with emphasis on the products from the pertinent target FIPs (Table 5).

Outcome 1.1. Increased market demand for sustainable marine commodities in relevant international and domestic markets.

105. This outcome will aim to engage international and domestic buyers into adopting (i) seafood purchasing policies and (ii) target purchase commitments. The "seafood purchasing policies" are corporate documents that the companies adopt to establish their conditions when procuring seafood products (e.g., whole individuals, fillets, cans). Two examples of these purchasing policies are those of ALDI US and SeaValue PLC. The project will use the sustainable seafood policy toolkit developed by the GMC project.
106. The "target purchase commitments" are voluntary targets set by the buyers to comply with their corporate policies. For example, Walmart adopted in 2023 an enhanced seafood policy that established the following:
    By 2025, based on price, availability, quality, customer demand, and unique regulatory environments across our global retail markets, Walmart U.S., Sam's Club, Walmart Canada, Walmart Mexico, and Walmart Central America will require all fresh and frozen, farmed and wild seafood suppliers to source from fisheries who are:
    (i) Third-party certified as sustainable using Marine Stewardship Council (MSC) or Best Aquaculture Practices (BAP) or certified by a program which follows the FAO Guidelines and is recognized by the Global Sustainable Seafood Initiative (GSSI) as such. For our farmed supply, we expect suppliers to ensure sustainable production and sourcing throughout the supply chain, including final processing plant, farms, hatcheries and feed mills.
    Or
    (ii) Actively working toward certification or in a Fishery Improvement Project (FIP) or Aquaculture Improvement Project (AIP) that has definitive and ambitious goals, measurable metrics, and time bound milestones.
    The tuna suppliers will (i) source exclusively from vessels that have 100% observer monitoring (electronic monitoring or human observer) by 2027, and (ii) source from fisheries using zero high seas transshipment unless the transshipment activity is covered by 100% observer monitoring (electronic monitoring or human coverage) by 2027.

[17] The "end buyers" include retail outlets (e.g., fish markets, national supermarket chains), restaurants, and foodservice establishments (e.g., hotels, catering services).

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107. Based upon the lessons from the GMC project and SFP´s experience, the work will focus on the mid-upper and upper-end levels of the international and domestic markets. These levels have the highest leverage to promote change along the value chains.

Output 1.1.1. Twelve (12) improved seafood purchasing policies and target sustainability commitments adopted by major supply chain partners in international markets sourcing export-oriented commodities.

108. The project will aim that at least 12 international buyers, that purchase products from the target supply chains (Table 4), adopt sustainable seafood purchasing policies and target commitments.
109. To achieve this output, the project will use market intelligence tools to identify those traders and buyers, in the end markets, that purchase the pertinent products (e.g., octopus buyers in Japan and Spain, dorado buyers in the USA, shark buyers in Spain and the USA). Then, the prospective international buyers will be screened using the Private Sector Risk Assessment Tool (2017) to ensure that they are not involved in UNDP exclusionary criteria. After that tailor-made engagement strategies (adjusted to the specific market context) will be prepared and implemented. For example, the buyers could be approached directly or through the pertinent "supply chain roundtables" that are facilitated by SFP. The "supply chain roundtable" is a tool developed by SFP to bring together processors, traders, wholesalers and major buyers to promote improvements along the seafood supply chains. The project will benefit from SFP´s experience with the 10 supply chain roundtables that they facilitate and will directly interact with three of them: (a) Global Mahi Supply Chain Roundtable, (b) Global Octopus Supply Chain Roundtable, and (c) Global Roundtable on Marine Ingredients.
110. The buyers will be introduced to the use of the FishSource and FisheryProgress platforms to aid their decision-making process.
    - FishSource is a public platform, aimed at major seafood buyers, that presents up-to-date impartial information about the status of fisheries and fish stocks in an easy to understand format. This information system is administered by SFP and funded by a range of sources including philanthropy, seafood companies and international development agencies. FishSource contain profiles of seafood species and their related fisheries (i.e., a single fishing gear operated by a flag country on a stock). The profiles include information about the resource (e.g., stock status) and the fishery (e.g., the quality of the fishery´s management and the impacts of the fishery on the environment) and scores (simplified indicators) of how the is performing. The scores are build using publicly available scientific and technical information about the status of the fishery. The scores cover three areas (i) the management of the fishery (three indicators), (ii) the current and future status of the stock (two indicators) and (iii) the impacts of the fishery on the environment (four indicators). Each score is rated from 0 (the lowest score) to 10 (the highest score). Table 6 presents the FishSource scores of the target species of the GMC2 project.
    - FisheryProgress is a global public platform to track progress of Fishery Improvement Projects. On the one hand, FIP implementors voluntarily adhere to the platform´s reporting requirements. On the other hand, buyers use FisheryProgress to assess the status and progress of the FIPs they source from. FisheryProgress has a Human Rights and Social Responsibility Policy that requires that all FIPs undertake a risk assessment (using the social responsibility assessment tool for the seafood sector) and prepare and implement, if pertinent, a social workplan to address the identified gaps. Table 5 presents the status of project target FIPs as reported in FisheryProgress as of July 2023.
111. The effectiveness of the engagement strategies will be assessed during the third year of project implementation and adjusted as needed. In year 5 the effectiveness will again be assessed, and the learning will be systematised and disseminated.

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Table 6. FishSource scores of the target fisheries of the GMC2 project.

Country	Species	Fishery	FishSource scores									
			Management quality			Stock health		Environmental impacts				Source
			Management strategy	Managers compliance	Fishers compliance	Current health	Future health	Bycatch	ETP impacts	Habitat	Ecosystem	
Mauritania	Bonga (*Ethmalosa fimbriata*)	Purse seines	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	1
Mauritania	Chub mackerel (*Scomber japonicus*)	Purse seines	≥ 6	≥ 6	< 6	8.4	8.7	Not yet scored	Not yet scored	Not yet scored	Not yet scored	2
Mauritania	Common octopus (*Octopus vulgaris*)	Bottom trawls, jigs, pots	>6/10	<6/10	<6/10	7.9/10	7.7/10	0.0/10	0.0/10	2.5/10	1.5/10	3
Mauritania	European pilchard (*Sardina pilchardus*)	Purse seines	≥ 6	≥ 6	< 6	≥ 8	≥ 6	Not yet scored	Not yet scored	Not yet scored	Not yet scored	17
Mauritania	Flat sardinella (*Sardinella maderensis*)	Purse seines, Encircling gillnets	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	18
Mauritania	Round sardinella (*Sardinella aurita*)	Purse seines, Encircling gillnets	≥ 6	< 6	< 6	Not yet scored	< 6	Not yet scored	Not yet scored	Not yet scored	Not yet scored	19
Senegal	Chub mackerel (*Scomber japonicus*)	Purse seines	< 6	< 6	< 6	8.4	8.7	Not yet scored	Not yet scored	Not yet scored	Not yet scored	20
Senegal	Common octopus (*Octopus vulgaris*)	Pots, Traps	< 6	< 6	< 6	8.0	10.0	1.0	1.0	1.5	2.5	21
Senegal	Common octopus (*Octopus vulgaris*)	Handlines hand operated, Single boat bottom otter trawls, Trammel nets	< 6	< 6	< 6	8.0	10.0	Not yet scored	Not yet scored	Not yet scored	Not yet scored	21
Senegal	Common octopus (*Octopus vulgaris*)	Bottom trawls	< 6	< 6	< 6	8.0	10.0	0.0	0.0	2.5	1.5	21

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Country	Species	Fishery	FishSource scores									
			Management quality			Stock health		Environmental impacts				Source
			Management strategy	Managers compliance	Fishers compliance	Current health	Future health	Bycatch	ETP impacts	Habitat	Ecosystem	
Senegal	European pilchard (*Sardina pilchardus*)	Purse seines	Not yet scored	Not yet scored	Not yet scored	≥ 8	≥ 6	Not yet scored	Not yet scored	Not yet scored	Not yet scored	17
Senegal	Flat sardinella (*Sardinella maderensis*)	Purse seines, Encircling gillnets, Beach seines	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	18
Senegal	Round sardinella (*Sardinella aurita*)	Purse seines, Encircling gillnets, Beach seines	≥ 6	< 6	< 6	Not yet scored	< 6	Not yet scored	Not yet scored	Not yet scored	Not yet scored	19
Morocco	European anchovy (*Engraulis encrasicolus*)	Purse seines	≥ 6	≥ 6	≥ 6	≥ 6	9.0	Not yet scored	Not yet scored	Not yet scored	Not yet scored	22
Morocco	Chub mackerel (*Scomber japonicus*)	Purse seines, Semipelagic trawls	≥ 6	≥ 6	≥ 6	8.4	8.7	Not yet scored	Not yet scored	Not yet scored	Not yet scored	20
Morocco	European pilchard (NW Africa central) (*Sardina pilchardus*)	Purse seines, Beach seines, Bottom trawls, Midwater trawls	≥ 6	≥ 6	≥ 8	≥ 8	≥ 6	Not yet scored	Not yet scored	Not yet scored	Not yet scored	23
Morocco	European pilchard (NW Africa southern) (*Sardina pilchardus*)	Midwater trawls, Purse seines	≥ 6	≥ 6	≥ 8	≥ 8	≥ 6	Not yet scored	Not yet scored	Not yet scored	Not yet scored	17
Morocco	Flat sardinella (*Sardinella maderensis*)	Midwater trawls, Purse seines	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored	18

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Country	Species	Fishery	FishSource scores									
			Management quality			Stock health		Environmental impacts				Source
			Management strategy	Managers compliance	Fishers compliance	Current health	Future health	Bycatch	ETP impacts	Habitat	Ecosystem	
Morocco	Round sardinella (*Sardinella aurita*)	Midwater trawls, Purse seines	≥ 6	< 6	< 6	Not yet scored	< 6	Not yet scored	Not yet scored	Not yet scored	Not yet scored	19
Ecuador	Blue shark	Longline	< 6	≥ 6	< 6	Data Deficient	Data Deficient	4.0	5.0	9.3	4.0	4
Ecuador	Dorado	Drifting longlines	≥ 6	≥ 6	Data Deficient	Data Deficient	Data Deficient	4.0	4.0	9.3	4.0	5
Ecuador	Pelagic thresher shark	Longline	< 6 to ≥ 6	< 6 to ≥ 6	Data Deficient ≥ 6	Data Deficient	Data Deficient	Not yet scored to5.0	Not yet scored to5.0	Not yet scored to9.3	Not yet scored to5.0	6
Ecuador	Shortfin mako	Longline	< 6	< 6	< 6	< 6	< 6					7
Ecuador	Swordfish	Drifting longlines	≥ 6	< 6	≥ 6	≥ 6	≥ 6	4.0	4.0	9.3	4.0	8
Ecuador	Titi shrimp	Bottom trawls	< 6	< 6	< 6	Not yet scored	Not yet scored					9
Ecuador	Yellowfin tuna	Drifting longlines	≥ 6	≥ 6	≥ 6	≥ 6	≥ 6	4.0	4.0	9.3	4.0	10
Guatemala	Dorado	Drifting longlines	< 6	≥ 6	< 6	Data Deficient	Data Deficient					5
Guatemala	Silky Shark	Longline										16
Guatemala	Pelagic thresher shark	Longline	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored					6
Panama	Blue shark		Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored					
Panama	Crystal shrimp	Botton trawls	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored					11
Panama	Dorado	Drifting longline	≥ 6	Not yet scored	Not yet scored	Not yet scored	Not yet scored	4.0	4.0	9.3	4.0	5
Panama	Kolibri shrimp	Bottom trawls	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored					12
Panama	Northern nylon shrimp	Bottom trawls	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored					13

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Country	Species	Fishery	FishSource scores									
			Management quality			Stock health		Environmental impacts				Source
			Management strategy	Managers compliance	Fishers compliance	Current health	Future health	Bycatch	ETP impacts	Habitat	Ecosystem	
Panama	Pelagic thresher shark	Longlines	< 6	≥ 6	< 6	Data Deficient	Data Deficient	5.0	5.0	9.3	5.0	14
Panama	Shortfin mako	Drifting longlines	< 6	< 6	< 6	< 6	< 6					7
Panama	Swordfish	Longlines	≥ 6	< 6	≥ 6	≥ 6	≥ 6	4.0	4.0	9.3	4.0	8
Panama	Western white shrimp	Bottom trawls	Not yet scored	Not yet scored	Not yet scored	Not yet scored	Not yet scored					15
Panama	Yellowfin tuna	Drifting longlines	≥ 8	≥ 6	≥ 6	≥ 6	≥ 6	Not yet scored	Not yet scored	Not yet scored	Not yet scored	10

1. Sustainable Fisheries Partnership (SFP). Bonga shad NW Africa. FishSource profile. In: FishSource [online]. Updated 29 August 2017. Accessed [22 July 2023]. https://www.fishsource.org/stock_page/2242
2. Sustainable Fisheries Partnership (SFP). Atlantic chub mackerel NW Africa. FishSource profile. In: FishSource [online]. Updated 22 May 2023. Accessed [22 July 2023]. https://www.fishsource.org/fishery_page/7279
3. Sustainable Fisheries Partnership (SFP). Common octopus Cape Blanc. FishSource profile. In: FishSource [online]. Updated 13 January 2022. Accessed [22 July 2023]. https://www.fishsource.org/stock_page/2236
4. Sustainable Fisheries Partnership (SFP). Blue Shark. FishSource profile. In: FishSource [online]. Updated 30 July 2021. Accessed [28 July 2023]. https://www.fishsource.org/stock_page/1025.
5. Sustainable Fisheries Partnership (SFP). Dorado. FishSource profile. In: FishSource [online]. Updated 30 March 2023. Accessed [28 July 2023] https://www.fishsource.org/stock_page/1036
6. Sustainable Fisheries Partnership (SFP). Pelagic thresher shark. FishSource profile. In: FishSource [online]. Updated 27 May 2021. Accessed [28 July 2023] https://www.fishsource.org/stock_page/2432
7. Sustainable Fisheries Partnership (SFP). Shortfin mako. FishSource profile. In: FishSource [online]. Accessed [28 July 2023] https://www.fishsource.org/stock_page/2432
8. Sustainable Fisheries Partnership (SFP). Swordfish. FishSource profile. In: FishSource [online]. Updated 15 March 2023. Accessed [28 July 2023] https://www.fishsource.org/fishery_page/5509
9. Sustainable Fisheries Partnership (SFP). Titi shrimp. FishSource profile. In: FishSource [online]. Updated 31 December 2018. Accessed [28 July 2023] https://www.fishsource.org/stock_page/1541
10. Sustainable Fisheries Partnership (SFP). Yellowfin tuna. FishSource profile. In: FishSource [online]. Updated 18 June 2021. Accessed [28 July 2023] https://www.fishsource.org/stock_page/1055
11. Sustainable Fisheries Partnership (SFP). Crystal shrimp. FishSource profile. In: FishSource [online]. Updated 17 August 2020. Accessed [28 July 2023] https://www.fishsource.org/stock_page/2535
12. Sustainable Fisheries Partnership (SFP). Kolibri shrimp. FishSource profile. In: FishSource [online]. Updated 17 August 2020. Accessed [28 July 2023] https://www.fishsource.org/stock_page/2536
13. Sustainable Fisheries Partnership (SFP). Northern nylon shrimp. FishSource profile. In: FishSource [online]. Updated 26 April 2022. Accessed [28 July 2023] https://www.fishsource.org/stock_page/2626
14. Sustainable Fisheries Partnership (SFP). Pelagic thresher. FishSource profile. In: FishSource [online]. Updated 28 May 2021. Accessed [28 July 2023] https://www.fishsource.org/stock_page/2432
15. Sustainable Fisheries Partnership (SFP). Western white shrimp. FishSource profile. In: FishSource [online]. Updated 17 August 2020. Accessed [28 July 2023] https://www.fishsource.org/stock_page/2537
16. Sustainable Fisheries Partnership (SFP). Silky shark. FishSource profile. In: FishSource [online]. Updated 11 August 2020. Accessed [30 July 2023] https://www.fishsource.org/stock_page/1144
17. Sustainable Fisheries Partnership (SFP). European Pilchard. FishSource profile. In: FishSource [online]. Updated 5 April 2023. Accessed [01 August 2023] https://www.fishsource.org/stock_page/782
18. Sustainable Fisheries Partnership (SFP). Madeiran Sardinella. FishSource profile. In: FishSource [online]. Updated 29 August 2023. Accessed [01 August 2023] ttps://www.fishsource.org/stock_page/2239
19. Sustainable Fisheries Partnership (SFP). Round sardinella. FishSource profile. In: FishSource [online]. Updated 29 August 2023. Accessed [01 August 2023] https://www.fishsource.org/stock_page/2241
20. Sustainable Fisheries Partnership (SFP). Chub Mackerel. FishSource profile. In: FishSource [online]. Updated 22 May 2023. Accessed [01 August 2023] https://www.fishsource.org/stock_page/2620
21. Sustainable Fisheries Partnership (SFP). Common octopus. FishSource profile. In: FishSource [online]. Updated 22 May 2023. Accessed [01 August 2023] https://www.fishsource.org/fishery_page/7056
22. Sustainable Fisheries Partnership (SFP). European anchovy. FishSource profile. In: FishSource [online]. Updated 7 July 2023. Accessed [01 August 2023] https://www.fishsource.org/stock_page/776
23. Sustainable Fisheries Partnership (SFP). European pilchard. FishSource profile. In: FishSource [online]. Updated 5 April 2023. Accessed [01 August 2023] https://www.fishsource.org/stock_page/781

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X|Output 1.1.2. Four (4) improved seafood purchasing policies and targeted sustainability commitments adopted by key players in domestic markets.

112. The project will undertake experimental work for the development of buyer engagement in domestic markets. At the global level, the markets of developed countries are more mature in terms of demanding sustainable seafood. In these markets, a growing number of consumers are willing to demand and purchase seafood products from sustainable sources (e.g., certified seafood). On the other hand, the demand for sustainable seafood in the domestic markets of the participating countries is negligible. In developing countries, consumers tend to prioritise price in their purchasing decisions over sustainability considerations.
113. The project will build upon the existing limited worldwide experience in developing domestic demand for sustainable seafood in developing countries. A key experience to be applied is the Better Seafood Philippines programme (BSP). The BSP is an initiative sponsored by the USAID Fish Right Programme, that is implemented by the University of Rhode Island. The project will adapt the BSP´s buyer engagement model and the Responsible Seafood Sourcing Standard to run the buyer engagement trials in Ecuador, Guatemala and Senegal and the buyer engagement pilot in Morocco. By the end of the project, it is expected that at least four domestic buyers adopt sustainable seafood purchasing policies and target commitments.
114. In the final year, a workshop will be organised to jointly analyse and exchange the experience and lessons of the four countries on engaging domestic buyers to demand sustainable and responsible seafood products. The learning will be systematised into a learning document to be distributed worldwide.

Buyer engagement trials

115. The purpose of the buyer engagement trials in Ecuador, Guatemala and Senegal will be to assess the viability of developing consumer demand for sustainable seafood in these domestic markets. In the three countries certified seafood products are not available to consumers. The focus of the trials will be the products generated by the pertinent country FIPs (Table 7):
    - In Ecuador, this includes dorado, swordfish, large pelagic fish (e.g., tuna and marlins), and sharks caught as bycatch of the longline fishery. The project will explore the possibility to promote domestic consumption of the tuna products that are already certified: Eastern Pacific Ecuador Purse Seine Tropical Tuna Fishery (FSC and FAD set fishery) and pole and line tuna.
    - In Guatemala, this includes dorado and sharks.
    - In Senegal, the focus will be the small pelagic fish that are sold for direct human consumption fresh or artisanal processed (salted, grilled, dried) from the supply chain improvement project (SCIP) to be developed in the Joal Local Artisanal Fishing Council (CLPA) (see output 2.1.2).
116. The results will allow to understand (i) key leverage points, (ii) consumer interest in sustainable seafood, and (iii) opportunities and barriers for the development of a buyer engagement programme. This learning will sustain future work to design and implement buyer engagement pilots or programmes, where feasible.
117. The work in Ecuador will initiate at the end of year 1 taking advantage of the three FIPs that are already operating (i.e., dorado and swordfish, see Table 7) and the catalogue of related products produced by artisanal organisations. In Guatemala and Senegal, the trials will initiate after the FIP and SCIP are operational.
118. On each country the work will initiate with a scoping of the interest for sustainable seafood in key levels of the domestic supply chains (mainly the mid-upper and end-market levels). Based on the results, a domestic market engagement trial will be prepared and implemented. Prospective buyers will be screened using the Private Sector Risk Assessment Tool (2017) to ensure that they are not involved in UNDP exclusionary criteria. The operation will include (i) building relationships with interested buyers (e.g., supermarkets, fishmongers, hotels), (ii) providing them guidance, information, and technical assistance (e.g., preparation of sustainable seafood policies, supply chain audits, use of information portals like FisheryProgress and FishSource, use of social responsibility and reduced bycatch indicators to be introduced in outputs 1.2.1 and 1.3.1), and (iii) fostering constructive linkages among buyers and the pertinent authorities (e.g., fisheries, food safety). Progress and effectiveness of the trials will be assessed, and pertinent improvements will be implemented. Finally, lessons will be documented and systematised. Each trial will generate recommendations about the feasibility of scaling-up into a buyer engagement pilot or a fully fledged buyer engagement programme.

Buyer engagement pilot

119. The buyer engagement pilot in Morocco will promote the domestic consumption of products from the sardine and anchovy FIPs (Table 7). However, it is foreseen that more emphasis will be placed on the sardine products. The pilot will generate learning and experience to, if feasible, expand into a full-scale programme to grow Moroccan market demand for sustainable and responsible seafood.

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120. The pilot will initiate with a detailed analysis of Moroccan consumers (urban and rural) and end-market channels willingness to purchase sustainable seafood products. Examples of end-market channels are supermarket chains (e.g., Carrefour, Atacadao, Marjane, Aswak Assalam) and the hospitality industry[18]. Then, the pilot will be designed using as a reference the experience from the Better Seafood Philippines programme. It is foreseen that the Responsible Seafood Sourcing Standard will be adapted to the Moroccan scenario to be administered locally. The prospective buyers will be screened using the Private Sector Risk Assessment Tool (2017) to ensure that they are not involved in UNDP exclusionary criteria.
121. The pilot will be implemented by a small local team with the support from an SFP Seafood Market Advisor. Implementation will include (i) promotion of sustainable seafood products from the Moroccan FIPs, (ii) provision of guidance, advise and technical assistance to interested buyers, (iii) building public – private collaboration networks and alliances, and (iv) exploring the institutional and financial basis to support a buyer engagement programme. The lessons and experience will be systematically documented and analysed in biannual participatory assessments of the effectiveness of the pilot. At the end, (i) lessons will be documented, and (ii) a scaling-up strategy and sustainability mechanism will be proposed to the key national stakeholders.

Table 7. Seafood products from target FIPs that will be at the core of the buyer engagement trials in Ecuador and Guatemala and the pilot in Morocco.

Country	Target species	FIP	Types of products	Comments
Ecuador	Dorado	Ecuador mahi-mahi – longline	Fresh and frozen fillets and portions are sold to retailers, restaurants, and food service establishments [b].	GMC2 will not contribute directly with theses FIPs. However, there will be coordination with the FIP implementers to develop the buyer engagement trial.
		Ecuador mahi-mahi - longline (ASOAMAN)		
	Swordfish	Ecuador South Eastern Pacific swordfish - longline		
	Other large pelagic fish [a]	Ecuador large pelagic fish longline ASOAMAN		The GMC2 project will support the development of this FIP.
Guatemala	Dorado	Guatemala dorado and sharks FIP	Fresh and frozen fillets and portions are sold to retailers, restaurants, and food service establishments.	The GMC2 project will support the development of this FIP.
	Sharks		Shark meat is sold in the municipal markets and salted and dried to be sold during Holy Week.	
Morocco	Sardine	Morocco sardine - pelagic trawl and seine [c]	Canned and frozen products.	GMC2 will not contribute directly with theses FIP. However, there will be coordination with the FIP implementers to develop the buyer engagement trial.
	Anchovy	Morocco anchovy - purse seine	Canned products.	

[a] Yellowfin tuna, marlins, and sharks.
[b] The sharks that are landed are sold in in the domestic market through traders (comerciantes) and municipal markets and processed for export (fillets, headed & gutted). In the domestic market, shark meat is sold through retailers, restaurants and food service establishments using other names. Also, shark meat is salted and dried to be sold during Holy Week.
[c] On 9 August 2023 this FIP was inactive.

Outcome 1.2. Increased market demand for socially responsible seafood commodities.

122. This outcome is synergic to outcome 1.1 and will aim to motivate international and domestic buyers to incorporate social responsibility considerations into their seafood purchasing policies and target purchase commitments. For this,

[18] Tourism constituted 7.1% of the total GDP of Morocco in 2019. OECD. (2022). Morocco in OECD Tourism Trends and Policies 2022. Organisation for Economic Co-operation and Development (OECD). DOI: https://doi.org/10.1787/e3197856-en

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a responsible seafood standard will be developed and integrated into the FishSource rating system (output 1.2.1). Then, the standard will be promoted with international and domestic buyers (outputs 1.2.2 and 1.2.3). The project will aim to achieve that at least three international buyers and two domestic buyers adopt socially responsible seafood policies and target commitments.

Output 1.2.1. Socially responsible seafood standard integrated into the FishSource rating system and available to major supply chain partners worldwide.

123. The project will support the development of social and economic performance scores to be included in the fishery profiles of FishSource. The purpose of these scores will be to track a fishery's social and economic status and performance. Like the other FishSource indicators and scores, the social and economic scores will be based on public information.
124. In 2016, SFP prepared a proposal for the social and economic indicators and scores that has piloted in a few fisheries. The GMC2 project will support advancing the development of the social and economic indicators and scores, preparing a prototype, and testing it to generate the new instrument.
125. The social and economic scores will be launched by the end of year 1 and applied to the GMC2 target fisheries. By the end of year 2 there will be a meeting of experts to peer-review the use and utility of the socially responsible indicators and scores. Based upon the results of the meeting the social and economic indicators and scores will be adjusted, applied to the FisSource listed fisheries and widely promoted. Finally, on year 5, the experience and lessons will be documented, systematised and shared.

Output 1.2.2. Three major international supply chain partners integrate socially responsible seafood requirements in their policies and commitments.

126. As part of the work with international buyers (output 1.1.1), the GMC2 project will advocate and make a case need for the integration of social responsibility considerations (e.g., workers labour and safety conditions) into their purchasing decisions and their corporate policies. This may include developing new responsible sourcing policies and targets or strengthening the exiting instruments.
127. The project will provide guidance, information and technical assistance to key target international buyers. This will include the use of the social and economic indicators and scores in FishSource.

Output 1.2.3. Two key players in domestic supply chains integrate socially responsible seafood commitments in their policies and commitments.

128. The work to achieve this output is similar to that of 1.2.1 but applied to the work with domestic buyers (output 1.1.2).

Outcome 1.3. Increased market demand for seafood commodities from fisheries with reduced bycatch and environmental impact.

129. This outcome is also synergic to outcome 1.1 and will aim to motivate international and domestic buyers to incorporate ecosystem impact considerations into their seafood purchasing policies and target purchase commitments. These considerations include understanding the impacts of the fisheries and adopting measures like (i) preferring providers that apply measures to minimise bycatch, and (ii) avoiding fisheries that use destructive practices or harm Endangered, Threatened and Protected species (ETP). For this, the project will promote the use of tools (e.g., bycatch audits, Bycatch Solutions Hub) and the pertinent FishSource indicators and scores. As indicated before, FishSource includes indicators and scores for (i) mitigation of bycatch, (ii) mitigation of impacts on ETP species, (iii) mitigation of impacts on benthic habitats, and (iv) mitigation of impacts on other components of the ecosystem. The project will aim to achieve that at least three international buyers (output 1.3.1) and two domestic buyers (output 1.3.2) adopt reduced bycatch and environmental impact policies and target commitments.

Output 1.3.1. Three major international supply chain partners take action to demand seafood sourced from fisheries with reduced bycatch and ecosystem impacts.

130. By the end of year 1, the bycatch and ecosystem impact indicators and scores will be applied to the target fisheries. Then, as part of the work with international buyers (output 1.1.1), the GMC2 project will advocate and make a case need for the integration of ecosystem impact considerations into their purchasing decisions and their corporate policies. This may include developing new responsible sourcing policies and targets or strengthening the exiting instruments.

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131. The project will provide guidance, information and technical assistance to key target international buyers. This will include the use of tools like bycatch audits and the pertinent indicators and scores in FishSource. Finally, during year 4 of project implementation, the experience and lessons will be documented, systematised and shared.

Output 1.3.2. Two key players in domestic supply chains take action to demand seafood sourced from fisheries with reduced bycatch and ecosystem impacts.

132. The work to achieve this output is like that of 1.3.1 but applied to the work with domestic buyers (output 1.1.2).

Component 2. Increase supply of sustainable seafood products from CCLME and PACA.

133. This component will focus on increasing the supply of seafood products from the target supply chains that demonstrate improved fisheries governance, social responsibility, and reduced impacts on the marine environment. The purpose is that these seafood products meet the demand that will be generated by the actions of the component 1.
134. The project will support the strengthening of pertinent fisheries management platforms and the development of credible FIPs that can supply the market with sustainable products (outcome 2.1). Also, the project will promote the integration of social responsibility and reduced ecosystem impact considerations into pertinent fisheries management instruments and the FIPs (outcomes 2.2 and 2.3).

Outcome 2.1. Increased supply of seafood products that demonstrate improved fisheries governance and stock health.

135. To increase the supply of sustainable seafood products it is necessary that the fisheries have a strong governance and that the supply chains improve their practices (e.g., fishing operations, traceability). On the one hand, strong fisheries governance facilitates (i) constructive dialogue among stakeholders, (ii) sound and science-based decision making, and (iii) confronting key issues like overcapacity and illegal fishing. On the other hand, the supply chain actors can implement direct actions to sustain the resource and minimise or eliminate negative impacts on the marine environment and the related human communities. To advance on this, the project will apply two tools in the target supply chains: (i) government-led co-management platforms (output 2.1.1) and (ii) industry-led fishery improvement projects (output 2.1.2). In addition, the GMC2 project will support the development of capacities of the most vulnerable groups of these supply chains to engage into the pertinent fisheries governance processes and the FIPs (output 2.1.3).
136. The “co-management platforms” are multi-stakeholder dialogue spaces that facilitate participatory processes (i) to prepare and assess the implementation of fisheries management plans, (ii) to agree on conservation and management measures, and (iii) to adopt joint action to confront key challenges like traceability and illegal fishing. The project will build upon the lessons of the GMC project on developing these platforms.
137. A “Fishery Improvement Project” is a collaborative effort of the actors of the supply chain to improve the sustainability of a specific fishery. The FIP brings together fishers, vessel operators, processors, buyers, and retailers to identify the key environmental issues of the fishery and to implement priority actions to address the key challenges. The FIPs focus on the environmental challenges of the fisheries, but more recently have started to incorporate social responsibility aspects. Two key steps have been:
138. The development of a framework to identify socially responsible seafood (called the Monterey Framework). This framework establishes that socially responsible seafood has three essential components: (i) it protects human rights, dignity, and access to resources, (ii) it ensures equality and equitable opportunities to benefit from the resources, and (iii) it improves food and livelihood security.
139. The development of the social responsibility assessment tool for the seafood sector which is applied to the FIPs that are listed in FisheryProgress.
140. Based upon the experience of SFP and the GMC project, the present project will only support industry-led FIPs. These are FIPs in which the private sector (e.g., fishers, processors, traders) assume responsibility and leadership of the improvements (e.g., recording of capture and landings, bycatch reduction measures), including the pertinent investments.
141. At project start a "cultural heritage impact assessment" will be prepared to identify and document any cultural heritage practices linked to the target fisheries. This information will contribute to identify (i) cultural practices that have negative impacts on the fishery resources and the marine environment, and (ii) empirical knowledge to be taken into account in the design and implementation of fisheries regulations and management plans and the FIPs.

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Output 2.1.1. Seven government led national co-management platforms that improve fisheries governance and stock health.

142. The GMC2 project will support the creation or strengthening of formal government-led co-management platforms. As indicated before, these are multi-stakeholder dialogue spaces were public (e.g., fisheries, maritime and environment authorities) and private actors (e.g., fishers, traders, processors) can analyse the situation and key issues of the fishery and agree upon measures to be taken like management measures (e.g., management plans, harvest strategies) or research priorities. Without exception, the analytic and decision-making processes will consider the fishers´ pertinent empirical knowledge.
143. The project will work with seven national platforms:
    (1) Support the development and operation of the Dialogue Roundtable and the Technical Committee of the pomada fishery in Ecuador.
    (2) Develop the management platform for the longline large pelagic fish fishery in Ecuador.
    (3) Develop the management platform for the dorado and sharks fishery in Guatemala.
    (4) Develop the management platform for the shrimp fisheries of the Pacific coast of Panama.
    (5) Develop the management platform for the longline fishery for large pelagic fish of the Pacific coast of Panama.
    (6) Support the operation of the governance framework for the small pelagic fish fishery in Senegal.
    (7) Support the management framework of the fishery for small pelagic fish in Mauritania.
144. In all cases, the work will initiate with a situation analysis that will include mapping[19] existing and potential conflicts (i.e., fishery conflicts[20] and conflicts among members of the supply chains). This analysis will be basis for the design of a tailor-made intervention.
145. Without exception, the national fisheries authority will be responsible for organising and leading the co-management platform, convening its members, and ensuring that the agreements are implemented. It is foreseen that these platforms will be the basis for updating or developing management instruments and plans (output 2.2.2). The projected climate change impacts on the target fisheries and supply chains will be put forward and analysed on each platform to be taken into account for the development of fisheries conservation and management measures.
146. In addition, the GMC2 project will support advancing collaborative management of small pelagic fish between Morocco and Mauritania.

(1) Support the development and operation of the Dialogue Roundtable and the Technical Committee of the pomada fishery in Ecuador.

147. The National Action Plan for the pomada fishery (PAN Pomada), adopted in 2021, established that a governance system will be established (result 1.2). The governance system will be integrated by a dialogue roundtable and a technical committee. However, these governance units have not yet been developed.
148. At project start, there will be a situation analysis and an assessment of gender integration into the PAN pomada 2021 – 2027. Based upon the results of these analyses a workplan will be prepared and implemented to support the development and operation of the management platform. Probable actions may include formally establishing the dialogue roundtable and the technical committee, facilitating the meetings to foster constructive dialogue and trust among the members, and promoting fact-based analysis and consensus building. The project will prepare gender-responsive action plan to strengthen gender integration into the PAN Pomada 2021 – 2027 and will organise meetings to sensitise the members of the platform on taking gender aspects into account in the fisheries governance system and the design and implementation of fisheries management instruments.
149. There will be annual performance assessments to facilitate reflection of the members of the platform and agreement on actions to address shortfalls and key issues.

[19] A tool to explore is the FishColla conflict mapping toolkit. See:
Abdurrahim, A. Y., Ross, H., & Adhuri, D. S. (2020). Analysing fisheries conflict with the FishCollab 'conflict mapping'toolkit: lessons from Selayar, Indonesia. In IOP Conference Series: Earth and Environmental Science (Vol. 420, No. 1, p. 012001). IOP Publishing.
Ross, H., Adhuri, D. S., Abdurrahim, A. Y., Penrang, A., Rismayani, A., & Ismainna, A. (2018). FishCollab: a toolkit to support community and government collaboration in coastal management. Washington, DC: Capturing Coral Reef and Related Ecosystem Services Project.

[20] Fishery conflicts are disagreements that occur between two or more actors and centre on the ownership or management of marine fishery resources or the access to marine space. See:
Spijkers, J., Singh, G., Blasiak, R., Morrison, T. H., Le Billon, P., & Österblom, H. (2019). Global patterns of fisheries conflict: Forty years of data. Global Environmental Change, 57, 101921.
Spijkers, J., Merrie, A., Wabnitz, C. C., Osborne, M., Mobjörk, M., Bodin, Ö., ... & Morrison, T. H. (2021). Exploring the future of fishery conflict through narrative scenarios. One Earth, 4(3), 386-396.

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(2) Develop the management platform for the longline large pelagic fish fishery in Ecuador.

150. At present there is no management platform for the longline fishery for large pelagic fish (i.e., espinel grueso). A dialogue roundtable and a technical committee have been proposed for the dorado fishery, but these governance units have not been yet established. It must be taken into account that both fisheries and supply chains have the same actors, but their modes of operation and markets are different. It is foreseen that both management platforms (dorado and large pelagic fish) will be synergic. The process to develop a national action plan for swordfish (a main element of the capture with espinel grueso) will be undertaken towards the end of 2023.
151. At project start, the management platform will be designed and formally established by the national fisheries authority, aiming to operationalise the implementation of the PAN swordfish. The project will support the development and operation of the management platform. Probable actions may include facilitating the meetings to foster constructive dialogue and trust among the members, promoting fact-based analysis and consensus building. The platform structure and operation will take into consideration that the capture of large pelagic fish feeds distinctive international (e.g., swordfish) and domestic (e.g., marlins, shark meat) markets. A key activity of the platform will be to prepare the national position to be held in the regional meetings of the Inter-American Tropical Tuna Commission (IATTC), considering that the target species (tunas, marlins, swordfish) are covered by the Antigua Convention.
152. There will be annual performance assessments to facilitate reflection of the members of the platform and agreement on actions to address shortfalls and key issues.

(3) Develop the management platform for the dorado and sharks fishery in Guatemala.

153. At present this fishery – formally designated as “commercial fishing for dorado and shark in the Pacific Ocean” in chapter III of the Regulation of the General Law of Fisheries and Aquaculture (Governmental Agreement 223-2005) – has no participatory management platform. There is a “technical table for chondrichthyans” (mesa técnica de condrictios) that congregate mainly civil society conservation organisations, public sector entities and academia and which is a centre piece of the National Action Plan for the Management and Conservation of Sharks, Rays and Chimaeras of Guatemala (PAN condrictios). But the technical table for chondrichthyans does not constitute a fisheries co-management platform since it does not address the management of the dorado fishery and has no formal representation of the fishery sector.
154. During the second year of the GMC2 project, the management platform for the dorado and sharks fishery will be designed and formally established. This will allow time for convening and organising the value chain actors that will be part of the dorado and shark FIP (output 2.1.2). The design of this management platform will build upon the experience of the technical table for chondrichthyans and the governance roundtables by species that have been implemented in the Caribbean and will be in line with the PAN condrictios.
155. The project will support the development and operation of the management platform. Probable actions may include engaging representatives of the supply chain, facilitating the meetings to foster constructive dialogue and trust among the members, promoting fact-based analysis and consensus building. There will be meetings to sensitise the members of the platform on taking gender aspects into account in the fisheries governance system and the design and implementation of fisheries management instruments.
156. A financial strategy for the operation of the management platform will be prepared after the first year of its functioning. The purpose of this strategy will be to mobilise resources from public and private sources to sustain the governance process. It is foreseen that the Directorate of Regulations for Fishing and Aquaculture (DIPESCA) will lead the implementation of this strategy.
157. Finally, there will be annual performance assessments to facilitate reflection of the members of the platform and agreement on actions to address shortfalls and key issues.

(4) Develop the management platform for the shrimp fisheries of the Pacific coast of Panama.

158. Co-management of fishery resources is established in article 18 of the Panamanian Fisheries Law (Law 204 of 2021). But, at present there is no management platform for the shrimp fisheries (artisanal and bottom trawl). Panama has a National Commission for Responsible Fishing (NCRF) which was established by the law that created the Aquatic Resources Authority of Panama (ARAP) (Law 44 of 2006) (Chapter IV of Law 44) and modified by the Fisheries Law (article 151 of Law 204). The NCRF is a consultation and advisory body to recommend to the fisheries authority initiatives, policies, and measures to regulate the fishing activity. The NCRF was installed and became operational on 9 December 2022. In *stricto sensu* the NCRF is not a co-management body.
159. Towards the end of the first year of the GMC2 project, the management platform for the shrimp fisheries will be designed and formally established. This will allow time for undertaking a baseline analysis of the situation of artisanal

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shrimp fishers (including Emberá-Wounaan fishers) (output 2.1.3) and convening the supply chain actors that will be part of the Panamanian shrimp FIP (output 2.1.2, Table 5).

160. The project will support the development and operation of the management platform. Probable actions may include engaging representatives of the supply chain, facilitating the meetings to foster constructive dialogue and trust among the members, promoting fact-based analysis and consensus building. A cornerstone of the work will be to support the integration of artisanal fishers and in particular the organisation of Emberá-Wounaan artisanal shrimp fishers, if they are involved in the fishery and are willing to participate, to have a voice and representation in the management platform (output 2.1.3). It is foreseen that the NCRF will be kept informed of the developments through the General Administrator of ARAP, who is the secretary of the commission.
161. There will be meetings to sensitise the members of the platform on taking gender aspects into account in the fisheries governance system and the design and implementation of fisheries management instruments. Finally, there will be annual performance assessments to facilitate reflection of the members of the platform and agreement on actions to address shortfalls and key issues.

(5) Develop the management platform for the longline fishery for large pelagic fish of the Pacific coast of Panama.

162. At present there is no management platform for the longline fishery for large pelagic fish of Panama. At the beginning of the second year of the GMC2 project, the management platform will be designed and formally established. This will allow time for convening the supply chain actors that will be part of the Panamanian LPF FIP (output 2.1.2, Table 5).
163. The project will support the development and operation of the management platform. Probable actions may include engaging representatives of the supply chain, facilitating the meetings to foster constructive dialogue and trust among the members, promoting fact-based analysis and consensus building. It is foreseen that the NCRF will be kept informed of the developments through the General Administrator of ARAP, who is the secretary of the commission.
164. There will be meetings to sensitise the members of the platform on taking gender aspects into account in the fisheries governance system and the design and implementation of fisheries management instruments. Finally, there will be annual performance assessments to facilitate reflection of the members of the platform and agreement on actions to address shortfalls and key issues.

(6) Support the operation of the governance framework for the small pelagic fish fishery in Senegal.

165. Co-management of fishery resources is established in section IV of the Senegalese Fisheries Law (Law 2015-18 of 13 July 2015). For small pelagic fish the governance framework includes the National Support Commission for the Development of Fisheries (CNAPP), the National Advisory Council for Maritime Fisheries (CNPCM), the Local Artisanal Fishing Council (CLPAs), the National Federation of Women Processors of Senegal (FENETRANS), the National Interprofessional Fisheries Council of Senegal (CONIPAS), and various economic interest groups. The operation of this institutional framework confronts limitations like institutional anchoring and limited funding. Therefore, at project start, a detailed participatory situation analysis will be undertaken to assess the functioning of the governance framework (e.g., level of performance, governance gaps and limitations). In parallel, the project will assess the level of gender integration in the latest sardinellas management plan[21] and the management framework for small pelagic fish. Then, a workplan to strengthen the governance framework will be prepared and implemented. The workplan will include:
    - governance performance indicators and targets to track progress,
    - actions to strengthen the integration of women in the governance framework and the understanding of the role and contributions of women along the small pelagic fish value chain, and
    - affirmative actions to mainstream gender into the implementation of the sardinellas´ management plan.
166. The project will support strengthening and operation of the governance framework. Probable actions may include engaging representatives of the supply chain, facilitating the meetings to foster constructive dialogue and trust among the members, promoting fact-based analysis and consensus building, preparing legal instruments, developing specialised studies, and training activities. There will be meetings to sensitise the members of the governance framework on taking gender aspects into account in the fisheries governance system and the design and implementation of fisheries management instruments. Finally, there will be annual performance assessments to facilitate reflection of the members of the governance framework and agreement on actions to address shortfalls and key issues.

[21] As of August 2023, the sardinellas´ management plan of 2014 was being updated. It was expected that th new plan will be completed by the end of 2023.

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(7) Support the management framework of the fishery for small pelagic fish in Mauritania.

167. For small pelagic fish the governance framework includes four bodies:
    - The National Advisory Council for Fisheries Management and Development[22] (CCNADP), a high-level advisory body that give opinions of fisheries management strategies and plans and the total allowable catch (TAC) of the fisheries.
    - The Fisheries Management Support Commission (CAAP), a public – private body, responsible for coordinating the implementation and monitoring of the fisheries management plans.
    - The National consultation commission for the management of small pelagics (CNC-PP), a public – private advisory body, to be consulted regarding management measures and plans for the fishery.
    - The coordination unit of the management plan for small pelagics in the Mauritanian EEZ (PAP-PP).
168. Therefore, at project start, a detailed participatory situation analysis will be undertaken to assess the operation and performance of the management structure of the Mauritanian fishery for small pelagic fish (i.e., CNC-PP, CAAP, CCNADP and the PAP-PP coordination unit). Based upon this analysis, a workplan will be prepared and implemented to strengthen the capacities and operation of the CNC-PP and the PAP-PP coordination unit. The workplan will include governance performance indicators and targets to track progress. The project will support the implementation of the workplan, probable actions include training and technical assistance to the CNC-PP (e.g., positive dialogue, decision-making process and consensus building), actions to modernise and potentiate the CNC-PP (e.g., update the decree that sets the composition and functioning of the CNC-PP, current version is of 2012), facilitating the meetings of the governance framework to foster constructive dialogue and trust among the members, promoting fact-based analysis and consensus building, monitoring and evaluation of the implementation of the PAP-PP, and systematically capture and document learning. There will be meetings to sensitise the members of the governance framework on taking gender aspects into account in the fisheries governance framework and the design and implementation of fisheries management instruments. Finally, there will be annual performance assessments to facilitate reflection of the members of the governance framework and agreement on actions to address shortfalls and key issues.

(8) Support collaborative management of small pelagic fish between Morocco and Mauritania.

169. Regional cooperation is greatly needed to manage the small pelagic fish resources of the CCLME. The most recent assessment of Seafood Watch for the Moroccan fishery highlights that there are no regional agreements to limit total catches between the states, nor on the partitioning of TACs advised by the FAO Working Group for the subregion into national quotas. Morocco and Mauritania signed a Cooperation Agreement on Maritime Fisheries and Aquaculture on 11 March 2022 which includes, among other issues, cooperation on scientific and technical research and the management of fisheries. Therefore, the project will support joint actions to advance the collaborative management of small pelagic fish.
170. The GMC2 project will provide a joint research fund aimed at improving the estimations of the condition of the stocks and to refine the Mauritanian TAC calculations of shared small pelagic fish resources. The research activities will be based upon articles 3 and 5 of the Cooperation Agreement in Maritime Fisheries and Aquaculture of 2022. The details of the use of the research fund will be agreed by the parties during project implementation. The GMC2 project will cover materials, consumables (e.g., petrol, laboratory consumables), and small equipment. In addition, the project will sponsor binational technical meetings to, among other matters, analyse the status of the stocks of shared small pelagic fish resources and to discuss coordinated harvest strategies.

Output 2.1.2. Eight industry-led verifiable Fishery Improvement Projects that contribute to improved fisheries governance and stock health.

171. The GMC2 project will support (i) the initiation of three new FIPs, (ii) the implementation of five existing FIPs and (iii) the adaptation of the FIP methodology to develop a small pelagic fish supply chain improvement project in the Joal CLPA in Senegal. As indicated before, without exception, the project will only support industry-led FIPs.
172. In all cases, the work will initiate with a situation analysis that will include mapping existing and potential conflicts among members of the supply chains. This analysis will be basis for the design of a tailor-made intervention. The project activities will build upon the experience on developing FIPs of the GMC project and other sources. Without exception, the fishery improvement plans will integrate pertinent empirical knowledge from the fishers. In all cases, the FIP participants will be encouraged (i) to analyse the projected climate change impacts on the fishery and the supply chain and (ii) to develop and implement adaptation measures in their operations.

[22] See articles 20 and 21 of the fisheries law (Law 2015-017) and articles 7 to 12 of its regulations (Decree 2015-159)

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173. The private sector entities that are part of the FIPs that will receive support from the GMC2 project will be screened according to the Policy on Cooperation between UNDP and the Private Sector 2009 and the UNDP Policy on Due Diligence and Partnerships with the Private Sector (2013) using the Private Sector Risk Assessment Tool (2017). The GMC2 project will not engage with private sector entities involved in UNDP exclusionary criteria (e.g., violation of human rights).

(1) Ecuador. Support the implementation of the pomada FIP.

174. The FIP "Ecuador Gulf of Guayaquil titi shrimp - bottom trawl" (abbreviated pomada FIP) was launched in 2020 and reassembled in 2023. As of August 2023, the FIP partners are seven exporters (signatories of the memorandum of understanding), and the coordinator is the National Chamber of Fisheries (CNP). Other participants include importers in the destination market and the Public Institute for Aquaculture and Fisheries Research (IPIAP). The FIP focuses on the trawl fishery for pomada (*Protrachypene precipua*) (see the fisheries profile in Annex 15).
175. The GMC2 project will support key elements of the fisheries improvement workplan and will encourage the integration of the artisanal component of the fishery (bolso fishers) into the FIP (see output 2.1.3). Key interventions include:
    - The design of an improved fisheries monitoring system to collect information from both components of the fishery (trawls and bolsos) to be processed by IPIAP. The implementation of the improved monitoring system in the trawlers will be funded by the FIP. Whereas the GMC2 project will support IPIAP to implement a two-years pilot participatory monitoring system with selected bolso fishers' organisations.
    - Training of trawler and bolso fishers in data collection and best practice like the use of turtle excluder devices (TEDs), the release of marine turtles, and the reduction of bycatch.
    - An assessment of the spatial distribution of population units of pomada.
    - Yearly stock assessment (with the present methodology that relies on data from the trawlers) in years 1, 2 and 3, and a comprehensive stock assessment that integrate information from the trawlers and bolsos in year 4.
    - The application of the social performance risk assessment and the preparation and implementation of the FIP´s social workplan.

(2) Ecuador. Launch the ASOAMAN large pelagic fish FIP.

176. The Manta Shipowners Fishery Production Association (ASOAMAN) operate an ocean fishery using motherships (called nodrizas) and drifting longlines (see the fisheries profile in Annex 15). They have two fishing seasons and operation modalities: (i) during the warm months they use a surface longline to capture dorado (*Coryphaena hippurus*), and (ii) during the cold months they switch to a deep-water longline to capture swordfish, tunas and marlins. In 2021, ASOMAN launched a FIP for their dorado operation and is willing to develop a complementary FIP for their operation that target large pelagic fish during the cold season. The partners of their dorado FIP are the boat owners (signatories of the memorandum of understanding), and the FIP is coordinated by ASOAMAN. Other participants include a processor company, IPIAP, and the Universidad Laica "Eloy Alfaro" de Manabí (ULEAM).
177. The GMC2 project will support the steps to organise and launch the "Ecuador large pelagic fish longline ASOAMAN" FIP (provisional name) and its initial implementation. As of August 2023, other boat owners and processing plants expressed interest in participating in the development of this new FIP. During implementation, the GMC2 project will ensure be close coordination with the implementers of the FIP Ecuador South Eastern Pacific swordfish – longline which focuses on Xiphias gladius from large scale longliners and the nodrizas, and is implemented by three processors-exporters and WWF.
178. Key interventions include:
    - Prepare the initial instruments (e.g., fisheries pre-assessment, workplan, budget).
    - Apply the social performance risk assessment and prepare and implement the FIP´s social workplan.
    - Training of fishers in data collection and best practice like the release of protected sharks and other ETP species.
    - Pilot testing of electronic logbook (equipment and software) in the longliners based on previous experience and best available technology. Test equipment, software, and data-transmission options to identify the most viable and cost-effective options.
179. The products from this FIP will be promoted in the domestic market as part of the buyer engagement trial in Ecuador (output 1.1.2).

(3) Guatemala. Launch the dorado and sharks FIP.

180. Guatemala has no FIPs under implementation. The "dorado and sharks FIP" (provisional name) will be the first FIP of the country. During the project preparation phase three processing companies indicated their interest to join forces to

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develop this FIP: Langosta Roja S.A., Industria Pesquera Samaritana S.A., and TUNART. The FIP will focus on the longline fishery for dorado and sharks which operates from the neighbouring ports of Puerto San José (Escuintla), Puerto de Iztapa (Iztapa) and Buena Vista (Iztapa) (see the fisheries profile in Annex 15).

181. During late July 2023 a prospective FIP was announced in FisheryProgress: PROSPECTIVE Guatemala Pacific mahi-mahi and yellowfin tuna – longline. The guidelines for supporting FIPs estates that a prospective FIP is in the stage of identification or initial development and can be listed as such in FisheryProgress for up to 12 months. The intent of listing prospective projects is to help businesses identify fishery improvement projects to participate in as well as to prevent the development of multiple FIPs in the same species/geographic region. Therefore, at project start it will be necessary to verify if this prospective FIP has progressed or not.
182. The GMC2 project will support the steps to organise and launch the "dorado and sharks FIP" (provisional name) and its initial implementation. Key interventions include:
    - Prepare the initial instruments: supply chain analysis, identification of participants, definition of FIP scope, fisheries pre-assessment, and pre-FIP workplan.
    - Support the launch of the FIP.
    - Support the organisation and initial implementation of the FIP research team and research plan. Guatemala does not have a national fisheries research entity; therefore, it will be crucial to organise a research platform with pertinent universities.
    - Apply the social performance risk assessment and prepare and implement the FIP´s social workplan.
    - Develop capacities of the members of FIP to address social issues during implementation (e.g., gender, child labour, decent work, human rights),
    - Training of fishers, traders and processors on data collection and best practice like the release of ETP species.
    - Design and implement a traceability system for all the supply value chain, from capture to final consumer.
    - Pilot testing of electronic logbook and vessel monitoring of the FIP´s fleet.
183. The products from this FIP will be promoted in the domestic market as part of the buyer engagement trial in Guatemala (output 1.1.2).
184. Finally, the GMC2 project will motivate that the producers and processors of dorado join the Regional Committee of Producers and Processors of mahi (COREMAHI).

(4) Panama. Support the development of a FIP for the shrimp fisheries.

185. Panama has two shrimp FIPs listed in FisheryProgress, both initiated by MARPESCA S.A.: (i) the Panama shrimp - bottom trawl (focused on *Litopenaeus occidentalis, Farfantepenaeus brevirostris* and *Solenocera agassizii*) which is inactive, and (ii) the Panama Northern nylon shrimp - bottom trawl (focused on *Heterocarpus vicarius*) which has demonstrated negligible progress. During the project preparation phase, it was found that MARPESCA and other companies from the National Chamber of Fisheries and Aquaculture are interested in organising a new or reassembled shrimp FIP. Therefore, the GMC2 project will support the steps to organise and launch the "shrimp FIP" (provisional name) and its initial implementation (see the fisheries profile in Annex 15). Key interventions include:
    - Assess the situation of the existing shrimp FIPs, prepare the initial instruments (e.g., supply chain analysis, definition of FIP scope), and organise the governance and implementation arrangements (e.g., FIP coordinator, funding contributions).
    - Support the launch of the FIP.
    - Support the organisation and initial implementation of the FIP research team and research plan.
    - Apply the social performance risk assessment and prepare and implement the FIP´s social workplan.
    - Training of fishers, traders and processors on data collection and best practice like the release of ETP species.
    - Pilot testing of electronic logbook and vessel monitoring of the FIP´s fleet.
    - Design and implement a traceability system for all the supply value chain.
    - Undertake stock assessment.

(5) Panama. Support the implementation of the large pelagic fish longline FIP.

186. Panama has two FIPs for large pelagic fish listed in FisheryProgress: (i) the Eastern Pacific large pelagics - longline (MARTEC) (focused on *Thunnus albacares, Coryphaena hippurus*, and *Xiphias gladius*) which is active and shows advanced progress, and (ii) the Panama large pelagics - longline (MARPESCA) (focused on *Thunnus albacares* and *Coryphaena hippurus*) which has demonstrated little progress. The first FIP has a regional scope, covering Costa Rica, Panama, and Ecuador, and is run by AQUAFOODS. During the project preparation phase, it was found that these companies are interested in organising a new or reassembled FIP for large pelagic fish (i.e., dorado and yellowfin tuna)

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(see the fisheries profile in Annex 15). Therefore, the GMC2 project will support the steps to organise the "large pelagic fish longline FIP" (provisional name) and its initial implementation. Key interventions include:

- Assess the situation of the existing FIPs and decide with the fishing companies how to proceed (reassemble and existing FIP, merge the FIPs, prepare a new FIP) and scope of the work (e.g., include new partners, include the artisanal fishery).
- Facilitate the preparation of a cooperation agreement between the FIP implementors and ARAP for matters like fisheries monitoring, data processing and traceability.
- Design an updated fisheries monitoring system to collect information from the fishing operations and the supply chain.
- Training of fishers on data collection and best practice like the release of ETP species.
- Pilot testing of electronic monitoring onboard the longline vessels.
- Apply the social performance risk assessment and prepare and implement the FIP´s social workplan.

187. Finally, the GMC2 project will motivate that the producers and processors of dorado join COREMAHI.

(6) Senegal. Launch a small pelagic fish supply chain improvement project in the Joal CLPA.

188. The GMC2 project will test the development of a "small pelagic fish supply chain improvement project" in the Joal CLPA in Senegal. Joal is a commune of the M'bour Department, located south of Dakar, and is one of the main landing sites for small pelagic fish.
189. Small pelagic fish is vital for food security in Senegal. The landings of the artisanal fishery are mostly artisanal processed by women who gut, ferment, salt and dry the fish. Women also play a main role in trading the processed fish locally (petty traders) or long-distance (locally known as banabanas). Smoked and salted-dried fish is transported to the inland areas of Senegal and exported to neighbour countries such as Mali, Burkina Faso, Guinea Bissau, Guinea Conakry, Cote d'Ivoire, and Benin.
190. Women processors face limitations like unsanitary and unsafe processing areas, weak social cohesion and limited access to funding (e.g., to buy fish). There have been important advances. For example, the USAID COMFISH and Dekkal Geej projects have contributed to empower women processors and to improve their processing. Also, FAO has introduced (i) improved processing techniques to prevent contamination with polycyclic aromatic hydrocarbons (PAHs) during smoking and drying and (ii) handling guidelines to improve food safety. However, artisanal processing and trading of smoked and salted-dried small pelagic fish is currently seriously threatened by the drastic reduction of fish availability, and the increase in prices caused by the demand from fish meal and fish oil processing plants.
191. The GMC2 project will undertake exploratory work to improve the supply of artisanal processed small pelagic fish that is safe and comes from sustainable fishing. In this case:
    - "safe" means that it is fit for human consumption and therefore has been handled and prepared following certain standards of quality processing and hygienic practices (e.g., not contaminated with PAHs or bacteria), and
    - "sustainable fishing" means that the fish comes from a reliable source like formal fishers that comply with the regulations (e.g., no illegal fishing).

    It is foreseen that the Responsible Seafood Sourcing Standard used by Better Seafood Philipines will be adapted to local conditions.

192. This "supply chain improvement project" will be synergic to the domestic buyer engagement trial indicated in output 1.1.2 and the actions to strengthen the Joal CLPA and to empower women processors indicated in output 2.1.3. The work in Joal will be a pilot to generate experience and practice that, depending on the results, could be scaled up and transferred to other locations. The initiative will include the fishers and the women processors under the umbrella of the Local Artisanal Fishing Council and will establish fluid communication and synergies with the U.S. Agency for International Development (USAID), Japan International Cooperation Agency (JICA) and other development partners working on related matters.
193. Key interventions include:
    - Prepare a detailed analysis of the situation of the small pelagic fish supply chain in Joal (e.g., stakeholder identification, domestic markets, value distribution along the supply chain, role of women and youth in the supply chain) to identify bottlenecks, market disruptions and opportunities to develop supply of sustainable small pelagic fish products to the domestic market.
    - Prepare a pre-assessment of the fishery to identify environmental and management challenges.
    - Prepare a strategy and workplan and organise the governance and funding arrangements for the improvement project. It is foreseen that local fishers and women processors will make important in-kind contributions that will have to be accounted.

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- Implement the pilot for two years, with semestral meetings of the partners to assess progress, identify and document lessons, and adjust planning.

194. At the end, a learning document will be prepared and disseminated. This document will include recommendations for scaling up, as pertinent.

(7) Senegal. Launch octopus FIP.

195. For Senegal, the common octopus (Octopus vulgaris) is a main export commodity that comes from small-scale and industrial fisheries and is exported frozen mainly to Asia (Japan, China, South Korea) and Europe (Spain, Italy, Greece, Portugal, and France) (see the fisheries profile in Annex 15). The Senegalese octopus from the small-scale fishery is rated as a "good alternative" in Seafood Watch.
196. A few years ago, small-scale fishers have started to use clay pots to form artificial reefs that provide a favourable habitat for octopus females during the breeding season. The clay pots are made by women potters that generate an additional income with this task. This initiative has been sponsored by the European Union, as part of the fisheries agreement with Senegal. The idea of increasing the breeding area using the clay pots is quite innovative.
197. The GMC2 project will support the steps to organise and launch the "Senegal octopus FIP" (provisional name) and its initial implementation. During the project preparation phase, it was found that local processors and exporters (e.g., SENEFAND part of PROFAND) and the global octopus supply chain roundtable were interested in developing such a FIP.
198. Key interventions include:
    - Prepare the initial instruments: supply chain analysis, identification of participants, definition of FIP scope, fisheries pre-assessment, and pre-FIP workplan.
    - Support the launch of the FIP.
    - Support the organisation and initial implementation of a public – private alliance to undertake the applied research priorities.
    - Training of fishers, traders and processors on data collection and best practice.
    - Design a financial mechanism to integrate the costs of production and deployment of clay pots into the production costs of octopus (i.e., internalise the ecosystem service of artificial reefs that provide shelter for reproducing female octopuses). This will be done by analysing the clay pot supply chain and the social and economic conditions of the women potters and designing an intervention that provide long-term support and tangible benefits to them.

(8) Mauritania. Support the implementation of the small pelagic fish purse seine FIP.

199. For Mauritania, small pelagic fish is an important commodity. The majority of the capture (ca., one million tonnes in 2019) is transformed into fishmeal and fish oil and exported. Fishmeal is mostly exported to China and Turkey, whereas fish oil is exported mainly to France, Denmark and Turkey. Frozen small pelagic fish is exported mainly to African countries (see the fisheries profile in Annex 15).
200. Since 2017, Mauritania has a small pelagics - purse seine FIP which is led by the Mauritanian Institute of Oceanographic and Fisheries Research (IMROP) and OLVEA Fish Oils, though other industry companies participate. The GMC2 project will provide targeted support to this FIP. The specific support required was identified during the project preparation phase.
201. Key interventions include:
    - Provide technical guidance for the implementation of the FIP´s social workplan.
    - Support the strengthening of the national coordination group by (i) assessing the current limitations and barriers for effective local coordination, (ii) preparing a strategy and workplan to establish and consolidate a local coordination team, and (iii) support the coordination team, ensuring fluid coordination and operation among FIP participants (e.g., Ministère des Pêches et de l'Economie Maritime, IMROP, local businesses and international buyers) and the use of pertinent instruments (e.g., operations manual, collaboration agreements).
    - Design and test trial a monitoring system (e.g., minimum sample size, formulas to calculate total catch) to collect data from the Mauritanian coastal fleet that fish for small pelagic fish and to estimate it capture, landings and catch composition.

(9) Mauritania. Support the implementation of the octopus FIP.

202. For Mauritania, the common octopus is a main export commodity that comes from artisanal, small-scale and industrial fisheries and is exported frozen mainly to Europe (Spain and Italy) and Asia (mostly Japan) and Europe (see the fisheries profile in Annex 15). The Mauritanian octopus is rated as a "avoid" in Seafood Watch.

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203. During July 2023, the Global Octopus Supply chain roundtable and the, newly formed, Mauritanian Association of Octopus Producers and Exporters (AMPEP) launched a prospective FIP. The GMC2 project will support the development of this FIP.
204. Key interventions include:
    - Apply the social performance risk assessment and prepare and implement the FIP´s social workplan.
    - Design and test trial a monitoring system (e.g., minimum sample size, formulas to calculate total catch) to collect data from the Mauritanian fleets that capture octopus (pirogues using pots and jigs, inshore fishing boats using traps, and deep-sea trawlers). The system will register bycatch and incidental captures of ETP species.
    - Support the institutional and governance development of AMPEP as a key actor of the Mauritanian octopus FIP. Possible areas of support include (i) to develop positive dialogue and negotiation skills, (ii) to prepare and agree on key instruments like internal rules and regulations, administration of a common fund, a strategic plan, self-evaluation tools, and a code of conduct, and (iii) to understand the requirements of the sustainable seafood market (e.g., sustainable use of the resource, social responsibility). At the end it is expected that AMPEP can (i) effectively represent the actors of the value chain, (ii) positively interact and collaborate with the fisheries authority and other pertinent government entities (e.g. IMROP, maritime authority), and (iii) sustain the octopus FIP.

Output 2.1.3. Artisanal and small-scale fishers and local supply chain partners effectively engage into fisheries improvement projects and co-management platforms.

205. This output aims to contribute to potentiate the capacities of the most vulnerable groups of the target supply chains to engage into fisheries governance and the FIPs. The project will support (i) the bolso fishers and women peelers of the pomada fishery in Ecuador, (ii) the artisanal fishers of the dorado and sharks fishery of Guatemala, (iii) the artisanal fishers of the shrimp fishery in Panama, (iv) CLPA network and CLPA and women processors of Joal in Senegal. In all cases, the target groups will be encouraged (i) to analyse the projected climate change impacts on their operations and (ii) to devise and apply adaptation measures.

(1) Pomada bolso fishers.

206. The pomada bolso fishers live in remote villages within the Gulf of Guayaquil. Most of these communities have very low living conditions and limited access to education, health care and telecommunications. These are traditional artisanal fishers that harvest various resources like mangrove crabs (*Ucides occidentalis*) and estuarine fishes. They do not have market power, because they depend on the middlemen who buy their perishable harvest. Also, they do not have political power, since in negotiations with the government they are represented by second level organisations that not always embody their voice, nor is easy to reach consensus among such a diverse group. Bolso fishers have proposed to establish a management system based on Territorial Use Rights for Fisheries (TURFs) like in the red crab fishery, but their proposals have not been considered. Formal fishers are grouped in fisher's organisations, but there is a large number of informal fishers that operate and sell their catch to the middlemen (this is stricto sensu is illegal fishing). The pomada FIP is focusing on the trawl fishery because of the complexity of integrating the bolso fishers into actions to improve the fishery.
207. The GMC2 project will specifically contribute to develop participatory governance and co-management skills of the pomada bolso fisher's organisations to foster their participation in the pomada management platform and the pomada FIP. This work will be closely coordinated with WWF who has been supporting this fishery during the past years. Key interventions include:
    - Evaluate the social, economic, and labour conditions of the pomada bolso fishers, with particular emphasis on the roles of women and young persons.
    - Assess the capacities of the pomada fishers´ organisations to effectively participate and have a voice in the governance platform, and then identify capacity needs and prepare a workplan for capacity development. The workplan will include fostering constructive collaboration among fishers´ organisations and will give particular attention to potentiate the contributions of women and young persons to fisheries governance.
    - Implement the workplan by providing direct support, technical assistance, and training. A social worker will assist the fisher's organisations for eighteen months, it is foreseen that SRP will continue to provide support afterwards. Th work will include (i) building bridges and trust among fishers´ organisations and encouraging the establishment of a coalition, (ii) forming alliances with public and private organisations to generate support to their organisations, (iii) implementing a traceability system and (iv) developing capacities to participate in FIPs.
    - Sponsor annual meetings of the fishers´ organisations to exchange experience and assess progress.

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(2) Pomada women peelers.

208. The operation of the pomada fishery is centred in Posorja, a rural locality with about 24,000 inhabitants. There the trawlers and pomada fishers land and trade their capture. The large processors | exporters only buy peeled pomada. For this, some companies contract local primary processing facilities (i.e., small processing units, abbreviated SPUs) or buy from middlemen that sell peeled pomada. There are two small processing units which are formal and legally contract women peelers. In contrast, most peeling is done in informal and unsanitary facilities run by middlemen. Also, when there is high demand, middlemen pay women to peel pomada at home.
209. Protecting the employment of women peelers was a core argument to maintain the pomada trawl fishery when shrimp trawling was banned in Ecuador in 2012. Trawl owners and middlemen often raise the argument of women peelers´ employment in negotiations with the fisheries authority. But pomada women peelers are the most vulnerable group. They entirely depend on the working opportunities that the SPUs and the middlemen offer. In the formal SPUs women have decent working conditions, but when they undertake informal work, they face labour and safety risks. Also, when they peel at home, they do this as an extension of their household chores. Also, they are not organised and do not have a common voice and representation. It is estimated that there are about 1,500 pomada women peelers in Posorja.
210. The GMC2 project will specifically foster that pomada women peelers are integrated as a key actor of the supply chain. Key interventions include:
    - Under the leadership of SRP prepare a register of pomada women peelers and pomada peeling facilities (formal and informal). Then, document the social, economic and labour conditions of women pomada shrimp peelers in Posorja, and prepare a workplan to empower them to effectively participate in fisheries governance.
    - Implement the workplan by providing direct support, technical assistance, and training. A social worker will assist the women peelers for one year to foster collaboration, positive dialogue, build trust, and develop a joint voice to participate in pomada fisheries governance and value chain improvement. The work will include building alliances with public and private organisations (e.g., the parrish government of Posorja) to generate long-term support to the empowerment of pomada women peelers.
    - Bring the labour issues of the women peelers to the pomada management platform and other pertinent fora.
211. The work on labour issues will be closely coordinated with the International Labour Organisation (ILO) project "strengthening decent work in the fishing sector in Ecuador and Peru" that directly works with the labour and fisheries authorities.

(3) Artisanal fishers of the dorado and sharks fishery.

212. The artisanal fishers, in general, have very low living conditions and limited access to education, health care and basic services. They are the most vulnerable link of the value chain since they entirely depend on the middlemen (local traders) who are the suppliers of the processing plants. The fishers sell their catch to the middleman that pays the best price, though there are basic social agreements. The fishers of the dorado and sharks fishery mostly operate independently or in family groups. Their level of organisations is very weak. The few fishers' organisations that exist, in general, do not truly represent voice and needs of the fishers of this fishery. TUNART is developing a business model based on sourcing directly from fishers.
213. The GMC2 project will specifically contribute to develop participatory governance and co-management skills of the artisanal fishers and local traders to foster their participation in the management platform and the FIP to be developed. The project will focus on the operations based on of Puerto San José (Escuintla), Puerto de Iztapa (Iztapa) and Buena Vista (Iztapa). Key interventions include:
    - Undertake a comprehensive baseline analysis which includes (a) to evaluate the social, economic, and labour conditions of the fishers and local traders, (b) to document and quantify the involvement and contributions of women in the dorado and sharks value chains, and (c) to assess baseline capacities of independent fishers, local traders and existing fishers´ organisations to effectively participate and have a voice in the governance platforms for dorado and sharks.
    - Based upon the results of the baseline analysis, prepare, and implement a workplan to potentiate the capacities of the fishers and local traders. The work will include (i) fostering collaboration and trust among fishers, (ii) forming alliances with public and private organisations to generate long-term support to their development, and (iv) developing capacities to participate in FIPs.
    - Sponsor annual meetings to promote fisher-to-fisher learning exchange.

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(4) Artisanal shrimp fishers of the Pacific coast of Panama.

214. Similarly, to the situation found in Ecuador and Guatemala, the Panamanian artisanal fishers have very low living conditions and do not have market or political power in the supply chain. These fishers mostly live in remote localities and depend on the middlemen to sell their catch. The fishers are not fully organised, though there are local formal organisations and a National Federation of Artisanal Fishermen of Panama (FENAPESCA).
215. During the project preparation phase, it was found that some Emberá-Wounaan fishers fish shrimp with gillnets on the eastern side of the Panama bight (Santa Fé and Chimán districts). These fishers operate outside of the Emberá-Wounaan territory which is land locked. Apparently, they are members of two inactive artisanal fishing associations (the Asociación de Pescadores Artesanales y Agroturística de Cucunatí -APAGROCU- and the Asociación de Pescadores Artesanales de Río Platanares - APAGROCU). The existence of these fishers and their involvement in the shrimp fishery will be verified by during year 1 (Annex 3).
216. The GMC2 project will contribute to engage shrimp artisanal fishers into fisheries governance processes as well as guarantee that any Emberá-Wounaan shrimp fishers are included in the process. Key interventions include:
    - Undertake a comprehensive baseline analysis which includes: (a) to document social, economic, and labour conditions of Panamanian artisanal shrimp fishers in the Pacific coast with particular attention to the roles of women and young persons in the fishing activities, (b) to prepare a baseline analysis of the conditions of Emberá-Wounaan artisanal shrimp fishers (e.g., number of artisanal fishers, conditions of their families, women participation in the shrimp supply chain, use - dependency on the fishery´s resources, actual and past levels of organisation, interests and views to be organised as fishers for this activity), and (c) to assess the baseline capacities of key artisanal shrimp fishers´ organisations to effectively participate in the governance platform.
    - Based upon the results of the baseline analysis, prepare and implement a workplan for capacity development, including fostering constructive collaboration among fishers´ organisations. The work will include (i) direct work with Emberá-Wounaan artisanal shrimp fishers to facilitate dialogue and to prepare their contributions to the co-management platform, (ii) fostering collaboration and trust among fishers, and (ii) developing capacities to participate in fisheries governance and FIPs. In all cases, particular attention will be given to the contributions of women and young persons to fisheries governance.
    - Sponsor annual meetings of key fishers´ organisations to promote fisher-to-fisher learning exchange.

(5) National network of Local Artisanal Fishing Councils.

217. As indicated before the CLPAs are the basis of the Senegal´s co-management system. The first CLPAs were created in 2010 (Ministerial Decree 9077 of 8 October 2010). Later the fisheries law of 2015 established them nationwide (Law 2015-18 and Decree 2016-1804). The COMFISH projects supported the development of a national network of all CLPAs which have had difficulties for operation. A key issue is funding, despite the existence of the CLPA Operational Support Fund (Fonds d'appui au fonctionnement des CLPA, abbreviated FAF). In 2006, interministerial decree 001808 of 15 March 2006, established that 60% of the fees for artisanal fishing permits will be allocated to CLPAs in the form of operational support funds. Then, in 2009, an order of the Minister of Maritime Economy, Fisheries and Maritime Transport, established the a Departmental Management Committee (CGD) for the FAF within the Maritime Fisheries Directorate. However, despite these advances the FAF is not yet operational.
218. The GMC2 project will contribute to strengthen the operation of the national network of CLPAs aiming to potentiate their contribution to the governance of the small pelagic fish and octopus fisheries. Key interventions include:
    - Undertake a rapid situation analysis of the operation of the CLPAs and the coordination network building upon the information and experience of previous cooperation work (e.g., USAID COMFISH, COMFISH+ and Dekkal Geej projects, JICA) and in-depth interviews and focus groups with CLPAs.
    - Based upon the results of the analysis, prepare and implement a workplan to strengthen the national coordination network through technical assistance and training.
    - Develop a web-based platform to facilitate information exchange among CLPAs (e.g., posting news and information about each CLPA). The platform will include a digital repository to compile and make public the CLPA acts, local plans and other formal documents. The platform will be easily accessible and adjusted to the condition of internet access of the CLPA users (e.g., equipment used by CLPA members and internet access in rural areas). The COMFISH projets set a website to assist CLPA members (i.e., www.clpa.sn) but it was abandoned. Therefore, the GMC2 project will seek partnerships to provide long-term support to the web-based platform.
    - Prepare and implement a strategy to operationalise the FAF.

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(6) Joal Local Artisanal Fishing Council.

219. The GMC2 project will support the strengthening of the Joal CLPA which is at the core of the small pelagic fish supply chain improvement project (output 2.1.2). Key interventions include:
   - Assess the existing capacities of the Joal CLPA to effectively participate and have a voice in the governance framework for the small pelagic fish fishery. Identify capacity needs and, together with the CLPA, prepare and implement a workplan for capacity development with indicators and targets to measure progress. Particular attention will be given to the contributions of women and young persons to the CLPA operation and to small pelagic fish fisheries governance.
   - Prepare and implement a resource mobilisation strategy that outlines how the CLPA will secure the financial and non-financial resources needed to accomplish its mandate and functions according to its workplan. The strategy will include actions for the development of capacities needed (e.g., keeping accounts, reporting).
   - Provide direct funding, to be administered by the CLPA, to support the implementation small pelagic fish management measures like monitoring and control, implementation of closed seasons or applied research (the activities will be in line with the local and national management plans for small pelagic fish).
   - Organise semestral meetings of the Joal CLPA to assess progress, identify and document lessons, and adjust planning.

(7) Joal artisanal women processors of small pelagic fish.

220. As indicated before, women processors confront several barriers. The GMC2 project will contribute to empowering the women processors of the Joal CLPA who are at the heart of the small pelagic fish supply chain improvement project (output 2.1.2). Key interventions include:
   - Document the social, economic, and labour conditions of women that process small pelagic fish in the Joal area.
   - Together with the women processors prepare and implement a workplan to potentiate their capacities to contribute to improvements in the supply chain and fisheries governance. A social worker will assist the women processors for two years to foster collaboration, positive dialogue, build trust, and develop a joint voice as processors and to constructively engage into (i) the CLPA and other fisheries governance structures and (ii) the supply chain improvement project (output 2.1.2). The work will include support to improve small pelagic fish processing through technical assistance, training (e.g., food safety practices, business planning, use of improved kilns) and investments (e.g., improved kilns, sanitation and hygiene of storage areas). The improvements will be in line and coordinated with the buyer engagement trial (output 1.1.2) and the supply chain improvement project (output 2.1.2). Throughout the work two key elements will be: (i) to foster that women processors build alliances to secure long-term support to their development and (ii) to strongly encourage the participation of young women.
   - Organise meetings of the women processors to assess progress, identify and document lessons, and adjust planning. At the end, a lessons learned document will be prepared with recommendations for the transfer of lessons to other groups of women processors.

Outcome 2.2. Increased supply of seafood products that demonstrate improved social responsibility.

221. The project will promote the integration of social responsibility considerations into the supply chains and the fisheries management instruments to respond to the pertinent market demand (outcome 1.2). For this, the GMC2 project will (i) develop guidelines to mainstream social responsibility considerations into fisheries governance processes and supply chains (output 2.2.1), and (ii) support the integration of social and economic considerations into the management plans of the target fisheries (output 2.2.2).

Output 2.2.1. Two sets of guidelines to mainstream social responsibility into fisheries governance and seafood supply chains.

222. The project team guided by a market specialist from SFP will review the current status, trends, tools and initiatives to integrate social responsibility into fisheries governance and supply chains. Then, the team will prepare two tools: (i) a self-evaluation tool and guidelines to integrate social responsibility into fisheries governance processes and (ii) a self-evaluation tool and guidelines to integrate social responsibility into fisheries value chains.
223. The two tools (in English, French and Spanish) will be tested together with the key actors of the target value chains. Then, their application and performance will be assessed to prepare a final revised version that will be distributed worldwide.

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Output 2.2.2. Nine fisheries management instruments that integrate social and economic objectives and targets.

224. The integration of social and economic considerations into fisheries management instruments is very complex. This requires an intersectoral perspective and strong policy coherence. The Organisation for Economic Co-operation and Development (OECD) defines policy coherence as "the systematic promotion of mutually reinforcing policy actions across government departments and agencies creating synergies towards achieving the agreed objectives". A whole-of-government approach and policy coherence are key to advance towards the Sustainable Development Goals (SDGs) and the Kunming-Montreal Global Biodiversity Framework[23] since it implies improving policy integration and capitalise on synergies and benefits across economic, social, and environmental sectors. The target 17.14 of the SDGs is to "enhance policy coherence for sustainable development".
225. The GMC2 project will facilitate that the six participating countries test the use of Regulatory Impact Assessment (RIA) in the management frameworks of the target fisheries. RIA is an evidence-based tool to support public decision making. It is a systematic appraisal of how a proposed policy is likely to affect certain categories of stakeholders and a range of outcomes. The use of RIA in the present project will contribute (i) to identify and assess the possible impacts of the proposed fisheries conservation and management measures (e.g., loss of sources of income or livelihoods) and (ii) to design mitigation and compensation measures as necessary. Five of the six participating countries do not apply RIA. Only Panama applies this tool, but only within government agencies (no stakeholder consultation is undertaken). In the case of Ecuador, the USA-Ecuador Trade and Investment Council Protocol on Trade Rules and Transparency, which entered into force on August 2021, requires the use of Regulatory Impact Assessment (article 9 of Annex II), and the National Secretariat of Planning (SENPLADES) has issued a toolkit for the application of RIA.
226. To achieve this output the work is arranged in three interlinked phases: (i) training on RIA, (ii) regional learning exchanges on fisheries management plans, and (iii) direct support to update or develop the management plans of the target fisheries.

[1] Training on Regulatory Impact Assessment.

227. An expert in RIA will prepare a training course and guidelines for the application of RIA in fisheries. It is foreseen that the training will be based on the OECD methodology. In-person training courses will be implemented on each participating country. It is foreseen that ca., 20 persons person per country will attend the course (e.g., fisheries officers, planning secretary, environment officers, maritime authority). The guidelines on RIA application in fisheries (in English, French and Spanish) will be posted on the IW:LEARN portal and widely disseminated.
228. During the months after the course, the expert in RIA will provide on-line support and advice to the participants to test the tool in the target fisheries.

[2] Regional learning exchanges on fisheries management plans.

229. The project will facilitate regional exchanges of learning among the CCLME and the PACA countries.

South-South cooperation for the preparation and implementation of fisheries action plans among PACA countries.

230. Over the past fifteen years the Ecuadorian fisheries authority has applied a strategy to prepare and adopt participatory "national action plans" (abbreviated PAN) for the key fisheries (e.g., dorado, pomada, tuna, mangrove crab). These plans have a comprehensive strategic approach and include four basic components dealing with (i) the fisheries governance framework, (ii) surveillance and control, (iii) monitoring and research, and (iv) outreach and communication. All plans include a monitoring and evaluation plan with measurable indicators and targets. The Viceministry of Aquaculture and Fisheries (VMAP) has a unit that manage the PANs under the Directorate of Fisheries and Aquaculture Policy. This experience will be valuable to Guatemala and Panama that do not have management plans for the target fisheries.
231. The project will facilitate that the Ecuadorian experience and lessons (positive and negative) are distilled through a participatory process with the VMAP, IPIAP and key stakeholders from the fisheries and associated supply chains. Then, a regional workshop will be held in Ecuador including field visits and interaction with fisheries stakeholders. It is

[23] Article 6 (b) of the Convention on Biological Diversity calls upon Parties to integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies (i.e., biodiversity mainstreaming). Target 14 of the Global Environmental Framework is: Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, strategic environmental assessments, environmental impact assessments and, as appropriate, national accounting, within and across all levels of government and across all sectors, in particular those with significant impacts on biodiversity, progressively aligning all relevant public and private activities, and fiscal and financial flows with the goals and targets of this framework.

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foreseen that the workshop will be based upon the FAO guidance for fisheries learning exchanges. The workshop will serve to initiate a community of practice among practitioners of the three countries. Finally, during the following years, the project will foster that the members of the community of practice regularly have virtual meetings, provide advice, and exchange experiences and lessons during the development of the six management plans to be targeted by the GMC2 project in the PACA.

Learning exchange on management plans for small pelagic fish and octopus among CCLME countries.

232. Mauritania, Morocco and Senegal have accumulated strong experience in the preparation of national management plans for small pelagic fish and octopus fisheries. The project will support, on each country, participatory processes with key stakeholders to document, systematise and distil the experience in preparing and implementing fisheries management plans for small pelagic fish and octopus. Then, a regional workshop will be held to exchange learning and to initiate a community of practice among practitioners of the three countries. It is foreseen that the workshop will be based upon the FAO guidance for fisheries learning exchanges. Finally, during the following years, the project will foster that the members of the community of practice regularly have virtual meetings, provide advice, and exchange experiences and lessons during the development of the four management plans to be targeted by the GMC2 project in the CCLME.

[3] Update or development of the target fisheries management plans.

233. The project will contribute (i) to develop or update nine management plans and (ii) to implement Mauritania´s small pelagic fish management plan of 2022. Finally, the project will foster that COREMAHI integrate social consideration in its code of conduct. In all cases, the analytic and decision-making processes will consider the empirical knowledge that the fishers have about the resources and the marine environment. Also, the projected climate change impacts on the target fisheries and supply chains will be put forward and analysed to be taken into account during the preparation of the fisheries management plans.

(1) Ecuador. Update the PAN pomada 2028 – 2033.

234. The present PAN pomada will run from 2021 until 2027. The GMC2 project will support that the fisheries authority test the RIA in the present management framework and to design and test impact mitigation strategies to protect the most vulnerable groups (i.e., female pomada peelers and bolso fishers). For example, how to mitigate income losses during the closed seasons as a whole-of-government response. All this will contribute to develop practical experience on the use of RIA for decision making and policy coherence.
235. The project will also contribute to confront two key issues:
    - First, an assessment of the labour and working conditions of fishers of the pomada trawlers will be prepared. This will serve to identify issues and gaps, to discuss these matters in the pomada dialogue roundtable, and to prepare and implement an action plan to address pertinent gaps as a whole-of-government response. All this will be done in close collaboration with the ILO project.
    - Second, an investigation of illegal fishing and catch laundering in the pomada supply chain will be prepared. This fishery has a serious issue with illegal catch (from fishers using “changa” a forbidden fishing gear and illegal bolso fishers) that enter the supply chain, therefore threatening that the buyers in the destination market avoid sourcing from Ecuador. This information will be used to apply RIA and identify a whole-of-government response to eliminate illegal fishing and catch laundering.
236. Finally, the project will sponsor an external independent assessment of the implementation of the PAN pomada 2021-2027 and the participatory process to prepare the 2028 – 2023 version that will (i) include social and economic targets and indicators and (ii) a fisheries management with harvest strategy, reference points and harvest control rules.

(2) Ecuador. Prepare the PAN large pelagic fish.

237. The GMC2 project will support the assessment and updating of the PAN espada (to be launched during the first quarter of 2024). It is foreseen that the scope of the plan will be expanded to cover all large pelagic fish captured by the espinel grueso fishery. The first action will be to assess the labour and working conditions of the fishers that operate in the longline vessels (large longliners and nodrizas) to identify issues and gaps. This will be done in close collaboration with the ILO project and will be an input for discussion in the management platform and the future updating of the PAN.
238. The second action will be to undertake an external independent mid-term evaluation of the PAN espada and the effectiveness of the fishery conservation and management measures, followed by a participatory process to update

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the plan (and most probably expand its scope) with the management platform (output 2.1.1). The updated plan will integrate labour gaps and other pertinent key social and economic matters as a whole-of-government response (based on a RIA process). The PAN will include a fisheries management with harvest strategy, reference points and harvest control rules that is in line with the conservation and management of the IATTC.

(3) Guatemala. Support implementation and update of PAN sharks 2021 – 2026.

239. The project will foster the inclusion of social and economic considerations into the PAN condrictios. For this:
    - First, an external independent assessment of the implementation of the PAN condrictios will be undertaken to understand how implementation is progressing and to identify key gaps.
    - Second, a detailed analysis will be prepared of the Guatemalan domestic consumption and value chain for shark meat, parts, and products and their contribution to food security, livelihoods and income. This analysis will be the basis for a facilitated intersectoral dialogue process to foster policy coherence and an agreed policy framework for shark conservation, trade, and management measures.
    - Third, support DIPESCA to implement a registry of shark fishers and traders in the Pacific coast of Guatemala. This will be an important input for the regulation of shark fisheries.
    - Fourth, prepare and adopt a set of conservation and management measures for the shark species caught in the Pacific coast of Guatemala (at the moment the country does not have species-specific fisheries regulations). The regulations will be based on Regulatory Impact Assessment as will be whole-of-government approach response. The effectiveness of the conservation and management measures will be assessed after one and two years of their adoption to generate knowledge and to adjust the measures as pertinent.
    - Finally, the project will sponsor an external independent assessment of the implementation of the PAN condrictios and the participatory process to prepare the 2027 – 2032 version. It is foreseen that the plan will be in line with pertinent regional instruments (e.g., the Regional Action Plan for the Management and Conservation of Sharks in Central America which was updated in 2022) and the regulations of the IATTC.

(4) Guatemala. Prepare the action plan for the dorado and sharks fishery.

240. The project will sponsor the participatory process to prepare the action plan for the dorado and sharks fisheries. This will be done after (i) the first set of shark conservation and management are adopted (paragraph 239), and (ii) the management platform has been established (paragraph 153). It is foreseen that the plan (i) will include social and economic targets and indicators, (ii) a harvest strategy, reference points and harvest control rules, (iii) is in line with the pertinent regional regulations of the IATTC, and (iv) be based on a RIA process and a whole-of-government approach.

(5) Panama. Prepare the shrimp management plan.

241. Panama has a set of regulations (e.g., closed seasons) but no comprehensive management plan for the shrimp fisheries. Therefore, the GMC2 project will sponsor the participatory process to prepare the national action plan for the shrimp fisheries. The first step will be to assess the performance of the present regulatory framework using RIA. It is foreseen that the plan (i) will include social and economic targets and indicators, and (ii) a harvest strategy, reference points and harvest control rules.

(6) Panama. Prepare the large pelagic fish management plan.

242. Like with shrimps, Panama has a set of regulations for longline fishing (Executive Decrees 126 of 2017 and 11 of 2019) but no comprehensive management plan for large pelagic fish. Therefore, the GMC2 project will sponsor the participatory process to prepare the national action plan for the longline fishery for large pelagic fish. The first step will be to assess the performance of the present regulatory framework using RIA. It is foreseen that the plan (i) will include social and economic targets and indicators, (ii) a harvest strategy, reference points and harvest control rules, and (iii) will be in line with the pertinent regional regulations of the IATTC.

(7) Senegal. Integrate Regulatory Impact Assessment into management framework of the fishery for small pelagic fish.

243. The national fisheries authority is in the process of updating the management plan for the sardinella fishery. It is foreseeable that the new plan will be adopted by late 2023. The GMC2 project will assist the fisheries authority to assess the management framework for sardinellas and other small pelagic fish applying RIA.

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244. The process will include applying RIA to the existing management framework and preparing a social responsibility assessment of the governance process and the supply chain. This information will be taken to intersectoral dialogue tables to analyse their implications and to develop key measures to address the identified gaps as a whole-of-government approach response.

(8) Senegal. Update the octopus management plan.

245. The latest Octopus Fishery Management Plan was adopted in 2016. The project will sponsor the updating of this plan. The first step will be to assess the performance of the present regulatory framework using RIA followed by facilitated intersectoral dialogue to analyse the results. Then, an external independent assessment of the implementation of the Mauritanian octopus management plan will be prepared, followed by a participatory process to prepare the updated version. The process to update the plan will have technical assistance from Morocco based upon the Memorandum of Understanding signed on November 2016. It is foreseen that the new plan (i) will include social and economic targets and indicators and (ii) be based on a whole-of-government approach. A booklet in Wolof that summarise the updated management plan will be printed and distributed to the CLPAs.

(9) Mauritania. Update the octopus management plan.

246. The latest Octopus Fishery Management Plan was approved by Order 764/MPEM/2018 of 18 October 2018. The project will sponsor an external independent assessment of the implementation of the plan and the participatory process to prepare the updated version. It is foreseen that the new plan (i) will include social and economic targets and indicators and (ii) be based on a RIA process and a whole-of-government approach.

(10) Support the implementation of Mauritania´s small pelagic fish management plan.

247. The Management Plan for small pelagics in the Mauritanian ZEE (PAP-PP) was adopted in 2022. The GMC2 project will add to advance the specific objectives 2 and 4 of the management plan:
   - Specific objective 2. Optimization of the wealth generated by the small pelagics fishery, which aims to achieve that "the development and marketing of small pelagics are ensured taking into account the needs of national and external markets in finished products".
   - Specific objective 4. Improvement of the contribution of small pelagics to food security, which aims to achieve that "improving the contribution of small pelagics to food security" and "creation of storage capacity".

248. For this, the project will work on three lines of action:
   - First, to prepare a strategic plan to potentiate added value small pelagic fish products. For this, the project will sponsor a report that (i) calculates the present values of employment and economic contribution of the existing small pelagic fish value chains and (ii) to prepare a forecast of future employment and economic contribution of three scenarios: (a) 100% capture destined to added value human consumption (domestic and export markets) and use of fish residues to produce fishmeal and oil, (b) 100% capture destined to production of fishmeal and oil, and (c) an intermediate scenario. Then, organise two study visits from a public - private delegation to Morocco to exchange experience on processing and adding value to small pelagic fish and the use of by-products and wastes (e.g., skins, scales, bones, trimmings) to produce added value products. The study visits will be based upon article 6 of the Cooperation Agreement in Maritime Fisheries and Aquaculture signed in 2022 by both countries. Finally, undertake a participatory process to prepare a national policy and a strategic plan to develop Mauritanian value chains for added value small pelagic fish (e.g., canned, frozen, sun dried, smoked, ready-to-eat products). The process will be based on multisectoral and multilevel workshops with key stakeholders (fishers, processors, government) to construct the policy and strategic plan.
   - Second, to design a national programme to promote seafood consumption (mainly small pelagic fish). For this, the project will sponsor an analysis to (i) calculate the current national fish and seafood per capita consumption, (ii) calculate the current national per capita consumption of small pelagic fish, and (iii) identify the consumer preferences and major barriers to seafood and small pelagic fish consumption. Then, a study visit will be organised to know firsthand the experience and lessons of a successful national programme to promote seafood consumption. Finally, undertake a participatory process to design a national programme to promote seafood consumption (in particular small pelagic fish).
   - Third, sponsor an external independent evaluation of the implementation of the PAP-PP and analyse the results with the CNC-PP, CAAP, and CCNADP.

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[4] Integrate social considerations and targets in COREMAHI´s code of conduct.

249. COREMAHI is a private organisation which congregate producers and processors from Costa Rica, Ecuador, and Peru. Their mission is "to ensure the commitment of the national and international public and private sectors linked to the mahi mahi fishery in Eastern Pacific waters with the aim of promoting the sustainability of the resource and maintaining its stock(s) and healthy ecosystems". COREMAHI has a code of conduct that is applied by its members. The code of conduct, which was adopted in 2021 and recently evaluated in 2023, it includes voluntary measures to reduce the impact on marine turtles and sharks and the release of marine litter, but it does not include social considerations.
250. The GMC2 project will collaborate with COREMAHI (i) to motivate the integration of Guatemalan and Panamanian producers and processors, and (ii) to develop social responsibility targets into their code of conduct. The project will foster annual self-assessments of the effectiveness of the code of conduct and, towards the end of the project, an external independent assessment of the performance and effectiveness of the code of conduct.

Outcome 2.3. Increased supply of seafood products that demonstrate reduced bycatch and environmental impact.

251. The project will promote the integration of reduced bycatch and environmental impact considerations into three fisheries management instruments (output 2.3.1) and four FIPs (output 2.3.2). The focus will be to reduce the bycatch of sharks in the PACA. Though, there will be an intervention to address plastic pollution from the octopus fishery in Mauritania.

Output 2.3.1. Three fisheries management instruments that integrate objectives and targets to reduce ecosystem impacts and bycatch.

252. The aim will be that, in the PACA countries, key fisheries management instruments incorporate measures to reduce the bycatch of sharks. To achieve this output the work will focus on (i) the National Action Plan for the Conservation and Management of Sharks of Ecuador (PAT-Ec) and the PAN large pelagic fish (output 2.2.2), (ii) the regulations for the longline fisheries in Guatemala and Panama, (iii) the process to prepare the Detriment Finding Reports (NDFs) for shark species, and (iv) the regional actions of COREMAHI.

(1) Ecuador. Mainstream shark market considerations into PAT-Ec and PAN large pelagic fish.

253. Ecuador has a long history of applying management and conservation measures to sharks species. The main issue has been that sharks are caught as bycatch in several fisheries. There are various specific measures to protect specific shark species and a PAT-Ec. The Executive Decree 902 (published in the Official Register 274 of 15 February 2009) established that "the conservation and management of the shark resource is established as a policy of the Ecuadorian State, through the implementation of the National Action Plan for the Conservation and Management of Sharks of Ecuador (PAT-Ec) and other instruments that for that purpose are issued by the Undersecretary of Fisheries Resources". The current version of the PAT-Ec covers the period 2020 to 2024.
254. The public disgust with shark finning and the trade of shark fins generated, over the years, an increased pressure to reduce the capture of sharks or even to ban their capture. This, however, does not consider that shark meat has been traditionally consumed by Ecuadorians and that it is currently (i) sold with other names in markets, supermarkets, restaurants and catering, and (ii) exported to markets like the USA and Spain. In fact, sharks are an affordable source of protein for Ecuadorians. There is a strong pressure to ban shark capture and trade in Ecuador like Colombia did in 2021. But the Colombian measure had severe social impacts for not considering the uses of sharks as food and source of income in local trade.
255. The GMC2 project will contribute to this matter by:
    - First, sponsor a detailed analysis of the Ecuadorian domestic consumption, market and value chain for shark meat and parts and their contribution to food security, income, and livelihoods.
    - Second, organise facilitated intersectoral dialogue on the implications of Ecuadorian domestic shark consumption and trade on conservation and management measures (e.g., food security, employment). The dialogue process will foster policy coherence and an agreed policy framework for shark conservation, trade, and management measures.
    - Third, foster that pertinent measures and target to reduce the bycatch of sharks are integrated into the new version of the PAT-Ec (to be updated during 2025) and the PAN large pelagic fish.
256. This work will be closely coordinated with WWF who is executing the USAID sponsored project “Habla Tiburon” which will implement market and conservation incentives designed to reduce the fishing mortality of sharks and rays.

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(2) Guatemala. Implement measures to reduce bycatch of sharks in longline fisheries.

257. As indicated before Guatemala does not have species specific regulations for sharks. Therefore, based upon the work during the first two years of project implementation and the field tests of bycatch reduction in the FIP, the project will foster that DIPESCA prepare and adopt regulations to reduce the bycatch of sharks in the longline fisheries. These regulations will be based on RIA and will have a whole-of-government approach. Finally, the effectiveness of the measures will be assessed, and the regulations adjusted accordingly.

(3) Panama. Implement measures to reduce bycatch in longline fisheries.

258. Similarly, the project will foster that ARAP prepare and adopt regulations to reduce the bycatch of sharks in the longline fisheries. These regulations will be based on RIA and will have a whole-of-government approach. Finally, the effectiveness of the measures will be assessed, and the regulations adjusted accordingly.

(4) Regional. Strengthen capacities to prepare Non-Detriment Finding Reports for shark species.

259. The three countries confront difficulties to prepare the NDFs like limited intersectoral collaboration and limited information about the condition of the regional stocks of the sharks. Two big challenges are: (i) to prepare risk assessments with very limited information and (ii) to comply with the resolutions of CITES CoP 19 of 2022. Therefore, the GMC2 project will organise a regional meeting to identify barriers and challenges for assessing risks on transboundary shark species. A specialist from IATTC will be invited to participate in this meeting. After that, an intersectoral training workshop will be held on each country with delegates from key entities (e.g., CITES scientific authority, maritime authority, fisheries authority, trade and exports authority, customs authority). These workshops will emphasise the need for a whole-of-government response to the preparation and implementation of NDFs and pertinent CITES regulations. The workshops will be followed by online technical assistance by an international specialist. The project will organise bimonthly online regional meetings for coordination and experience exchange among the national teams in charge of the preparation of the NDFs. This will be complemented with two in-person meetings in years 3 and 4 of project implementation. Experts from IATTC will be engaged into these meetings. It is envisioned that this process will contribute to develop a community of practice that can continue after project completion.

(5) Regional. Active role of COREMAHI in the reduction of environmental impact of the longline fishery.

260. COREMAHI is very active in the IATTC processes: (i) they have a formal status of observer under the IATTC, (ii) they actively participate in the Scientific Advisory Committee (SAC) and conference meetings, and (iii) signed a Memorandum of Understanding with the IATTC in 2021. Therefore, the GMC2 project will foster that COREMAHI advocate for bycatch management in the longline fisheries for large pelagic fish covered by the IATTC. For this the project will:
    - Support the participation of COREMAHI delegates in the SAC and IATTC meetings. The focus will be to work on the conservation and management measures for dorado, sharks and ETP species, and the dorado regional scientific research plan.
    - Promote that COREMAHI issue position statements and technical documents to the IATTC and the national authorities regarding bycatch issues and conservation and management measures for dorado, sharks and ETP species.
    - Undertake an external independent evaluation of the effectiveness of the bycatch reduction and ETP conservation measures applied by COREMAHI members in the context of the code of conduct. Then, based on the results of the evaluation, update the code of conduct to strengthen the pertinent measures and to incorporate specific targets and reporting actions.
    - Foster annual self-assessments of the performance of the code of conduct regarding the measures to reduce the impacts on sharks and ETP species.

Output 2.3.2. Four FIPs that implement actions to reduce ecosystem impacts and bycatch.

261. The aim will be that the large pelagic fish FIPs of Ecuador, Guatemala and Panama apply measures to reduce ecosystem impacts and bycatch (mainly sharks). The measures will be prepared and implemented as part of the FIP development and execution. In Panama, the GMC2 project will sponsor field tests of methods and tools to reduce by catch in the longlines. These results will be used by the FIP implementers for pilot testing and implementation. The results and lessons will be documented and disseminated.

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262. The project will support dealing with marine debris generated by the Mauritanian octopus fishery. The octopus fishery started in 1978, since then, fishers adopted the use of plastic pots. These plastic pots get lost and become marine debris. Mauritanian pots have been found thought the Caribbean, in Florida, and in Bermuda. Octopus plastic pots have become a frequent marine debris item in various parts of the world, like Morocco and the North Atlantic Iberian coast. The GMC2 project will support IMROP to undertake exploratory work to identify methods to reduce marine litter caused by plastic octopus pots. Key interventions include:
    - To conduct a participatory root cause analysis of the generation of marine litter by plastic octopus pots together with local artisanal fishers. The analysis will aim to understand the fishers' views, their modes of operation and to identify the causes of the problem (e.g., gear design, fishers' behaviour, lack of disposal facilities).
    - To identify, based on the root cause analysis, probable actions to prevent the problem (e.g., use clay pots, gear modifications) and prepare a plan to field test the possible solutions using participatory action research methods.
    - To field test of the probable methods to reduce marine litter caused by plastic octopus pots. The work will be based on participatory action research methods and will be implemented together with artisanal fishers. The findings will be systematically documented and analysed to distil positive and negative lessons. The results of each trial will be discussed and analysed with the fishers to try to find improvements. At the end, a scientific report will be prepared with recommendations about the most viable options that were identified and ways to scale them up.
263. The advances and results of this work will be shared with the Global Octopus Supply chain roundtable to motivate buyers to require measures to reduce the impact of lost octopus plastic pots.

Component 3. Knowledge management to support the transformation of the seafood market.

264. This component will focus on generating information to support decision making along the seafood supply chains (outcome 3.1), documenting and sharing the project learning (outcome 3.2).

Outcome 3.1. Reliable and verifiable information of sustainability performance of target marine commodities is available to supply chain partners and the public to drive their purchasing decisions.

265. Transparent, reliable, and accessible information is key to support decision making along the seafood supply chains. Therefore, the project will ensure that the information about the condition of the target fisheries and the advances of the FIPs is publicly available and widely shared. The two main channels to be used will be FishSource and FisheryProgress, which are independent platforms that are acknowledged and used by the main international buyers. The project will also encourage that the information from the target fisheries and FIPs is included in the transparency mechanisms that are implemented by the countries that have joined the Fisheries Transparency Initiative (FiTI) (i.e., Ecuador, Mauritania and Senegal).

Output 3.1.1. The sustainability assessment profiles of all project target fisheries are maintained in FishSource.

266. At project start, the project team together with FishSource personnel will train all the project stakeholders (e.g., government officials, fishers, buyers, FIP implementers) in the use of the FishSource platform, its fishery profiles, indicators and scores. This training will be repeated, as needed, during project implementation.
267. The GMC2 project will sponsor that SFP analysts update or develop the fishery profiles of the target fisheries and to ensure that these profiles are maintained updated throughout the project implementation. It is foreseen that SFP will take measures to ensure that these profiles are maintained updated after project completion.

Output 3.1.2. The profiles and progress evaluations of all project related FIPs are publicly available.

268. At project start, the project team together with SFP personnel will train all the project stakeholders (e.g., government officials, fishers, buyers, FIP implementers) in the use of the FisheryProgress platform, its indicators and scores, and its resources for FIPs and buyers. This training will be repeated, as needed, during project implementation.
269. The GMC2 project will sponsor that SFP analysts update or develop the profiles of the target FIPs and to ensure that these profiles are maintained updated in the FishSource platform throughout the project implementation. It is foreseen that SFP will take measures to ensure that these FishSource FIP profiles are updated after project completion, if required. In addition, the project team will ensure that the FIP implementers maintain their FisheryProgress profiles updated and report according to the pertinent schedule.

Outcome 3.2. Lessons about mainstreaming ecological and social sustainability into seafood supply chains are

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available worldwide.

270. This outcome focuses on documenting and sharing the lessons from the project. Key elements will be the project´s communication and knowledge transfer strategies. The implementation of the project monitoring and evaluation plan (outcome 4.1) will generate inputs to measure progress and to learn from experience.

Output 3.2.1. Project lessons documented and disseminated.

271. This output focuses on documenting and sharing the lessons from the project. Two lines of work will be developed:
    - To facilitate communication and information flow among key project stakeholders and disseminate achievements and lessons.
    - To document and disseminate project lessons.

Project communication strategy

272. At project start, the part-time Communications Consultant will establish a "communications working group" with the communication officers of the project partners (paragraph 295, Table 15). Each entity will designate a delegate that will integrate the working group and that will be the channel for the flow of information and communication materials. This workgroup will prepare and agree:
    - annual work plans that will be jointly implemented and evaluated, and
    - protocols and procedures for collaboration and joint actions.
273. The Communications Consultant will prepare press materials and news, but their dissemination will be done through the channels and social networks of the project partners (e.g., YouTube, Instagram, Twitter). These channels will be the main means to conduct the messages of the awareness raising and knowledge transfer strategies.
274. In the second quarter of project implementation, the Communications Consultant will prepare:
    - A detailed project communication strategy. The purpose of this strategy will be to transmit vital information about the project throughout its implementation. The strategy will focus on the key stakeholders (Annex 7) and the project beneficiaries (Annex 18). It will include: (a) actions for wide dissemination of the core ideas about sustainable and responsible seafood value chains and the main project learning, (b) a workstream to document and share cultural values and beliefs of the target fishing communities (e.g., Mauritanian artisanal octopus fishers, pomada women processors) to be shared through the project´s website, and (c) regular contributions to the IW: LEARN network. The strategy will incorporate recurrent messages about the projected climate change impacts on the target fisheries and supply chains. The project communication strategy will be analysed with the members of communications working group, and it will be executed through annual joint work plans. At the end of each year, the communications working group will evaluate achievements and performance of the project´s communication strategy and it will make relevant adjustments.
    - Four guidelines about:
        - Organization of sustainable events (e.g., UNDP guidelines for sustainable events, UNEP sustainable events guide and the Green Events Tool).
        - Behaviour and use of inclusive and gender-sensitive language.
        - Culturally sensitive behaviour and language.
        - Organisation of inclusive meetings and events (e.g., Harvard inclusive meeting guide).

    The guidelines will be agreed with the partners and implemented in all project actions.
275. The Communications Consultant, in coordination with the communications working group, will prepare communication materials to implement the project´s communication strategy. A quarterly digital bulletin with news and information of the project will be prepared, which will be distributed to all the target audiences of the project.

Project website

276. The Communications Consultant will be responsible for developing and managing the project website that will be linked to the websites of the project partners, core entities, and to the IW LEARN portal.
277. If necessary, accounts will be created and maintained in virtual platforms and social networking sites (e.g., Facebook, Twitter, YouTube, Instagram) that are accessible to the target audiences of the project. However, the priority will be that information flows through the partner channels and networks.

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Project lessons documented and disseminated.

278. In the third quarter of project implementation, a part-time Monitoring, Evaluation, and Knowledge Consultant will prepare the project strategy for knowledge transfer. The purpose of this strategy will be to capture project knowledge, transfer it to pertinent key stakeholders and to make it available to interested parties worldwide. A core element of the strategy will be close coordination and collaboration with IW:LEARN. The project will invest at least 1% of GEF financing to support learning activities through IW: LEARN. The project will actively contribute information and knowledge to the IW:LEARN network. The part-time Gender, Safeguards, and Participation Consultant will ensure that the project submit contributions to the IW:LEARN Gender Hub. The project´s knowledge transfer strategy will have synergy with (i) the communication strategy, (ii) the gender action plan, and (iii) the stakeholders´ engagement plan.
279. In line with the knowledge transfer strategy, the Monitoring, Evaluation, and Knowledge Consultant will establish both methods and procedures for the project team to systematically document the experience of the project and finally prepare documents that present the project learning. The Monitoring, Evaluation, and Knowledge Consultant will provide practical guidance to the project team so that they can adequately document experiences, good practices, and the site interventions. The Gender, Safeguards, and Participation Consultant will ensure that these actions capture social, gender and intergenerational aspects.
280. Mid-term and final onsite meetings for self-assessment and reflection will be organised with local groups. The mid-term meetings will facilitate thinking about the challenges they might be facing and documenting learning. The final meetings will allow to distil and document core lessons. A key element of these sessions will be to examine the contributions and perspective of women and young persons. The reports of these meetings will be systematized and presented to the Project Board. Key findings will be informed in the annual reports to the GEF.
281. The project´s mid-term review will serve as an opportunity for learning. The key findings and lessons from the mid-term review will be shared to all project partners and responsible parties.
282. At the beginning of the final year, it is expected to prepare eight documents that systematise the project experience. Some provisional themes are:
    - Developing domestic demand for responsible and sustainable seafood (lessons from the buyer engagement trials and pilot).
    - Development of a small pelagic fish supply chain improvement project in the Joal CLPA.
    - Lessons on the application of RIA in fisheries.
    - Lessons on the implementation of the target FIPs.
    - Lessons on engaging artisanal fishers in co-management platforms (pomada fishers, Guatemalan dorado fishers, Panamanian shrimp fishers, Senegalese CLPAs, Mauritanian octopus fishers).
    - Women and youth participation and representation challenges in fisheries co-management platforms.
283. These documents will have a dissemination format (e.g., visually appealing, plain language) to be accessible to a broad audience. Each document (i) will be in English (for worldwide access) with extended summaries in French, Spanish and Wolof, and (ii) will be in high-quality PDF format to be downloaded from the web.
284. For project closure, a memoir that summarise the project experience will be prepared in a simple and very graphic format. The memoir will have executive summaries in French, Spanish and Wolof and will be distributed mainly in PDF format through electronic means. The memoir will include a sample of the cultural values and beliefs of the target fishing communities that were documented during project implementation (e.g., folk tales, stories). In addition, eight videos will be prepared. These will summarise the project achievements and lessons, including testimonies of key stakeholders and beneficiaries. The short videos will be made available through IW: LEARN, the project partners websites and YouTube.
285. The formal closure will be performed on the second quarter of the final year. A public event will be organized in each country with broad participation of beneficiaries, key stakeholders, and project partners.
286. To support dissemination of advances and lessons, GEF resources will be invested to support participation in the international waters' conferences (IWC) of 2025 and 2027.

Component 4. Monitoring and Evaluation.

Outcome 4.1. Project-level monitoring and evaluation, in compliance with UNDP and mandatory GEF-specific monitoring and evaluation requirements

287. The project management unit will monitor the GEF core indicators and the project indicators of the results framework to assess progress and the achievement of the mid-term and end-of-project targets. The monitoring and evaluation plan (M&E plan) and the specific GEF monitoring and reporting requirements are detailed in page 100. The part-time Monitoring, Evaluation, and Knowledge Consultant will support the project team in the implementation of the M&E

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plan (Table 16). This person will ensure that project activities are meticulously monitored and assessed applying the GEF monitoring and evaluation policy, and the UNDP monitoring and evaluation policies.

288. This outcome has four outputs that are described in the following paragraphs and in section "monitoring and evaluation (M&E) plan" (page 100).

Output 4.1.1. Inception Workshop and Report.

289. An inception workshop will be held within two months from the first disbursement date. Before this event it will be necessary that the members of the project board had been formally designated, and that the Project Coordinator has been contracted. If needed, the M&E plan will be adjusted based on outcomes of inception workshop. See paragraph 372 for more details.

Output 4.1.2. Annual GEF Project Implementation Review (PIR), reports of Board meetings, and monitoring of the indicators of the (i) project results framework, (ii) the GEF core indicators, (iii) the Gender Action Plan, (iv) the Stakeholder Engagement Plan, and (v) the ESMF.

290. Annual GEF project implementation reports (PIR, paragraph 373) will be prepared by the Project Coordinator based on the outcomes of project monitoring. These reports will include the status of the GEF Core Indicators (Annex 12, paragraph 374), and the project indicators established in the results framework. as well as a progress in terms of gender, communications, knowledge management, risks (ATLAS and SESP), delivery and financial planning. The PIR will be revised by UNDP country offices and cleared by the pertinent UNDP Regional Technical Advisor before submission to the GEF.
291. The Project Board will hold regular meetings to review project performance based on monitoring and evaluation reports like the PIR, MTR, and TE, among others. It is foreseen that the Project Board will meet at least once per year (Annex 11).

Output 4.1.3. Independent Mid-Term Review.

292. An independent mid-term review (MTR) will be completed by the mid-point of the project. The purpose of this examination will be to identify challenges and outline corrective actions to ensure that the project is on track to achieve maximum results by its completion (paragraph 375). The MTR will be prepared during the third year of project implementation.

Output 4.1.4. Independent Terminal Evaluation.

293. An independent terminal evaluation (TE) will be completed in the final year before the operational project closure (paragraph 380). The purpose of the TE will be to assess and document the project results, to synthesize lessons and to promote accountability and transparency.

Agreement on intellectual property rights and use of the logo on the project's deliverables and disclosure of information

294. To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed per relevant policies, notably the UNDP Disclosure Policy[24] and the GEF policy on public involvement[25].

Partnerships

295. The core partners of the project are the fisheries authorities of the six participating countries who are responsible for managing the fishery resources:
    - Undersecretary of Fisheries Resources (SRP) of Ecuador.
    - Directorate of regulations for fishing and aquaculture (DIPESCA) of Guatemala.
    - Ministry of Fisheries and Maritime Economy (MPEM) of Mauritania.
    - Department of Maritime Fisheries (DPM-M) of Morocco.

[24] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/
[25] See https://www.thegef.org/gef/policies_guidelines

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- Aquatic Resources Authority of Panama (ARAP) of Panama.
- Directorate of Maritime Fisheries (DPM-S) of Senegal.

296. However, the transformation of the target supply chains (Table 4) requires action from a variety of private and public actors (see the "Stakeholder engagement" section). As indicated before, the GMC2 project will have a national coordination group on each country to facilitate teamwork and synergies among key partners (paragraph 418). In addition, the Stakeholder Engagement Plan (Annex 7) details the forms of interaction to be implemented by the project.

Private sector

297. On the demand side (Figure 11), the key partners will be the international and domestic buyers that will engage into sustainable and ethical procurement of seafood. They will be identified and engaged during project implementation. Though, the project will directly interact with (a) the Global Mahi Supply Chain Roundtable, (b) the Global Octopus Supply Chain Roundtable, and (c) the Global Roundtable on Marine Ingredients.
298. On the supply side, the key partners will be the members of the target supply chains and FIPs (Table 4, Table 5). These include a range of organisations, companies, and individuals such as the Mauritanian Association of Octopus Producers and Exporters (AMPEP), the SENEFAND company of Senegal, the Guatemalan Industria Pesquera Samaritana S.A., Langosta Roja S.A., and TUNART companies, the Manta Shipowners Fishery Production Association (ASOAMAN), the Titi Company a pomada peeling plant, and COREMAHI.
299. All private sector entities to be engaged into GMC2 project activities will be screened according to the Policy on Cooperation between UNDP and the Private Sector 2009 and the UNDP Policy on Due Diligence and Partnerships with the Private Sector (2013) using the Private Sector Risk Assessment Tool (2017). The GMC2 project will not engage with private sector entities involved in UNDP exclusionary criteria (e.g., violation of human rights).

Public sector

300. The GMC2 project aims to foster a whole-of-government approach to advance fisheries and value chain improvements. Therefore, this will require the integration of the entities in charge of the protection of marine biodiversity, maritime control and enforcement, fisheries research, seafood safety, among other. The project will encourage, as pertinent, that entities responsible for social and economic matters (e.g., Ministry of Labour, Ministry of Woman, Family and Childhood) contribute to the development of management plans and conservation and management measures to catalyse a whole-of-government response and the use of non-regulatory measures.
301. In all participating countries, two key actors will be: (i) the entities responsible for the management of ETP species (e.g., sharks, sea turtles) to address bycatch issues (e.g., CONAP in Guatemala), and (ii) the fisheries research institutes (e.g., IMROP, IPIAP) that generate the stock assessments and key information.

Civil Society Organisations, international cooperation, and other initiatives

302. On each country the project will partner with the local Civil Society Organisations (CSOs) that are key to catalyse improvement in the fisheries and supply chains. For example:
    - CONIPAS and FENETRANS in Senegal who are part of the national co-management framework or the members of the Joal CLPA where the project will have direct interventions to strengthen fisheries governance and will test a small pelagic fish supply chain improvement project (paragraph 188).
    - The 25 organisations of pomada bolso fishers in Ecuador.

    These organisations have been identified and most of them participated in the project preparation phase (Annex 19).
303. The project will also closely coordinate and collaborate with international and conservation organisations that implement initiatives that complement the GMC2 project. In Ecuador, there will be close collaboration with WWF that is working on: (i) conservation of sharks and the reduction of their bycatch (project "Habla tiburón", Annex 16), (ii) improvement on the pomada, swordfish and dorado fisheries, and (iii) support to the swordfish and dorado FIPs. In West Africa, there will be close coordination with the consortium (coordinated by FEEDBACKEU) which implements a campaign to reduce the use of small pelagic fish for fishmeal and oil (project "Our Fish", Annex 16).
304. Regarding international cooperation agencies and international institutions, key collaboration includes:
    - The USAID and JICA initiatives in Senegal that have been fostering fisheries governance and infrastructure.
    - The USAID projects in Ecuador related to fighting IUU fishing, strengthening fisheries governance and the conservation of marine biodiversity.
    - The FAO work on the development of the institutional arrangements to implement the CCLME SAP and supporting regional fisheries management like the work with the Sub-Regional Fisheries Commission (SRFC).
    - The IATTC work on research and management of large pelagic fish, sharks and ETP species.

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- The work of the Organization of the Fisheries and Aquaculture Sector of the Central American Isthmus (OSPESCA) on artisanal fisheries and gender in the fisheries sector.
- The FiTI initiatives in Ecuador, Mauritania, Panama and Senegal.
- The ILO work on decent work in fisheries in Ecuador.

Risks and Assumptions

Risks to the project

305. The eight main risks that the project might face are presented in Table 8 and the UNDP Risk Register is found in Annex 5. The risk analysis was prepared based upon the UNDP Enterprise Risk Management (ERM) Policy and Procedures. Four risks are within the “strategic” risk category, three of them are substantial and one moderate. Also, there are three substantial level risks within the “safety and security” risk category and one substantial risk within the “social and environmental” risk category.

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Table 8. Risks to the implementation of the GMC2 project.

Risk	Level	Mitigation measure	Risk appetite
1. Changes in government priorities. [Strategic]	Substantial	It is usual that after general elections the new government implement changes in different areas (e.g., financial management, trade). All the participating countries will have general elections during the implementation of the GMC2 project (Table 9). When the new authorities assume office the UNDP Country Office will make the necessary arrangements to present the project and to establish communication channels with the pertinent authorities.	Open. UNDP prioritizes the development and implementation of its strategy, seeking new and innovative ways to deliver high-value services, programmatic offers, and objectives, expanding, and diversifying its donor and partner pool while learning from any failures and always following its ethical principles.
2. Changes in political directions and priorities of fisheries authorities. [Strategic]	Substantial	It is common to have changes of fisheries and environment authorities (e.g., ministers, undersecretaries). The project management unit will maintain ongoing fluid communication with project partners and stakeholders. At any time that new authorities assume office, there will be a formal presentation of the project document, implementation progress, management arrangements and the roles and contributions of the entity.	Open. UNDP prioritizes the development and implementation of its strategy, seeking new and innovative ways to deliver high-value services, programmatic offers, and objectives, expanding, and diversifying its donor and partner pool while learning from any failures and always following its ethical principles.
3. Political instability and civil unrest. [Safety and Security]	Substantial	During the project preparation phase there were incidents of civil unrest in Senegal[26] and political instability in Ecuador[27]. Currently (September 2023) there is tension in the Sahel after the recent coup in Niger[28] and post-election political turmoil in Guatemala[29]. During project implementation the Project Management Unit will monitor security advice news from specialised portals and international platforms. UNDP Country Offices will advise on how to proceed under tense circumstances.	Cautious. UNDP puts in place effective measures to reduce its exposure to security and safety risks affecting personnel, premises, assets and operations in order to enable the delivery of activities. Even in situations of significant risks, UNDP programmatic activities will deliver under appropriate and agreed mitigations and controls. UNDP will take necessary risks, including decisions at the appropriate level of delegated authority after all has been done to reduce risks to acceptable levels in accordance with the UNSMS Policy on Security Risk Management

[26] https://www.aljazeera.com/gallery/2023/6/4/death-toll-mounts-as-unrest-flares-in-senegal
https://www.lemonde.fr/en/international/article/2023/06/02/senegal-erupts-in-anger-after-conviction-of-opponent-ousmane-sonko_6028868_4.html
https://www.hrw.org/news/2023/08/01/senegalese-government-dissolves-opposition-party-cuts-internet
https://www.lemonde.fr/en/le-monde-africa/article/2023/08/01/senegalese-government-dissolves-opposition-party-two-dead-in-demonstrations_6075383_124.html
[27] https://www.vox.com/world-politics/2023/4/30/23705442/ecuador-lasso-political-corruption
https://www.wilsoncenter.org/blog-post/four-keys-understanding-what-happening-ecuador
[28] https://www.theguardian.com/world/2023/aug/17/west-african-bloc-prepared-for-military-intervention-after-niger-coup
[29] https://crisis24.garda.com/alerts/2023/09/guatemala-protests-are-likely-to-continue-nationwide-through-mid-september
https://www.aljazeera.com/news/2023/9/4/there-is-no-work-guatemala-political-crisis-spotlights-calls-for-change

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Risk	Level	Mitigation measure	Risk appetite
4. Illegal activities associated with fisheries. [Safety and Security]	Substantial	In the PACA countries drug trafficking associated with fisheries is a major issue. In Ecuador and Guatemala drug trafficking has penetrated the fisheries sector has generated violence and insecurity in fishing communities and the development of related illicit activities (e.g., human and wildlife trafficking). During project implementation the members of the PMU will monitor the conditions to avoid unnecessary risks and to adjust the project strategy and operational plans as pertinent. UNDP Country Offices will advise on how to proceed under tense circumstances. The issue will be proposed for discussion on the co-management platforms, the FIPs and the fisheries management plans of the PACA countries.	Cautious. UNDP puts in place effective measures to reduce its exposure to security and safety risks affecting personnel, premises, assets and operations in order to enable the delivery of activities. Even in situations of significant risks, UNDP programmatic activities will deliver under appropriate and agreed mitigations and controls. UNDP will take necessary risks, including decisions at the appropriate level of delegated authority after all has been done to reduce risks to acceptable levels in accordance with the UNSMS Policy on Security Risk Management
5. Disinterest of key stakeholders in participating in co-management platforms and FIPs. [Strategic]	Substantial	The fisheries officers and the pertinent fisheries authorities will provide information and guidance to all stakeholders to motivate their engagement into the co-management platforms and FIPs.	Open. UNDP prioritizes the development and implementation of its strategy, seeking new and innovative ways to deliver high-value services, programmatic offers, and objectives, expanding, and diversifying its donor and partner pool while learning from any failures and always following its ethical principles.
6. Impacts of El Niño Southern Oscillation (ENSO) and Pacific Decadal Oscillation (PDO). [Safety and Security | Natural hazards]	Substantial	ENSO and PDO are natural climate fluctuations that have direct impact on the biodiversity and society of the eastern Pacific Ocean. By 11 September 2023, El Niño conditions were observed, with about 95% chance to continue through December 2023 – February 2024. During project implementation climate conditions and ENSO and PDO indexes will be monitored, mainly through NOAA climate prediction centre. Annual workplans will be adjusted, as needed, to cope with the impacts of ENSO and PDO events	Cautious. UNDP puts in place effective measures to reduce its exposure to security and safety risks affecting personnel, premises, assets and operations in order to enable the delivery of activities. Even in situations of significant risks, UNDP programmatic activities will deliver under appropriate and agreed mitigations and controls. UNDP will take necessary risks, including decisions at the appropriate level of delegated authority after all has been done to reduce risks to acceptable levels in accordance with the UNSMS Policy on Security Risk Management
7. Climate change [Social and Environmental]	Substantial	Climate change might result in stronger and more frequent climate fluctuations. During project implementation the potential impacts of climate change will be always considered into planning and decision making as well as proposed for discussion on the co-management platforms and the FIPs.	Cautious. The risk is beyond the means of the project to minimise the likelihood that the risk will occur and/or reduce the impacts from this risk.
8. Major domestic buyers unwilling to mainstream sustainability	Moderate	The target countries have domestic markets not used to deal with and demand for sustainable seafood. During the implementation of the buyer engagement trials and pilot, direct contact will be made	Exploratory. UNDP will strike a balance between the potential upside benefits and downside costs of a

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Risk	Level	Mitigation measure	Risk appetite
considerations into their purchasing decisions. [Strategic | market conditions]		with domestic buyers to identify those who are more sensible to these matters, probably for reputational reasons.	decision and considers new solutions and options for delivery.

Table 9. Next general elections in the participating countries.

Country	Election date	Term
Ecuador*	October, 2023+	4 years
Guatemala*	August, 2023	4 years
Mauritania*	June, 2024	5 years
Morocco°	2026	5 years
Panama*	May, 2024	5 years
Senegal*	February, 2024	5 years

* Presidential election.
° Parliamentary election.
+ Parliament was dissolved in May 2023. The president elected in October 2023 will be in office until May 2025, when a new president will take over for four years until 2029.

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Risks from the project

306. In compliance of the UNDP Social and Environmental Standards (SES), the Social and Environmental Screening Procedure (SESP) was applied (Annex 4) to identify the potential risks that may be generated by certain actions to be carried out by the project during the implementation stage. The process applied and the results obtained are summarised in the following paragraphs.
307. Project outputs and activities were screened against the SES principles and standards. The risk significance (i.e., low, moderate, substantial, and high) was evaluated by estimating the level of impact and likelihood of occurrence of each risk using the five-point scale established in the SESP, taking into consideration the scenario in which the project will be implemented. Management measures were outlined to eliminate, reduce, or mitigate the impacts of each risk.
308. The results of the analysis are presented in Annex 4, including a description of the 11 social and environmental risks:
    - Risk 1: The project activities related to the design, reinforcement, support and implementation of muti-stakeholder co-management platforms for each fishery and to the development of governance arrangements for FIPs, could inadvertently lead to the exclusion of certain stakeholders (in particular smaller scale operations) from fully participating in decisions related to fisheries governance and fisheries improvement processes that may affect them. (Moderate)
    - Risk 2: The project activities aimed at supporting increased sustainability and social responsibility in the target fisheries and supply chains could inadvertently exacerbate economic disparities and increased social inequalities among industry actors. (Moderate)
    - Risk 3: The project support for improved fisheries conservation and management measures (to address overfishing or improve specific fisheries) may result in access restrictions to fishers, causing economic displacement, loss of jobs and loss of livelihoods to various actors of the target supply chains. (Substantive)
    - Risk 4: The project activities focusing on fisheries governance and management may lead to tensions or conflicts among different stakeholders over resource allocation and access (among different fishing communities or supply chain partners, especially if their interests or priorities diverge). (Moderate)
    - Risk 5: The project activities promoting and increasing demand for seafood from fisheries with reduced bycatch and ecosystem impacts may inadvertently increase incentives for illegal fishing activities in areas where such regulations are not adequately enforced. (Moderate)
    - Risk 6: The project activities in Panama in the shrimp sector could potentially affect the Emberá-Wounaan people since some of them may be artisanal shrimp fishers. The main risks of the project activities to this community are related to exclusion from participation in fisheries governance and decision-making processes and the risk of economic displacement if conservation and management measures in the shrimp fishery lead to access restrictions. (Moderate)
    - Risk 7: Given the context around gender in the project countries and the fishery sector, there is a risk of exclusion of women from participating in the fisheries governance and fisheries improvement processes promoted by the project. (Moderate)
    - Risk 8: The project activities focused on tightening market requirements and increasing demand for sustainable seafood could put pressure on the industry to meet the supply, which could potentially lead to labour exploitation and poor working conditions, especially in countries with weaker labour regulations. (Low)
    - Risk 9: The project activities focused on increasing demand for sustainable seafood and improving fisheries management could affect food security of local populations in some countries of the project. (Moderate)
    - Risk 10: The target fishery resources are affected by climate variability and climate change. (Moderate)
    - Risk 11: The project will foster changes in fishing practices that could impact intangible cultural heritage of certain communities. (Moderate).
309. The screenings conducted indicated that up to three Principles and five Social and Environmental Standards have been triggered due to ‘substantial’ or ‘moderate’ risks. Based on the significance of these individual risks, the project has been allocated an overall risk categorization rating of ‘substantial’, the overall risk category being taken from the highest rating allocated. Indeed, the SESP identified multiple moderate risks and one risk as substantial, which involves potential risks of economic displacement and loss of livelihoods for measures which are yet to be defined and will be decided during project implementation.
310. Based on this, the SESP confirmed the need to design a Stakeholder Engagement Plan (SEP), a Gender Action Plan (GAP), and an Environmental and Social Management Framework (ESMF). Most of the ‘moderate’ risks were determined to be addressed through existing project activities, with specific mitigation measures mainstreamed into the PRODOC, SEP and GAP. The design of the project has paid special attention to the principle of integration and

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participation of key stakeholders of the target supply chains and the related vulnerable populations, integrating them throughout the design of the project and supporting their involvement, participation, and engagement.

311. As indicated in the SESP guidelines, the type of assessment methodology for substantial risk projects varies depending on the nature of the risks and type of project. In order to further assess and clarify potential impacts identified in the SESP, the project has integrated the preparation of a scoped Environmental and Social Impact Assessment (ESIA) at the beginning of project implementation. The scoped ESIA will include four assessments: (i) cultural heritage impact assessment of the target fisheries, (ii) baseline analysis of Emberá-Wounaan artisanal shrimp fishers, and (iii) identification of ethnic minorities linked to the target fisheries in Africa. Based on the results of the scoped ESIA, a scoped environmental and social management plan (ESMP) will be prepared.
312. In addition to the UNDP SES requirements, the project has included a variety of sector specific tools which will also contribute to ensuring the social and environmental impacts are identified and addressed during project implementation. These assessments (social responsibility assessment, regulatory impact assessment) included during project implementation will allow to best target the specificities of each country and fishery. This will allow to adapt the information included in the SESP, SEP, GAP, ESMF, Scope ESIA and ESMP to the activities and measures being implemented in each country. In cases where these assessments identify specific risks of access restrictions leading to economic displacement and loss of livelihoods that are unavoidable and not addressed by the results of the RIA process, the project has integrated a Livelihood Action Framework.
313. The project ESMF specifies the applicable social and environmental policies and requirements and how those requirements will be met throughout project implementation. This includes procedures for the screening, assessment, mitigation, monitoring and reporting of social and environmental risks and impacts associated with the activities to be supported.

Stakeholder engagement

314. The Stakeholders' Analysis and Engagement Plan is in Annex 7. A part-time Gender, Safeguards, and Participation Consultant will coordinate the implementation of the plan, and together with the Monitoring, Evaluation and Knowledge Consultant will monitor and assess progress. The stakeholders´ engagement plan includes the grievance redress mechanism for the project.
315. There are 146 actors identified as key stakeholders in the six participating countries; most of them are public institutions and have a national scope of action. These numbers pose a challenge for developing greater integration from the diverse stakeholders from other sectors and to develop the enabling conditions for participation and good governance. There are 32 social organisations that have been identified as part of the most important local stakeholders and with whom the participatory processes promoted by the project should be developed and sustained. There are only 15 organisations working with gender equality and fisheries, a number that highlights the limitations for developing governance processes with social equality. There is the need to identify, strengthen and support the development of specific organisations to support gender-related issues.
316. From the total, there are 90 actors that have been identified as key stakeholders due to their high level of influence and interest and for whom special attention should be given for full involvement, to stablish strategic actions for full collaboration. Then, 53 actors have a medium interest and influence, and they must be part of consultation and involvement processes. Only three actors have low interest and influence, and they must only be informed about the advances of the project.
317. The project proposes a series of activities to influence in the management of the target fisheries. However, these project activities may generate changes in the conditions of use, access, management, and control of fishery resources of the fishing communities. These populations mainly use the target fisheries resources for: (a) consumption-subsistence (food) or (b) sale (processing-transformation, marketing, export). By making any change in the supply chain, derivative actions in the use, access, management of fishing resources (e.g., temporary season closure, prohibition of capture, processing or commercialization of a certain species, limitation of the number of boats or fishermen, reduction of fishing effort), may "affect" the fishery-dependent groups in the face of a change in the situation, regardless of whether the project seeks to improve the availability or management of the resource or its sustainability in the future. During the stakeholders' analysis the project has identified a group of vulnerable groups based on a three-step methodology to determine the potentially vulnerable groups that may derive from the project design described in Table 10.

Table 10. Vulnerable groups related to the target fisheries of the GMC2 project.

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Country	Value Chain	Vulnerable group	Vulnerability description
Senegal	Small pelagic fish	Small pelagic artisanal fishers	Economic dependence and poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
		Small pelagic women processors	Economic dependence and female-headed households. Women informal activity, high dependence as it is the only productive alternative for making their living.
		Small pelagic fish middlemen	Economic dependence and poverty conditions. Intermediaries who help to transport fish to markets and processing plants.
	Octopus	Octopus artisanal fishers	Economic dependence and poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
		Octopus middlemen	Economic dependence and poverty conditions. Intermediaries who help to transport octopus to markets and processing plants.
		Octopus women potters	Economic dependence and female-headed households. Additional economic alternative and dependence on the pot-production.
Mauritania	Octopus	Artisanal octopus fishers.	Economic dependence and poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
	Small pelagic fish	Small pelagic artisanal fishers	Economic dependence and poverty conditions. Fishers with limited empowerment and lack of negotiation capacities. High dependence on the resources of this fishery.
		Small pelagic fish middlemen	Economic dependence and poverty conditions. Intermediaries who help to transport fish to processing plants.
Ecuador	Pomada	Pomada women processors	Economic dependence and female-headed households. Economic dependence as a productive alternative for making their living.
		Pomada bolso fishers	Economic dependence and poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
	Large pelagic fish	Longline fishers	Economic dependence on the activity- poverty conditions. Fishers without a permanent activity and salary. They do not have adequate working conditions.
Guatemala	Large pelagic fish	Dorado-shark artisanal fishers	Economic dependence and poverty conditions. They are not organized and do not have adequate working conditions.
Panama	Shrimp	Artisanal shrimp fishers	Economic dependence and poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
		Artisanal shrimp fishers - Individuals from the Emberá-Wounnan indigenous peoples.	Economic dependence. They are indigenous individuals whose living conditions, participation, and interests in relation to shrimp fishing are unknown and will need to be assessed at the start of the project.

318. The project will be implemented in two distinct regions where Indigenous Peoples and ethnic groups should be addressed using a different lens:
    - In the case of Latin America, there is a historical, political, legal, and social context where the rights of indigenous peoples have important and increasing recognition, as well as the rights to land and self-determination. In Guatemala and Ecuador, there are not indigenous territories or peoples related to the project target fisheries or supply chains. In the case of Panama, there are no indigenous territories (i.e., comarcas) related to the target fisheries, however, a group of individuals participating in the artisanal shrimp fishing activities on the Pacific Coast have been identified as Emberá-Wounaan indigenous people. During the PPG it was not possible to confirm their ethnicity, their living conditions or their recent or current involvement in artisanal shrimp fishing. Therefore, the project has included multiple activities in the PRODOC, SEP and ESMF to clarify the situation early on, prior to the implementation of any interventions which could affect or impact this supposed group of Emberá-Wounaan shrimp fishers. This process will ensure to apply, if pertinent, Free, Prior and Informed Consent (FPIC), as required by national legislation (Law no.37 of 2016) and UNDP Standard 6 on Indigenous Peoples. Depending on the outcome of these assessments, (i) an Indigenous Peoples Plan and Cultural Heritage Plan may need to be prepared and (ii) the Stakeholder Engagement Plan may need to be updated. Further detail is provided in the ESMF.
    - In the case of West Africa (Senegal and Mauritania), the treatment of indigenous peoples' issues is complex, involving a lack of official recognition, barriers due to the dynamics of political, ethnic, and religious conditions, and the lack of a context enabling conditions for indigenous peoples' self-determination. For these reasons, these groups have been considered as vulnerable populations in the context of the GMC2 project (Table 10). At project start, an assessment of ethnic minorities related to the target value chains of West Africa will be prepared. Depending on the results of this assessment, the Stakeholder Engagement Plan may need to be updated.
319. The design of the project has paid special attention to the principle of integration based on the participation of key stakeholders of the target fisheries and the related vulnerable groups, integrating them throughout the design of the project and supporting their involvement, participation, and commitment. Actions such as supporting or strengthening the management platforms and roundtable dialogues, ensuring permanent self-assessment and annual progress assessments, determining the capacities needs for having a voice in governance processes, evaluation of social, economic, and labour conditions to support the process of strengthening of fishers organizations, capacities

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development, pedagogical interpretation, translation into local languages, all these for supporting and facilitating equality of participation.

320. The GMC2 project preparation phase was conducted in full consultation and with the close engagement of governments, private sector, NGOs, social organisations, and other relevant stakeholders – in particular those who will be directly involved in the implementation of the project activities (Annex 19). Table 11 summarise the number of meetings and number of consulted persons, organisations, and institutions. The strategy for consultation and stakeholders' involvement for the PPG was implemented in three levels:
    1. Institutional meetings with delegates from the project partners (virtual workshops) for technical consultations, information provision and the correspondent clearance of the PRODOC design. Four workshops were implemented:
        a. The initiation workshop held on 2 November 2022, to analyse the key elements of the project concept (PIF) and to agree on the roadmap, as well as the arrangements required for the PPG phase.
        b. A situation review workshop held on 4 May 2023, aimed to inform about the status of the implementation of the PPG.
        c. An update roadmap and new milestones for the PPG workshop held on 30 May 2023.
        d. A workshop to review the PRODOC review workshop and to provide final inputs, held on 16 August 2023.
    2. In-person consultation workshops with key stakeholders on each country developed with the participation of around 15 - 20 persons and implemented with the support of UNPD Country Offices and the formal delegates of the partner entities. Five workshops were held between 24 July and 2 August 2023. Due to time constraints, Mauritania developed bilateral consultations with key stakeholders.
    3. Meetings with local stakeholders and other parties involved in the project held by the PPG team (virtual and in-person meetings). Seventy-nine meetings were held with approximately 95 representatives from project partners, key stakeholders, relevant projects (both GEF and non-GEF), and key organisations.

Table 11. Summary of results of strategy for participation and engagement during the PPG phase.

Stakeholder Engagement Activity	Number of meetings	Number of organizations /institutions
1. Institutional level with formal delegates of the partner entities	Four virtual meetings	113 participants in total (ca., 28 persons per meeting)
2. In-person consultation workshops with country key stakeholders	Five in-person national workshops and 1 bilateral consultation	107 participants
3. Local stakeholders and other actors' bilateral consultations	79 meetings (virtual and in-person)	95 participants

321. The Stakeholder Engagement Plan builds on the results from the stakeholder analysis and provides a roadmap for those responsible for the implementation of the project as to when, how and with whom consultations and inclusive actions should be taken throughout the life of the project. The plan is therefore a framework document that will need to be updated in the inception phase of the project implementation and be adapted to the circumstances that occur at that time. The plan integrates 15 comprehensive activities to be develop during project implementation (detailed in the Stakeholders Engagement Plan Matrix). Some of the actions recommended by the SEP are:
    - The formal involvement of the national key project stakeholders will begin with the project initiation workshops in the six countries. In these meetings, key stakeholders will (i) confirm their contributions and participation in project implementation, (ii) agree on coordination mechanisms for each outcome, and (iii) know the existing environmental and social risks (Annex 4) and the risks to the project (Table 8). This same process will be carried out as part of the closure of the implementation and the compliance of reporting through closing workshops with national key stakeholders in each country.
    - At the project start, a "communications working group" will be established with the communication officers of the partner entities to achieve the greatest communicational effects of the project at all levels and with its main means of communication. An inclusive project communication strategy will be designed to include the diverse key actors,

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with an appropriate cultural approach, as well as with the respective languages; particular attention will be given to vulnerable groups related to the target fisheries. In addition, a person specialised in communication will be contracted part time (i.e., Communications Consultant) to facilitate sharing knowledge and an adequate transmission of information to key stakeholders.

- The project will ensure that all the documents, information, and materials of the project (i) are translated (when necessary, e.g., Wolof in Senegal) for diverse receptors, and (ii) integrate pedagogical interpretation of materials (e.g., local vulnerable fishers). The level of technical detail, use of local languages and dialects, levels of literacy, persons with disabilities, roles of women and men, and local methods of disseminating information will be considered in devising appropriate forms of disclosure. The project will also ensure that appropriate communication methods are devised to reach potentially marginalized and disadvantaged groups and these approaches will be expressed in all documents and communications.

322. The project will be implemented through direct involvement of local stakeholders and institutions. About 17,267 persons have been identified as direct beneficiaries from project activities and 373,883 as indirect beneficiaries (Table 12). Annex 18 contains a detailed description of the list of direct and indirect beneficiaries of the project activities.
323. Nine general barriers for stakeholder participation were identified, Table 13 summarises these barriers and the proposed mitigation actions.

Table 12. Direct and indirect beneficiaries from project activities

Direct beneficiaries	Number
Artisanal, industrial, and coastal fishers from project target fisheries, buyers (international and domestic), traders of seafood products, fisheries-related government agencies, personnel from processing plants, ship owners, middlemen, women shrimp peelers, women processors, representatives of CLPAs, hotels, restaurants, supermarkets, NGOs, academia. Men: 14,105 persons Women: 3,162 persons	17,267
Indirect beneficiaries	**Number**
Fishers, workers of the processing plants, women processors, and women shrimp peelers and their families. Other persons related to the CLPAs and other personnel from the fisheries related governmental agencies.	373,883
Total project beneficiaries	**391,150**

Table 13. Stakeholder engagement barriers and proposed mitigation actions.

Barriers	Mitigation measures
a. Lack of political commitments could result in poor articulation between stakeholders in each participating country, leading to limited success of project results.	- Highlight the added value of strong coordination and collaboration at multiple levels will result in sustainable processes, greater impact, and improved governance of target fisheries.
b. Weak/inadequate engagement of diverse multi-stakeholders with a variety of interests leading to low participation in the project.	- Establish tools for stakeholder engagement early and throughout the project implementation, as well as measuring the level of participation and involvement in the governance processes of the target fisheries. - Develop a FPIC process if Emberá-Woonan involvement/impact by project is confirmed. - Document project progress including progress reports and project updates using pedagogical tools and communication mechanisms. - Facilitate dissemination of information, using clear and cultural sensibility. - Use facilitators and effective communication mechanisms.
c. Conflicting interests can lead to stakeholder fatigue and limitations to sustained participation in project activities such as governance platforms and other activities.	- Hold respectful dialogues in conflict resolution. - Conduct targeted meetings with specific stakeholder groups. - Be flexible when addressing and trying to resolve concerns. - Avoid fragmentation, duplication, overlaps of activities. - Use facilitators and effective communication mechanisms.
d. Conditions of vulnerability of some groups do not allow them to participate and get involved adequately in project activities.	- Integrate activities oriented directly to involve the vulnerable groups that have been identified. - If Emberá- Wounaan involvement/impact by project is confirmed, develop an IPP and ensure full and effective participation of these fishers applying FPIC as pertinent. - Monitor the adequate participation of the vulnerable identified groups in the designed activities. - Provide travel support (reimburse travel expenses) and provide board and lodging to stakeholders that need assistance.
e. Conflicting responsibilities and high workload, notably in public institutions may limit the time	- Ensure that all meetings / workshops are efficiently planned and managed, with a clear agenda and specific targets, considering the needs and time limitations of the participants.

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	Barriers	Mitigation measures
	availability to have an active participation in the project.	
f.	In addition to the cost of time that each person dedicates to the activities and events of the project, there are other associated costs like travel expenses, food, and lodging. Some people will not have the means to cover these expenses.	- Provide travel support (reimburse travel expenses) and provide board and lodging to stakeholders that need assistance. - Give special attention to women participation and to vulnerable and poor stakeholders.
g.	Some groups are in remote areas and have long journeys to make from their homes to participate in project activities (e.g., training, workshops, meetings).	- Take into consideration distance and travel time. When appropriate, allow people to arrive a day before and provide lodging.
h.	Difficulties in understanding technical matters and complex concepts, language, difficulty expressing ideas (especially in public).	- Encourage the use of plain-inclusive language and graphic communication during trainings, meetings and for disclosing information. - Culturally appropriate and tailored to the language and accessibility preferences and decision-making processes of each identified stakeholder group. - If an FPIC process is to be developed translation for the process should be considered to facilitate adequate communication. - Complement group meetings with in-person meetings. - Assure that facilitators and trainers can integrate all the participants' opinions. Need to consider that some people may not have formal training and may need special support to fully understand complex issues.
i.	Existing inequalities of women derived from cultural perspectives and discrimination can limit their active involvement and participation in project activities	- Implement project´s gender-related indicators and actions determined in the Gender Action Plan (Annex 9) as part of implementing positive actions towards facilitating women participation and representation. - Use gender inclusive language in the project communication strategy. - Register and follow up sex-disaggregated information regarding participation in meetings and workshops.

South-South and Triangular Cooperation (SSC/TrC)

324. The present project is based on south-south cooperation. The key actions of technical cooperation among countries from the Global South are:
    - To adapt the Responsible Seafood Sourcing Standard used in the is the Better Seafood Philippines programme to be used in the buyer engagement trials in Ecuador, Guatemala and Senegal and the buyer engagement pilot in Morocco (output 1.1.2). It is foreseen that the team from BSP will provide assistance to the teams of the pertinent countries of the GMC2 project.
    - To facilitate joint research and the analysis of coordinated harvest strategies for shared small pelagic fish resources between Mauritania and Morocco (output 2.1.1). This collaboration is based upon the Cooperation Agreement on Maritime Fisheries and Aquaculture of 11 March 2022.
    - To facilitate technical assistance from Morocco to Mauritania for the development of a strategic plan to potentiate added value small pelagic fish products (output 2.2.2). This collaboration is also based upon the Cooperation Agreement on Maritime Fisheries and Aquaculture of 11 March 2022.
    - To facilitate technical assistance from Morocco to Senegal for the updating of the octopus management plan (output 2.2.2). This collaboration will be based upon the Memorandum of Understanding signed by the two countries in November 2016.
    - To facilitate learning exchange on management plans for small pelagic fish and octopus among Morocco, Mauritania and Senegal (output 2.2.2).
    - To facilitate the transfer of the Ecuadorian experience with developing and implementing “national action plans” to Guatemala and Panama (output 2.2.2).

Gender equality and Women’s Empowerment

325. The gender analysis and the gender action plan are in Annex 9. A part-time Gender, Safeguards, and Participation Consultant will provide technical assistance and guidance for the implementation of the gender action plan, and together with a Monitoring, Evaluation, and Knowledge Consultant, will monitor and assess progress during project implementation.
326. The fishery and aquaculture sector in all GMC2 beneficiary countries (and globally) is characterised by a lack of gender studies or data disaggregated by sex. There is a paucity of information regarding women’s participation in fisheries and value chains among the six countries where the project will operate. The lack of statistics and

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monitoring of the effects generated by the segregation of women's participation in the sector is a limitation to addressing gender issues properly in development projects and public policy.

327. Despite significant progress in adhering to international agreements and strengthening national regulations on gender equality (such as non-discriminatory constitutions), social and cultural norms, segregation, and the discrepancy between legislation and reality (and between laws in some countries) create obstacles for women to fully exercise their rights, especially in African countries.
328. Ecuador, Panama, Guatemala, and Senegal have public policies as relevant tools to achieve gender equality (such as national strategies and plans). Mauritania has an outdated national strategy for the promotion of women.
329. Public policy instruments related to the fishing sector (such as existing action or management plans for some fisheries) often lack gender considerations. In cases where gender is included, it is not effectively mainstreamed.
330. The GMC2 countries have an estimated population of between 50.2% and 52% women. However, women are underrepresented in the labour market, with higher participation in informal activities and the lower-paid links of the supply chain of the target fisheries.
331. All along the coasts in both currents, women fulfil a crucial part in the fisheries sector, particularly in artisanal and small-scale fisheries. Still, their work is not always recognised and does not necessarily involve pay.
332. Women play a key role in food security, especially in fishing communities. Countries such as Senegal, Mauritania, and Guatemala have a very high index of moderate or severe food insecurity in the population, exceeding 45%. Senegal is one of the most vulnerable countries, as 30% of the workforce relies on the fishing sector, unlike Guatemala (with the highest food insecurity index), which has less dependence on fishing resources in the economy.
333. The 2021 Gender Inequality Index (GII[30]) ranked Ecuador (0.362) and Panama (0.369) at the top of the six participating countries, showing lower gaps in education and labour participation but still a low representation of women in politics. Guatemala (0.481) and Morocco (0.425) had similar gender gaps in education and deficient political representation of women, with both countries also facing a significant gender gap in the labour force. At the bottom were Senegal (0.530) and Mauritania (0.632), having the lowest rates of women's participation in the labour force. However, Senegal was characterized by the highest gender gaps in education.
334. On the other hand, Panama, Guatemala, and Ecuador are at the top (of the six participating countries) in the Gender Development Index (GDI[31]). However, while Guatemala has no significant gaps in mean years of schooling, the country has relevant gaps in gross income per capita. Morocco (0.861), Senegal (0.874), and Mauritania (0.890) are at the bottom, but Morocco has the highest gender gap in income compared to the other African countries.
335. Unequal and gendered power dynamics related to decision-making and control over resources within families are common barriers in all countries. The persistence of attitudes, behaviours, and practices that emphasize and exalt traditional male dominance and superiority over women in the household is the most significant contributing factor that maintains a patriarchal division of labour in all participating countries.
336. The six participating countries have a clear division of roles in the supply chains of target fisheries. Men are generally responsible for preparing and carrying out the fishing operations, and maintaining the boats, motors, and fishing gear. In contrast, women tend to be more involved in processing and selling. However, when it comes to large-scale processing, especially in the dorado fishery in Guatemala, women's participation could be minor due to minimal product processing (usually only gutted and headed). Most women involved in the fishery sector play very little role in the export sector. They are only active in the local market (such as Mauritania), where demand is limited, and the highest quality fish are reserved for wholesalers.
337. The drastic reduction of traditional key species in Senegal, such as the sardinella, due to a decrease in the volume of this species is weakening the local processing industry with adverse effects, mainly for women.
338. Overall, women's access to and control over resources in the fishing sector remain significant challenges across the different participating countries, requiring concerted efforts to address gender disparities and promote economic empowerment.
339. In Ecuador, women in the fishing sector struggle with limited access to training opportunities, resulting in their exclusion from better-paid jobs and important roles in the fisheries value chain. Additionally, their lack of technical and commercial skills makes it difficult for them to attract financing for fishing businesses. Similarly, in Panama, women face barriers such as restricted access to credit, technical assistance, traditional markets, and technology,

[30] The Gender Inequality Index (GII) is a composite measurement that assesses gender-based inequalities and disparities within a country. It is used to gauge gender disparities in three key dimensions: reproductive health, empowerment, and economic status.
[31] The GDI is calculated based on the same dimensions used for the Human Development Index (HDI), which is a composite measure of life expectancy, education (mean years of schooling and expected years of schooling), and per capita income.

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limiting their industry participation. Guatemala also confronts the issue of limited access to training resources for women.

340. In Senegal, despite having a high rate of female entrepreneurship, women face multiple challenges, including a lack of financing mechanisms, production factors, extension services, and markets. Cultural and traditional practices hinder women's equal access to land ownership, while the lack of credit access limits the expansion of their businesses. Mauritania exhibits similar patterns, particularly in small pelagic and octopus fishing, with women lacking fair access to financial resources and competitive markets. Therefore, improving women's technical capacities in fishery product processing is crucial.
341. Women's participation in decision-making in the fishery sector remains an issue in all countries. While Ecuador and Panama face limited representation of women in leadership positions within fishing organizations and cooperatives, Guatemala struggles with weak association capacity for women due to the individual nature of artisanal fishing within family units. Moreover, since the processing of the target fishery in Guatemala is industrial, there are no organizational bodies. In Senegal, cultural factors hinder women's participation in fisheries governing bodies, despite some representation in the Local Artisanal Fisheries Councils (CLPAs). Similarly, Mauritania experiences low women's representation in political, administrative, and economic decision-making spheres, influenced by patriarchal and patrilineal norms, as well as in Morocco.
342. Regarding institutional capacity, not all the implementing institutions of the participating countries have the strengths (resources, specialised personnel, action plans, policies, and/or tools) to mainstream the gender approach in their actions/projects. Among the institutions considered strong in this matter are Ministry of Environment and Natural Resources (MARN) and the National Council of Protected Areas (CONAP) (Guatemala), and Ministry of the Environment (MiAMBIENTE)(Panama). Partially strengthened institutions (according to this gender analysis) include the Department of Marine Fisheries of the Ministry of Agriculture, Maritime Fisheries, Rural Development, and Waters and Forests (Morocco), and the Ministry of Environment and Sustainable Development (Senegal).
343. The Gender Action Plan (Annex 9) delineates 31 actions to be executed during project implementation, among which are the following:
    - Establish gender quotas for individual consultancies and permanent project team positions.
    - Training in gender equality and women empowerment to project staff and project partners (project start).
    - Develop gender profiles (using an intersectional approach) for each target fishery value chain (project start).
    - Develop women empowerment initiatives for some selected countries and fisheries (outcome 2.1).
    - Contribute to developing a FishSource Score indicator on Women's Participation in Decision Making in Fisheries (outcome 1.2).
    - Support the incorporation of new technologies through specific FIPs and ensure equal access for men and women (outcome 2.1).
    - Propose gender mainstreaming actions through a complementary Gender Action Plan (with gender responsive indicators) in some selected target fisheries existing action plans (outcome 2.1).
    - Promote women's access and leadership in some selected fishery organizations (outcome 2.1).
    - Promote web-based platforms (with a gender approach) for information exchange in some selected fisheries governance structures (outcome 2.1).
    - Integrate gender considerations into the focused situational analysis (at the community level) of selected GMC2 supported fishery supply chains (outcome 2.1).
    - Integrate gender considerations into the design of domestic engagement strategies for seafood products (outcome 1.1).
    - Integrate gender considerations into the annual assessments of management frameworks for target fisheries (outcome 2.1).
    - Integrate gender consideration into the development of situational analyses of governance structures (outcome 2.1).
    - Evaluation of women's social, economic, and labour conditions in some selected countries and value chains (outcome 2.1).
    - Ensure the integration of gender responsive indicators in preparing all new management plans of target fisheries supported by the project (outcomes 2.1 and 2.2).
    - Ensure the inclusion of gender-responsive indicators in developing social guidelines for mainstreaming social responsibility into fisheries governance and supply chains (outcome 2.2).

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- Ensure gender is effectively mainstreamed into responsible seafood sourcing standards (outcome 1.2).
- Define gender quotas for training opportunities derived from FIPs, co-management platforms, and RIA (outcomes 2.1 and 2.2).
- Define appropriate engagement mechanisms to promote women's access, participation, and decision making in management platforms to be supported by the GMC2 (outcome 2.1).
- Contribute to fostering collaboration among women in some selected value chains to improve representation in governance (outcome 2.1).
- Assess the involvement of women in the large pelagic fish value chains in selected countries and define a gender strategy in Guatemala (outcome 2.1).
- Advocate for gender equality with large buyers (outcome 1.1).
- Provide national and international gender consultants (external consultants to mitigate limited capacities of implementing institutions) to develop specific actions (outcomes 1.1, 1.2, 2.1, and 2.2).
- Integrate gender considerations into the GMC2 knowledge strategy (outcome 3.2).

344. The Gender Action Plan will be the responsibility of the part-time Gender, Safeguards, and Participation Consultant, who will provide technical support, and trainings for the project team and implementing institutions (among other responsibilities included within the GAP). All the project implementation activities will record sex and age data in people's participation. The implementation will include gender considerations in hiring, procurement, and all project reporting mechanisms. The project's communication strategy will be formulated with a gender-responsive and intergenerational approach. A gender and communication tool will be developed to mainstream gender considerations in all communication products.
345. The project monitoring mechanism will be adapted to ensure a gender sensitive system. Both the final and mid-term evaluations will include evaluation criteria to assess the degree of GEF contribution to gender equality and women's empowerment in the target countries (SDG 5).

Knowledge

346. Knowledge management is a cross-cutting element of the project theory of change (Figure 11 and Figure 12). Outcome 3.1 focus on facilitating access to information to support decision-making for market transformation and improved fisheries management. Complementarily, outcome 3.2 focus on documenting and sharing the lessons from the project. Output 3.2.1 has two lines of work: (i) to facilitate communication and information flow among key project stakeholders and disseminate achievements and lessons, and (ii) to document and disseminate project lessons. Output 3.2.2 is the project monitoring and evaluation plan, which will provide inputs to identify and process project lessons.
347. The project team will ensure extraction and dissemination of lessons learned and good practices to enable adaptive management and upscaling or replication at local and global scales. For this, two complementary knowledge transfer and communication strategies will be prepared and implemented (output 3.2.1). Project learning will be disseminated to targeted audiences through relevant information sharing fora and networks. The project will contribute to scientific, policy-based and/or any other networks as appropriate (e.g., by providing content, and/or enabling participation of stakeholders/beneficiaries). As indicated before, there will be close coordination and collaboration with IW:LEARN. To support dissemination of advances and lessons, GEF resources will be invested to support participation in the international waters' conferences of 2025 and 2027.
348. The project team will identify, analyse, and share the learning that could be beneficial for the design and implementation of similar projects and the lessons will be widely disseminated. There will be a continuous exchange of information between this project and other projects of similar approach in the participating countries, the countries of the CCLME and PACA, and worldwide.
349. The lessons from the project will be collected into eight documents which systematise experiences. The provisional themes are:
    - Developing domestic demand for responsible and sustainable seafood (lessons from the buyer engagement trials and pilot).
    - Development of a small pelagic fish supply chain improvement project in the Joal CLPA.
    - Lessons on the application of RIA in fisheries.
    - Lessons on the implementation of the target FIPs.
    - Lessons on engaging artisanal fishers in co-management platforms (pomada fishers, Guatemalan dorado fishers, Panamanian shrimp fishers, Senegalese CLPAs, Mauritanian octopus fishers).

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- Women and youth participation and representation challenges in fisheries co-management platforms.

350. These documents will have a dissemination format (e.g., visually appealing, plain language) to be accessible to a broad audience. Each document (i) will be in English (for worldwide access) with extended summaries in French and Spanish, and (ii) will be in high-quality PDF format to be downloaded from the web.
351. Finally, a memoir of the project that systematises both achievements and learnings will be prepared. The memoir will be in a simple and very graphic format, so that it is accessible to the general public, and will use inclusive and gender-sensitive and cultural-sensitive language.

Innovativeness, Sustainability and Potential for Scaling Up

Innovation

352. The GMC2 project is highly experimental. The tools that have been used in developed countries and industrial fisheries for market development and FIPs will be tried in developing countries and artisanal fisheries. It is foreseen that the lessons from these trials will be useful worldwide.
353. The main elements of innovation for the participating countries are:
    - To test buyer engagement for sustainable and responsible seafood in the domestic markets of developing countries (i.e., Guatemala, Ecuador, Morocco, and Senegal) (outputs 1.1.2, 1.2.3 and 1.3.2).
    - To test the use of Regulatory Impact Assessment in the management frameworks of the target fisheries and to foster the development of a whole-of-government response to the development and application of conservation and management measures.
    - To test the development of a "small pelagic fish supply chain improvement project" in Joal (Senegal), adapting the knowledge and tools used in FIPs (output 2.1.2).
    - To develop social and economic performance indicators and scores to be tested in the target fisheries and then applied to fisheries worldwide (output 1.2.1).

Environmental sustainability

354. The central axis of the project is to promote the production and consumption of sustainable and ethical seafood (Figure 11). The focus of the project is to advance the production and consumption of seafood that comes from sustainable sources and operations with reduced ecosystem impact in the CCLME and PACA. The highly participatory approach of the project and the direct work with the private sector will contribute to internalise this perspective at different levels of society in the participating countries.
355. Climate change will affect the fishery resources and biodiversity of the two large marine ecosystems. In this regard, the project will encourage that climate considerations are mainstreamed in all interventions.
356. All project actions will be framed within the corresponding national biodiversity and climate change strategies and national plans as well as pertinent fisheries management plans.

Social sustainability

357. The project includes a participatory approach and emphasizes the involvement of key stakeholders of ten seafood supply chains (Table 4). Measures will be taken to ensure that the pertinent key stakeholders are represented and participate in the co-management platforms, FIPs, and global supply roundtables, as appropriate. There will be specific actions to foster that vulnerable groups become integrated into the fisheries governance processes and the FIPs (output 2.1.3) and to seek alliances to sustain long-term support to vulnerable groups.
358. The project will promote multi-disciplinary and multi-level interaction, dialogue, and collaboration. A fundamental element will be that the key stakeholders will collaborate to address common problems (some of them quite sensitive) and will develop relationships based on trust, which will contribute to strengthen social capital.

Institutional sustainability

359. The project is anchored in the fisheries authorities of the six participating countries. However, the whole-of-government approach to be implemented implies that a range of government entities will be engaged in project implementation (e.g., environment authorities, fisheries research entities, maritime authorities). This will motivate that

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government institutions see their roles and responsibilities in addressing fisheries matters and therefore mobilise their resources into action.

360. There will be direct collaboration with private sector (including private sector organisations like AMPEP, COREMAHI and CNP) and local CSOs. It is expected that through this networking, the fundamental elements of sustainable and ethical production and procurement of seafood will continue in the institutional agendas.

Financial sustainability

361. GEF resources will be invested in strategic actions to catalyse a transformation of the target seafood supply chains (Table 4) and a whole-of-government approach in fisheries management. It is envisaged that this will motivate involvement of public and private sectors into the co-management processes, and the development and implementation of fisheries management plans and FIPs. The project will foster industry-led FIPs, therefore, the implementers (e.g., fishers, processors) will assume the costs of FIP implementation and will develop skills to undertake, as pertinent, other FIPs.
362. During the third year a post-project sustainability plan will be prepared. It will aim to mobilise, by various means, political and stakeholder support and contributions to maintain key project results. The post-project sustainability of the actions will be ensured by their integration into the institutional budgets and commitments of several stakeholders such as the fisheries and environment authorities, private sector, and civil society organizations.

Replicability

363. There is a high probability of replication of the lessons and good practices of the project. GEF resources have been strategically assigned to activities with high potential to catalyse learning. For this purpose, both experience and lessons will be systematically documented and disseminated through the project website, the portals and channels of the project partners and the IW: LEARN platform (output 3.2.1).
364. It is expected that the lessons learned will be immediately used in the short term in the participating countries. The lessons learned from this project will be certainly applicable to various contexts worldwide.

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Digital Solutions

365. The GMC2 project will foster that the supply chain actors use two main digital platforms to mobilise and facilitate access to key information for decision making: FishSource and FisheryProgress (output 3.2.1). However it is expected that the stakeholders will also use other digital platforms like the FiTI reports, the MSC data base to track fisheries, the SeafoodWatch guides, and the IW:LEARN, among other. Also, the project will support the development of web-based platform to facilitate information exchange among Senegalese CLPAs (output 2.1.3). Finally, most of the project information will flow through the range of digital platforms of the project partners. The project team will take into account the conditions internet access among the key stakeholders and will provide guidance on the use of the digital platforms and instruments.

PROJECT MANAGEMENT

Cost Efficiency and Effectiveness

366. The GMC2 project will ensure cost efficiency by focusing on key specific actions that maximise change and impact. These leverage points are the backbone of the project theory of change (Figure 7). The leverage points were chosen based upon the experience and lessons from seafood market transformation initiatives and the previous GMC project. In addition, the GMC2 project will catalyse:
    - That private sector invests in the improvement of their supply chains. For example, the GMC2 support to the FIPs will focus on strategic actions of the improvement process (e.g., testing onboard monitoring options) that will be upscaled or sustained afterwards by the members of the supply chain.
    - That pertinent authorities mobilise and focus resources into actions that are key to improve the management of the fishery resources, such as cost-efficient data collection and stock assessment strategies under data poor scenarios.
    - Collaboration and complementarity with other initiatives to prevent duplication and to maximise joint impact.

Project Management

367. The GMC2 project will operate in six countries and will be executed by Sustainable Fisheries Partnership which is the Implementing Partner (paragraph 391). The project team (Figure 15,Table 16) will operate in a decentralised form, building upon SFP´s long experience on remote working and web-based collaboration and communication methods and tools. The exact location of each member of the project management unit will be decided at project start.
368. This global project has a UNDP "Lead Country Office" (i.e., Ecuador) and five “Participating Country Offices” (i.e., Guatemala, Mauritania, Morocco, Panama, and Senegal). The "Lead Country Office e" will be the direct point of contact for the Implementing Partner and will oversee both the global and Ecuadorian activities. Each "Participating Country Office" will sign a pertinent country-specific UNDP-GEF Project Document and will be responsible for the implementation of the national activities and budget, and country-level project assurance. The "governance and management arrangements" section further details these measures.

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PROJECT RESULTS FRAMEWORK

Contribution to the Sustainable Development Goal (s): SDG14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development. In particular, target 14.4 (by 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics) and target 14b (provide access for small-scale artisanal fishers to marine resources and markets).
Intended Outcome as stated in the UNSDCF/Country [or Regional] Programme Results and Resource Framework: Ecuador. UNSDCF 2022-2026 Effect 2: In 2026, the State and society advance towards the ecological transition and towards a sustainable and inclusive economy, decarbonized and resilient to the effects of climate change, conserving biodiversity, avoiding land degradation and the contamination of ecosystems, with a gender, inclusion, and diversity approach. CPD 2023-2026 Output 2.2. Public, private, and civil society actors have adopted actions that promote sustainable production and consumption models, focused on a green, inclusive, and resilient recovery, resulting in the contribution and participation of women and diverse populations. Guatemala. Intended outcome: By 2025, the State of Guatemala will strengthen its policies, strategies and programs that promote mitigation and adaptation to climate change, the governance of territories, natural resources and ecosystems, so as to improve the comprehensive management of environmental risks , climatic, health, hydrological and geodynamic, with an integrated approach. Likewise, the sustainable use of natural resource management will be guaranteed, with special emphasis on the most vulnerable population groups and territories. Mauritania. UNSDCF 2024-2027. Effect 1: the population of Mauritania, in particular the most vulnerable and marginalized, benefit from and actively participate in a national development process that is sustainable, more diversified, more resilient to economic and environmental shocks, and that promotes the reduction of inequalities. Output 1.1: National public and private institutional actors, including the informal sector, social partners and CSOs, have the capacity and tools to develop economic sectors that are inclusive, sustainable and create decent jobs. CPD 2024-2027. Effect 1: By 2027, the population of Mauritania, especially the most vulnerable and marginalized, benefit from and actively participate in a national development process that is sustainable, more diversified, more resilient to economic and environmental shocks, and which promotes the reduction of inequalities. Output 1.1: Public and private actors, including the informal sector and social partners, have the capacity and tools to develop inclusive and sustainable economic sectors that create decent jobs. Morocco. Expected COOPERATION FRAMEWORK (UNCDF) Outcome 1: Morocco's economy is competitive, inclusive, and creates decent jobs, especially for women and youth, through a structural transformation based on sustainable development and resilience, including climate resilience. Related STRATEGIC PLAN Outcome: Structural transformation accelerated, particularly green, inclusive, and digital transitions. Expected CPD (2023-2027) Output 1.2: Enabling environment and inclusive solutions and practices promoted for biodiversity and ecosystem conservation, and sustainable management of natural resources, taking into account the effects of climate change. Panama. Outcome 3: “By 2025, Panama is resilient and has implemented public policies for adaptation and mitigation of climate change, neutrality of land degradation, protection of biodiversity, integrated environmental management and risk reduction of disasters and health crises, with a territorial, intercultural, human rights, gender, and life-course approach”. Output 3.2. Integrated water and coastal management include climate resilience and good practices in green supply chains. Senegal. UNSDCF Cooperation framework outcome involving UNDP 1. By 2028, production systems, including food systems, are organized in such a way as to preserve the environment, stimulate entrepreneurship, technological innovation and ensure decent employment for the population, especially the most vulnerable, including young people, women, the disabled and migrants, in rural and peri-urban areas.
Applicable Output(s) from the UNDP Strategic Plan:

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4.1 Natural resources protected and managed to enhance sustainable productivity and livelihoods. 4.2 Public and private investment mechanisms mobilized for biodiversity, water, oceans, and climate solutions.
Project title and Quantum Project Number: Project title. Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems. Quantum Project Number. Will be assigned at project start.

Objective and Outcome Indicators		Data Source	Baseline	Mid-term Target	End of Project Target	Data Collection Methods	Risks/Assumptions
Project Objective:	To mainstream ecological and social aspects of sustainability to foster sustainable fisheries production and improved wellbeing of coastal communities in support of emerging Blue Economies in the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems.						
	Mandatory Indicator 1: Number of direct project beneficiaries disaggregated by sex (individual people) (GEF core indicator 11).	Estimate of number of persons that will receive targeted support from the project.	0	≥10,000 Men: ≥8,000 persons Women: ≥2,000 persons	17,267 Men: 14,105 persons Women: 3,162 persons	Keep record of number of persons that participate in activities and meetings (e.g., training, technical assistance) of the project (disaggregated by sex).	Participation on each event is duly recorded.
	Indicator 2: Number of indirect project beneficiaries.	Estimate of number of persons from the target value chains, on each country, that will benefit from the project results.	0	≥200,000 persons	373,883 persons	Calculate the number of persons on each country that form part of every target value chain.	The pertinent authorities have up to date information on the number of persons that are part of the target value chains.
	Mandatory indicator 3: Globally over-exploited fisheries moved to more sustainable levels (metric tons) (GEF core indicator 8).	Stock status and catch reports from national fisheries authorities or RFMOs.	0	≥50,000	1,417,500	Official reports from national fisheries authorities or RFMOs.	Pertinent management plans and regulations are not properly enforced.

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Objective and Outcome Indicators		Data Source	Baseline	Mid-term Target	End of Project Target	Data Collection Methods	Risks/Assumptions
	Mandatory indicator 4: Level of Transboundary Diagnostic Analysis and Strategic Action Program formulation and implementation in PACA (GEF core sub-indicator 7.1).	PIRs from PACA project (GEF ID 10076).	1 = No TDA/SAP developed.	2 = TDA finalized includes inputs from GMC2 experience.	2 = TDA finalized includes inputs from GMC2 experience.	PIRs from PACA project.	There is fluid collaboration and coordination with the PACA project.
Project component 1	Increase demand for sustainable seafood products from CCLME and PACA.						
Outcome 1.1. Increased market demand for sustainable marine commodities in relevant international and domestic markets.	Indicator 5: Additional number of international buyers, related to target supply chains, that adopt sustainable seafood policies and target commitments.	SFP report from partnerships and Supply Chain Roundtables	LPF Ecuador: 0 LPF Guatemala: 0 LPF Panama: 0 Octopus Mauritania: 0 Octopus Senegal: 0 Pomada Ecuador: 0 Shrimp Panama: 0 SPF Mauritania: 0 SPF Morocco: 0 SPF Senegal: 0	6 international buyers	12 international buyers	Register in SFP partnerships and members of Supply Chain Roundtables those buyers that adopt new sustainable seafood policies and target commitments.	International buyers from products from the target seafood chains are interested in sustainable seafood.
	Indicator 6: Additional number of domestic buyers, related to target supply chains, that adopt sustainable seafood policies and target commitments.	Reports from the domestic buyer engagement trials (Ecuador, Guatemala, and Senegal) and pilot (Morocco).	LPF Ecuador: 0 LPF Guatemala: 0 SPF Morocco: 0 SPF Senegal: 0	2 domestic buyers	4 domestic buyers	Register domestic buyers that adopt new sustainable seafood policies and target commitments.	Domestic buyers from products from the target FIPs are interested in sustainable seafood.
Outputs to achieve Outcome 1.1.	1.1.1. Twelve (12) improved seafood purchasing policies and target sustainability commitments adopted by major supply chain partners in international markets sourcing export-oriented commodities. 1.1.2. Four (4) improved seafood purchasing policies and targeted sustainability commitments adopted by key players in domestic markets.						

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Objective and Outcome Indicators		Data Source	Baseline	Mid-term Target	End of Project Target	Data Collection Methods	Risks/Assumptions
Outcome 1.2. Increased market demand for socially responsible seafood commodities.	Indicator 7: Additional number of international buyers, related to target supply chains, that adopt socially responsible seafood policies and target commitments.	SFP report from partnerships and Supply Chain Roundtables	LPF Ecuador: 0 LPF Guatemala: 0 LPF Panama: 0 Octopus Mauritania: 0 Octopus Senegal: 0 Pomada Ecuador: 0 Shrimp Panama: 0 SPF Mauritania: 0 SPF Morocco: 0 SPF Senegal: 0	1 international buyer	3 international buyers	Register in SFP partnerships and members of Supply Chain Roundtables those buyers that adopt new socially responsible seafood policies and target commitments.	International buyers from products from the target seafood chains are committed to social responsibility.
	Indicator 8: Additional number of domestic buyers, related to target supply chains, that adopt socially responsible seafood policies and target commitments.	Reports from the domestic buyer engagement trials (Ecuador, Guatemala and Senegal) and pilot (Morocco).	LPF Ecuador: 0 LPF Guatemala: 0 Pomada Ecuador: 0 SPF Morocco: 0 SPF Senegal: 0	1 domestic buyer	2 domestic buyers	Register domestic buyers that adopt new socially responsible seafood policies and target commitments.	Domestic buyers from products from the target FIPs are committed to social responsibility.
Outputs to achieve Outcome 1.2.	1.2.1. Socially responsible seafood standard integrated into the FishSource rating system and available to major supply chain partners worldwide. 1.2.2. Three (3) major international supply chain partners integrate socially responsible seafood requirements in their policies and commitments. 1.2.3. Two (2) key players in domestic supply chains integrate socially responsible seafood commitments in their policies and commitments.						
Outcome 1.3. Increased market demand for seafood commodities from fisheries with reduced bycatch and environmental impact.	Indicator 9: Additional number of international buyers, related to target supply chains, that adopt reduced bycatch and environmental impact policies and target commitments.	SFP report from partnerships and Supply Chain Roundtables	LPF Ecuador: 0 LPF Guatemala: 0 LPF Panama: 0 Octopus Mauritania: 0 Octopus Senegal: 0 Pomada Ecuador: 0	1 international buyer	3 international buyers	Register in SFP partnerships and members of Supply Chain Roundtables those buyers that adopt new reduced bycatch and environmental	International buyers from products from the target seafood chains are committed to request seafood with reduced bycatch and environmental impact.

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Objective and Outcome Indicators		Data Source	Baseline	Mid-term Target	End of Project Target	Data Collection Methods	Risks/Assumptions
			Shrimp Panama: 0 SPF Mauritania: 0 SPF Morocco: 0 SPF Senegal: 0			impact policies and target commitments.	
	Indicator 10: Additional number of domestic buyers, related to target supply chains, that adopt reduced bycatch and environmental impact policies and target commitments.	Reports from the domestic buyer engagement trials (Ecuador, Guatemala and Senegal) and pilot (Morocco).	LPF Ecuador: 0 LPF Guatemala: 0 SPF Morocco: 0 SPF Senegal: 0	1 domestic buyer	2 domestic buyers	Register domestic buyers that adopt new reduced bycatch and environmental impact policies and target commitments.	Domestic buyers from products from the target FIPs are committed to request seafood with reduced bycatch and environmental impact.
Outputs to achieve Outcome 1.3.	1.3.1. Three (3) major international supply chain partners take action to demand seafood sourced from fisheries with reduced bycatch and ecosystem impacts. 1.3.2. Two (2) key players in domestic supply chains take action to demand seafood sourced from fisheries with reduced bycatch and ecosystem impacts.						
Project component 2	Increase supply of sustainable seafood products from CCLME and PACA.						
Outcome 2.1. Increased supply of seafood products that demonstrate improved fisheries governance and stock health.	Indicator 11: Number of government led national co-management platforms formally established and under operation.	Reports from support to national co-management platforms. The four-point level of development scale is in the GMC2 monitoring plan.	LPF Ecuador: 0 LPF Guatemala: 0 LPF Panama: 0 Pomada Ecuador: 2 Shrimp Panama: 0 SPF Mauritania: 2 SPF Senegal: 2	LPF Ecuador: 2 LPF Guatemala: 2 LPF Panama: 2 Pomada Ecuador: 4 Shrimp Panama: 2 SPF Mauritania: 3 SPF Senegal: 3	LPF Ecuador: 4 LPF Guatemala: 4 LPF Panama: 4 Pomada Ecuador: 4 Shrimp Panama: 4 SPF Mauritania: 4 SPF Senegal: 4 Seven national co-management platforms established and operating	Register platform meetings and formal instruments. See development scale in the monitoring plan.	Fisheries authorities support co-management processes and ensure political and administrative support. Stakeholders are willing to engage into fisheries co-management.

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Objective and Outcome Indicators		Data Source	Baseline	Mid-term Target	End of Project Target	Data Collection Methods	Risks/Assumptions
	Indicator 12. Percentage of women effectively participating in the national co-management platforms.	Reports from support to national platforms.	LPF Ecuador: 0 LPF Guatemala: 0 LPF Panama: 0 Pomada Ecuador: 2 Shrimp Panama: 0 SPF Mauritania: 2 SPF Senegal: 2	LPF Ecuador: ≥25% LPF Guatemala: ≥25% LPF Panama: ≥25% Pomada Ecuador: ≥25% Shrimp Panama: ≥25% SPF Mauritania: ≥25% SPF Senegal: ≥25%	LPF Ecuador: ≥40% LPF Guatemala: ≥40% LPF Panama: ≥40% Pomada Ecuador: ≥40% Shrimp Panama: ≥40% SPF Mauritania: ≥40% SPF Senegal: ≥40%	Record percentage of women participating on each meeting or activity of the national platform.	Women contribution to the value chain is not adequately recognised. Women groups that are part of the value chain are not duly organised.
	Indicator 13: Level of effective participation in the national co-management platforms.	Reports from support to national platforms. The five-point level of effective participation is in the GMC2 monitoring plan.	LPF Ecuador: not established. LPF Guatemala: not established. LPF Panama: not established. Pomada Ecuador: non-operational. Shrimp Panama: not established. SPF Mauritania: to be assessed at project start. SPF Senegal: to be assessed at project start.	LPF Ecuador: ≥3 LPF Guatemala: ≥3 LPF Panama: ≥3 Pomada Ecuador: ≥3 Shrimp Panama: ≥3 SPF Mauritania: ≥3 SPF Senegal: ≥3	LPF Ecuador: ≥4 LPF Guatemala: ≥4 LPF Panama: ≥4 Pomada Ecuador: ≥4 Shrimp Panama: ≥4 SPF Mauritania: ≥4 SPF Senegal: ≥4	Report from annual performance assessment of the target platforms.	The design and development of the co-management platforms does not foster effective participation of the key stakeholders.
	Indicator 14: Level of progress of the target FIPs.	Profiles in FisheryProgress.	Pomada FIP Stage 4 | SPRA not prepared | SWP not executed.	Pomada FIP Stage 4 | SPRA prepared | SWP in progress. LPF FIP Ecuador FIP Stage 2 | SPRA	Pomada FIP Stage 5 | SPRA prepared | SWP in progress. LPF FIP Ecuador FIP Stage 4 | SPRA	Follow FIP progress reports and ratings published in	FIP partners are motivated to swift execution of the FIP. FIP partners support addressing social gaps.

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Objective and Outcome Indicators		Data Source	Baseline	Mid-term Target	End of Project Target	Data Collection Methods	Risks/Assumptions
			LPF FIP Ecuador FIP Stage 0 | SPRA not prepared | SWP not executed. Dorado and sharks FIP Stage 0 | SPRA not prepared | SWP not executed. SPF FIP Mauritania Octopus FIP Mauritania Shrimp FIP LPF FIP Panama Octopus FIP Senegal	prepared | SWP not executed. Dorado and sharks FIP Stage 2 | SPRA prepared | SWP not executed. SPF FIP Mauritania Octopus FIP Mauritania Shrimp FIP LPF FIP Panama Octopus FIP Senegal	prepared | SWP in progress. Dorado and sharks FIP Stage 4 | SPRA prepared | SWP in progress. SPF FIP Mauritania Octopus FIP Mauritania Shrimp FIP LPF FIP Panama Octopus FIP Senegal	FisheryProgress.	There is an enabling environment for FIP implementation.
Outputs to achieve Outcome 2.1.	2.1.1. Seven (7) government led national co-management platforms that improve fisheries governance and stock health. 2.1.2. Eight (8) industry-led verifiable Fishery Improvement Projects that contribute to improved fisheries governance and stock health. 2.1.3. Artisanal and small-scale fishers and local supply chain partners effectively engage into fisheries improvement projects and co-management platforms.						
Outcome 2.2. Increased supply of seafood products that demonstrate improved social responsibility.	Indicator 15: Number of fisheries management plans that integrate social and economic objectives and targets.	Management plans of target fisheries. Reports from support to national platforms. Target fisheries management plans: Ecuador pomada, Ecuador LPF, Guatemala PAN sharks, Guatemala	0	3	8	Review the new or updated management plans that are formally approved by the pertinent authorities.	The stakeholders of the target fisheries are keen to integrate social and economic objectives and targets into the management plans.

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Objective and Outcome Indicators		Data Source	Baseline	Mid-term Target	End of Project Target	Data Collection Methods	Risks/Assumptions
		dorado and sharks fishery, Panama shrimp, Panama LPF, Senegal octopus, Mauritania SPF, Mauritania octopus.					
Outputs to achieve Outcome 2.2.	2.2.1. Two (2) sets of guidelines to mainstream social responsibility into fisheries governance and seafood supply chains. 2.2.2. Nine (9) fisheries management instruments that integrate social and economic objectives and targets.						
Outcome 2.3. Increased supply of seafood products that demonstrate reduced bycatch and environmental impact.	Indicator 16: Number of fisheries management plans that integrate objectives and targets to reduce bycatch and ecosystem impacts in longline fisheries.	Management plans of target fisheries. Reports from support to national platforms.	0 Ecuador PAN LPF (not formulated) Guatemala dorado & sharks (not formulated) Panama LPF (not formulated)	1	3	Review the new or updated management plans that are formally approved by the pertinent authorities.	The stakeholders of the target fisheries are keen to integrate objectives and targets to reduce bycatch and ecosystem impacts into the management plans.
	Indicator 17: Number of FIPs that integrate objectives and targets to reduce bycatch and ecosystem impacts.	Environmental plans and improvement progress publicly available on FisheryProgress.	Dorado and sharks FIP (not launched) LPF FIP Ecuador (not launched) LPF FIP Panama (not launched) Octopus FIP Mauritania (not launched)	2	4	Review the information posted in the FisheryProgress portal.	The stakeholders of the target fisheries are keen to integrate objectives and targets to reduce bycatch and ecosystem impacts into their improvement actions.
Outputs to achieve Outcome 2.3.	2.3.1. Three fisheries management instruments that integrate objectives and targets to reduce ecosystem impacts and bycatch. 2.3.2. Four FIPs that implement actions to reduce ecosystem impacts and bycatch.						
Project component 3	Knowledge management to support the transformation of the seafood market and project monitoring and evaluation						

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Objective and Outcome Indicators		Data Source	Baseline	Mid-term Target	End of Project Target	Data Collection Methods	Risks/Assumptions
Outcome 3.1. Reliable and verifiable information of sustainability performance of target marine commodities is available to supply chain partners and the public to drive their purchasing decisions.	Indicator 18: Number of visits per month (annual average) recorded on each of the FishSource profiles of the target fisheries.	Report from web tracking tool	0. The profiles are outdated or incomplete.	≥100	≥300	Examine the information from the web tracking tool.	There are buyers interested in the target fisheries.
Outputs to achieve Outcome 3.1.	3.1.1. The sustainability assessment profiles of all project target fisheries are maintained in FishSource. 3.1.2. The profiles and progress evaluations of all project related FIPs are publicly available.						
Outcome 3.2. Lessons about mainstreaming ecological and social sustainability into seafood supply chains are available worldwide.	Indicator 19: Number of people (men and women, by country) who have participated in events for dissemination of lessons (e.g., workshops, IWC)	Records of participants on each event for dissemination of project lessons.	0	≥600 (≥30% women)	≥1800 (≥30% women)	Record participants on each meeting/ workshop / event.	Participation on each event is duly recorded. Stakeholders are interested in the lessons from the value chain interventions.
	Indicator 20. Level of engagement in IW:LEARN through participation and delivery of key products. GEF Core sub-indicator 7.4.	Reports from implementation of the project´s knowledge transfer strategy	1. No participation	3. Website in line with IW:LEARN and at least one experience note and one results note	4. As before plus participation in IW Conferences and contribution of spatial data.	Record alignment of project´s web platform with IW:LEARN, delivery of experience and results notes, participation in IW Conference, and contribution of spatial data to	None.

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Objective and Outcome Indicators		Data Source	Baseline	Mid-term Target	End of Project Target	Data Collection Methods	Risks/Assumptions
						IW:LEARN Spatial Lab.	
	Indicator 21: Number of visitors per month (annual average) recorded in the network of electronic platforms used to disseminate project´s learnings and best practice	Report from web tracking tool	No visits.	Visits ≥2,000 Unique visits ≥1,500	Visits ≥4,000 Unique visits ≥3,000	Examine the information from the web tracking tool.	The direct stakeholders and the general public are interested in the advance of the project.
Outputs to achieve Outcome 3.2.	3.2.1. Project lessons documented and disseminated.						
Project Component 4	Monitoring & Evaluation						
Outcome 4.1. Project-level monitoring and evaluation, in compliance with UNDP and mandatory GEF-specific monitoring and evaluation requirements	Indicator 22: Project-level monitoring and evaluation completed through documentation from Inception Workshop, Annual GEF Project Implementation Reviews (PIR), M&E of GEF core Indicators, Gender Plan, Safeguards Frameworks and Action Plans, Independent Mid-Term Review, and Independent Terminal Evaluation	Inception Workshop Report Annual GEF Project Implementation Report (PIR) Board meeting reports M&E reports of GEF core indicators Reports of gender, stakeholder participation and ESMF monitoring Independent Mid-Term Review Independent Terminal Evaluation	No information on project M&E exists at the moment.	[1] Inception Workshop, [2] pertinent PIRs, [3] at least annual Board meetings, [4] annual update of GEF core indicators, gender, stakeholder participation and ESMf, and [4] MTR completed.	[1] Independent Terminal Evaluation completed. [2] Final core indicators updated. [3] Final project board meeting carried out.	Review of report generated by the project´s monitoring and evaluation plan.	All project-level monitoring and evaluation is complete and meets the requirements of UNDP and the GEF.

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Objective and Outcome Indicators		Data Source	Baseline	Mid-term Target	End of Project Target	Data Collection Methods	Risks/Assumptions
Outputs to achieve Outcome 4.1.	4.1.1. Inception Workshop and Report. 4.1.2. Annual GEF Project Implementation Review (PIR), reports of Board Meetings, and monitoring of GEF core Indicators, Gender Action Plan, Stakeholder Engagement Plan, and the ESMF. 4.1.3. Independent Mid-Term Review. 4.1.4. Independent Terminal Evaluation.						

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MONITORING AND EVALUATION (M&E) PLAN

369. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP (including guidance on GEF project revisions) and UNDP Evaluation Policy. The UNDP offices in each participating country are responsible for ensuring full compliance with all UNDP project M&E requirements including project monitoring, UNDP quality assurance requirements, quarterly risk management, and evaluation requirements. The UNDP country office in Ecuador ("Lead Country Office", paragraph 398) will coordinate the fulfilment of the M&E requirements of the entire project.
370. Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the GEF Monitoring Policy and the GEF Evaluation Policy and other relevant GEF policies. The M&E plan and budget included below will guide the GEF-specific M&E activities to be undertaken by this project.
371. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed – including during the Project Inception Workshop - and will be detailed in the Inception Report.

Minimum project monitoring and reporting requirements as required by the GEF

Inception Workshop and Report:

372. A project inception workshop will be held within two (2) months from the First disbursement date, with the aim to:
    a. Familiarise key stakeholders with the detailed project strategy and discuss any changes that may have taken place in the overall context since the project idea was initially conceptualized that may influence its strategy and implementation.
    b. Discuss the roles and responsibilities of the project team, including reporting lines, stakeholder engagement strategies and conflict resolution mechanisms.
    c. Review the results framework and monitoring plan.
    d. Discuss reporting, monitoring and evaluation roles and responsibilities and finalise the M&E budget, identify pertinent national/regional institutes to be involved in project-level M&E, discuss the role of the GEF OFPs and other stakeholders in project-level M&E.
    e. Update and review responsibilities for monitoring project strategies, including the risk log, SESP report, Social and Environmental Management Framework (where relevant) and other safeguard requirements, project grievance mechanisms, gender strategy, knowledge management strategy, and other relevant management strategies.
    f. Review financial reporting procedures and budget monitoring and other mandatory requirements and agree on the arrangements for the annual audit.
    g. Plan and schedule Project Board meetings and finalize the first-year annual work plan. Finalise the TOR of the Project Board.
    h. Formally launch the project.

GEF Project Implementation Report (PIR):

373. The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. UNDP will undertake quality assurance of the PIR before submission to the GEF. The PIR submitted to the GEF will be shared with the Project Board. UNDP will conduct a quality review of the PIR, and this quality review and feedback will be used to inform the preparation of the subsequent annual PIR.

GEF Core Indicators:

374. The GEF Core indicators included as Annex 12 will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to MTR and TE. Note that the project team is responsible for updating the core indicators status. The updated monitoring data must be shared with MTR/TE consultants prior to required evaluation missions, so these can be used for subsequent ground truthing. The methodologies to be used in data collection have been defined by the GEF and are available on the "guidelines on the implementation of the GEF-8 results measurement framework".

Independent Mid-term Review (MTR):

375. An independent mid-term review (MTR) will be completed by the mid-point of the project. The terms of reference, the MTR process and the final MTR report will follow the standard templates and MTR guidance for UNDP-supported GEF-financed projects available on the UNDP Evaluation Resource Center. The MTR must be submitted to the GEF by the mid-point of the project but no later than 48 months after CEO Endorsement. Mid-point is determined by taking the expected PRODOC signature date plus number of months duration and finding the middle date. To meet the submission deadline, final MTR reports must be completed and submitted to the BPPS NCE team no later than two

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(2) months in advance of the submission deadline to allow sufficient time for internal review/clearance that is required prior to submission.

376. Provisions must be taken to complete and submit the MTR within the submission deadline. Therefore, the MTR process must start no later than eight (8) months before the expected date of submission of the MTR.
377. The MTR will be "independent, impartial and rigorous". The evaluator(s) that UNDP will hire to undertake the assignment will be independent from organisations that were involved in designing, executing or advising on the project to be reviewed. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project under review.
378. The GEF Operational Focal Points and other stakeholders from the participating countries will be actively involved and consulted during the MTR process. Additional quality assurance support is available from BPPS/NCE.
379. The final MTR report will be publicly available in English and will be posted on the UNDP Evaluation Resource Centre (ERC) by the MTR submission date included on cover page of this project document. A management response to MTR recommendations will be posted in the ERC within six weeks of the MTR report's submission to the GEF.

Terminal Evaluation (TE):

380. An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and TE guidance for UNDP-supported GEF-financed projects available on the UNDP Evaluation Resource Center. The TE must be submitted to the GEF no later than six (6) months after the Completion Date. This is a hard deadline that, if not met, can only be extended through a formal extension request. To meet the submission deadline, final TE reports must be completed and submitted to BPPS NCE team no later than two (2) months in advance of the deadline to allow sufficient time for internal review/clearance that is required prior to submission.
381. Provisions must be taken to complete and submit the TE within the submission deadline. Therefore, TE must start no later than eight (8) months before the expected date of submission of the TE (or 11 months prior to the estimated operational closure date).
382. The evaluation will be "independent, impartial and rigorous". The evaluator(s) that UNDP will hire to undertake the assignment will be independent from organizations that were involved in designing, executing, or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.
383. The GEF Operational Focal Points and other stakeholders from the participating countries will be actively involved and consulted during the terminal evaluation process. Additional quality assurance support is available from BPPS NCE.
384. The final TE report will be publicly available in English and posted on the UNDP ERC by the TE submission date included on cover page of this project document. A management response to the TE recommendations will be posted to the ERC within six weeks of the TE report submission to the GEF.
385. Per the GEF Terminal Evaluation requirements, for cancelled full-sized projects, Terminal Evaluations are required if the GEF grant expenditure exceeds more than USD 2 million.

Final Report:

386. The project's final GEF PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

Monitoring and evaluation plans

387. In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans**.**

[1] Monitoring Plan

388. The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored by the Project Management Unit annually, and will be reported in the GEF PIR every year, and will be evaluated periodically during project implementation. If baseline data for some of the results indicators is not yet available, it will be collected during the first year of project implementation. Project risks, as outlined in the risk register, will be monitored quarterly.

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Monitoring Activity. Track results progress						
Results Monitoring	**Indicators**	**Targets**	**Description of indicators and targets**	**Frequency**	**Responsible for data collection**	**Means of verification**
Project objective	Mandatory Indicator 1: Number of direct project beneficiaries disaggregated by sex (individual people) (GEF core indicator 11).	Midterm ≥10,000 Men: ≥8,000 persons Women: ≥2,000 persons End of project 17,267 Men: 14,105 persons Women: 3,162 persons	Number of persons that participate in activities and meetings (e.g., training, technical assistance) of the project (disaggregated by sex). Annex 18 details the expected direct beneficiaries from the project.	Permanent recording. Annual reporting in progress section of GEF PIR.	Monitoring, evaluation, and knowledge Consultant	Records of all project activities and meetings.
	Indicator 2: Number of indirect project beneficiaries.	Midterm ≥200,000 persons End of project 373,883 persons	Number of persons of the target value chains that will benefit from the results of the project. Measured by the number of fishers that capture the target resources, the number of persons that work in the processing facilities, and their families. Annex 18 details the expected indirect beneficiaries from the project.	Project-start, Midterm and end-of-project	Fisheries officer PACA Fisheries officer CCLME	Official reports or records about the number of fishers and persons employed in the processing facilities.
	Mandatory indicator 3: Globally over-exploited fisheries moved to more sustainable levels (metric tons).	Midterm 50,000 t End of project 1,417,500 t	Stock status from official reports of national fisheries authorities or pertinent regional bodies. Four-point scale for stock status. 1 = Not evaluated, 2 = Underfished, 3 = Maximum sustainably fished, 4 = Overfished.	Annual	Fisheries officer PACA Fisheries officer CCLME	Official reports from national fisheries authorities or pertinent regional bodies

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Monitoring Activity. Track results progress						
Results Monitoring	**Indicators**	**Targets**	**Description of indicators and targets**	**Frequency**	**Responsible for data collection**	**Means of verification**
			The pertinent regional bodies are the "FAO Working Group on the Assessment of Small Pelagic Fish off Northwest Africa" and the "Inter-American Tropical Tuna Commission" (IATTC). Annual catch from official reports of national fisheries authorities. Table 14 details the baseline situation of the target fisheries.			
	Mandatory indicator 4: Level of Transboundary Diagnostic Analysis and Strategic Action Program formulation and implementation in PACA.	Midterm 2 = TDA finalized includes inputs from GMC2 experience. End of project 2 = TDA finalized includes inputs from GMC2 experience.	Level of Transboundary Diagnostic Analysis and Strategic Action Program formulation and implementation. The PACA TDA will include inputs from the value chain work of the GMC2 project. Corresponds to sub-indicator 7.1 of the GEF. Four-point scale. 1 = No TDA/SAP developed. 2 = TDA finalized, 3 = SAP ministerially endorsed, 4 = SAP under implementation.	Annual	Monitoring, evaluation, and knowledge consultant	TDA document of the PACA LME. Records of meetings with PACA TDA development team.
Project Outcome 1.1.	Indicator 5: Additional number of international buyers, related to target supply chains, that adopt sustainable seafood policies and target commitments.	Midterm 6 international buyers End of project 12 international buyers	Number of international buyers that purchase seafood from the target supply chains that adopt new sustainable seafood policies and target commitments.	Permanent recording. Annual reporting.	Market development consultant	SFP report from partnerships and Supply Chain Roundtables. Copy of new sustainable seafood policies and target commitments.

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Monitoring Activity. Track results progress						
Results Monitoring	**Indicators**	**Targets**	**Description of indicators and targets**	**Frequency**	**Responsible for data collection**	**Means of verification**
	Indicator 6: Additional number of domestic buyers, related to target supply chains, that adopt sustainable seafood policies and target commitments.	Midterm 2 domestic buyers End of project 4 domestic buyers	Number of domestic buyers that purchase seafood from the target supply chains in Ecuador, Guatemala, Morocco and Senegal that adopt new sustainable seafood policies and target commitments.	Permanent recording. Annual reporting.	Market development consultant	Reports from the domestic buyer engagement trials (Ecuador, Guatemala and Senegal) and pilot (Morocco). Copy of new sustainable seafood policies and target commitments.
Project Outcome 1.2.	Indicator 7: Additional number of international buyers, related to target supply chains, that adopt socially responsible seafood policies and target commitments.	Midterm 1 international buyer End of project 3 international buyers	Number of international buyers that purchase seafood from the target supply chains that adopt new socially responsible policies and target commitments.	Permanent recording. Annual reporting.	Market development consultant	SFP report from partnerships and Supply Chain Roundtables. Copy of new socially responsible seafood policies and target commitments.
	Indicator 8: Additional number of domestic buyers, related to target supply chains, that adopt socially responsible seafood policies and target commitments.	Midterm 1 domestic buyer End of project 2 domestic buyers	Number of domestic buyers that purchase seafood from the target supply chains that adopt new socially responsible policies and target commitments.	Permanent recording. Annual reporting.	Market development consultant	Reports from the domestic buyer engagement trials (Ecuador, Guatemala and Senegal) and pilot (Morocco). Copy of new sustainable seafood policies and target commitments.

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Monitoring Activity. Track results progress						
Results Monitoring	**Indicators**	**Targets**	**Description of indicators and targets**	**Frequency**	**Responsible for data collection**	**Means of verification**
Project Outcome 1.3.	Indicator 9: Additional number of international buyers, related to target supply chains, that adopt reduced bycatch and environmental impact policies and target commitments.	Midterm 1 international buyer End of project 3 international buyers	Number of international buyers that purchase seafood from the target supply chains that adopt new reduced bycatch and environmental impact policies and target commitments	Permanent recording. Annual reporting.	Market development consultant	SFP report from partnerships and Supply Chain Roundtables. Copy of new socially responsible seafood policies and target commitments.
	Indicator 10: Additional number of domestic buyers, related to target supply chains, that adopt reduced bycatch and environmental impact policies and target commitments.	Midterm 1 domestic buyer End of project 2 domestic buyers	Number of domestic buyers that purchase seafood from the target supply chains that adopt new reduced bycatch and environmental impact policies and target commitments	Permanent recording. Annual reporting.	Market development consultant	Reports from the domestic buyer engagement trials (Ecuador, Guatemala and Senegal) and pilot (Morocco). Copy of new sustainable seafood policies and target commitments.
Project Outcome 2.1.	Indicator 11: Number of government led national co-management platforms formally established and under operation.	Midterm LPF Ecuador: 2 LPF Guatemala: 2 LPF Panama: 2 Pomada Ecuador: 4 Shrimp Panama: 2 SPF Mauritania: 3 SPF Senegal: 3 End of project	Level of development of each government led national co-management platform. Four-point development scale. 0 = Not established. 1 = By-laws and operating regulations manual drafted. 2 = Platform formally established with by-laws, operating regulations and secretarial and administrative support.	Permanent recording. Annual reporting.	Fisheries officer PACA (Ecuador, Guatemala and Panama). Fisheries officer CCLME (Mauritania and Senegal).	Reports from project fisheries officers. Minutes of platform meetings. Copy of formal instruments (by-laws, operating regulations, workplan, legal instrument that establishes the platform).

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Monitoring Activity. Track results progress						
Results Monitoring	**Indicators**	**Targets**	**Description of indicators and targets**	**Frequency**	**Responsible for data collection**	**Means of verification**
		LPF Ecuador: 4 LPF Guatemala: 4 LPF Panama: 4 Pomada Ecuador: 4 Shrimp Panama: 4 SPF Mauritania: 4 SPF Senegal: 4	3 = Platform members have adopted a workplan. 4 = Platform implements the agreed workplan, meets regularly, records of meetings and decisions are kept.			
	Indicator 12: Percentage of women effectively participating in the national co-management platforms.	Midterm LPF Ecuador: ≥25% LPF Guatemala: ≥25% LPF Panama: ≥25% Pomada Ecuador: ≥25% Shrimp Panama: ≥25% SPF Mauritania: ≥25% SPF Senegal: ≥25% End of project LPF Ecuador: ≥40% LPF Guatemala: ≥40%	Percentage of women that participate on each meeting or activity (e.g., meetings of working groups) of the national co-management platform. At mid-term each platform must have a minimum participation target of 25%. At end of project each platform must have a minimum participation target of 40%.	Permanent recording. Quarterly reporting.	Fisheries officer PACA (Ecuador, Guatemala and Panama). Fisheries officer CCLME (Mauritania and Senegal).	List of participants on each meeting or activity of the platform (sex disaggregated).

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Monitoring Activity. Track results progress						
Results Monitoring	**Indicators**	**Targets**	**Description of indicators and targets**	**Frequency**	**Responsible for data collection**	**Means of verification**
		LPF Panama: ≥40% Pomada Ecuador: ≥40% Shrimp Panama: ≥40% SPF Mauritania: ≥40% SPF Senegal: ≥40%				
	Indicator 13: Level of effective participation in the national co-management platforms.	Midterm LPF Ecuador: ≥3 LPF Guatemala: ≥3 LPF Panama: ≥3 Pomada Ecuador: ≥3 Shrimp Panama: ≥3 SPF Mauritania: ≥3 SPF Senegal: ≥3 End of project LPF Ecuador: ≥4 LPF Guatemala: ≥4 LPF Panama: ≥4	Level of effective participation of key stakeholder groups in the functioning of the platform. Key stakeholder groups are: (1) producers (e.g., fishers, boat owners), (2) processors (e.g., women artisanal processors, small-scale and large-scale processors), and (3) government (e.g., fisheries, environment and maritime authorities, fisheries research entities). The level of participation is measured as the average of a weighed sample of the results of the application of a questionnaire to measure (i) representation, (ii) participation and equity, and (iii) accountability and transparency. The level of participation is measured in a five-point scale: 5.	Annual, as part of the annual performance assessment of each management platform.	Gender, safeguards, and participation consultant.	Report from annual performance assessment of the target platforms.

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Monitoring Activity. Track results progress						
Results Monitoring	**Indicators**	**Targets**	**Description of indicators and targets**	**Frequency**	**Responsible for data collection**	**Means of verification**
		Pomada Ecuador: ≥4 Shrimp Panama: ≥4 SPF Mauritania: ≥4 SPF Senegal: ≥4	Very good, 4. Good, 3. Fair, 2. Poor, and 1. Very poor. The methodology to be applied in described at the end of the present document.			
	Indicator 14: Level of progress of the target FIPs.	Midterm Pomada FIP Stage 4 | SPRA prepared | SWP in progress. LPF FIP Ecuador FIP Stage 2 | SPRA prepared | SWP not executed. Dorado and sharks FIP Stage 2 | SPRA prepared | SWP not executed. SPF FIP Mauritania Octopus FIP Mauritania Shrimp FIP LPF FIP Panama Octopus FIP Senegal	For each FIP three parameters will be assessed: [1] FIP stage: Stage 0 (initial conversations among potential partners). Stage 1 (FIP development. Stage 2 (FIP launch). Stage 3 (FIP implementation). Stage 4 (improvements in fishing practices or fishery management). Stage 5 (improvements on the water). [2] Preparation of Social performance risk assessment (SPRA): not prepared or prepared. [3] Implementation of Social workplan (SWP): not executed, in progress, completed.	Quarterly.	FIPs consultant	Public profiles posted in FisheryProgress.

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Monitoring Activity. Track results progress						
Results Monitoring	**Indicators**	**Targets**	**Description of indicators and targets**	**Frequency**	**Responsible for data collection**	**Means of verification**
		End of project Pomada FIP Stage 5 | SPRA prepared | SWP in progress. LPF FIP Ecuador FIP Stage 4 | SPRA prepared | SWP in progress. Dorado and sharks FIP Stage 4 | SPRA prepared | SWP in progress. SPF FIP Mauritania Octopus FIP Mauritania Shrimp FIP LPF FIP Panama Octopus FIP Senegal				
Project Outcome 2.2	Indicator 15. Number of fisheries management plans that integrate social and economic objectives and targets.	Midterm three (3) management plans. End of project eight (8) management plans.	Fisheries management plans of target fisheries, formally adopted by the pertinent authority, include specific social and economic objectives and targets. The target plans are: Ecuador PAN LPF Ecuador PAN pomada	Permanent recording. Annual reporting.	Fisheries officer PACA (Ecuador, Guatemala, and Panama). Fisheries officer CCLME (Mauritania and Senegal).	Fisheries management plans. Copy of formal instruments that adopt the management plans.

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Monitoring Activity. Track results progress						
Results Monitoring	**Indicators**	**Targets**	**Description of indicators and targets**	**Frequency**	**Responsible for data collection**	**Means of verification**
			Guatemala dorado & sharks Guatemala PAN sharks Mauritania SPF Mauritania octopus Panama LPF Panama shrimp Senegal octopus			
Project Outcome 2.3	Indicator 16. Number of fisheries management plans that integrate objectives and targets to reduce bycatch and ecosystem impacts in longline fisheries.	Midterm one (1) management plan. End of project three (3) management plans.	Fisheries management plans of target longline fisheries for large pelagic fish, formally adopted by the pertinent authority, that include specific objectives and targets to reduce bycatch and ecosystem impacts. The target plans are: Ecuador PAN LPF Guatemala dorado & sharks Panama LPF	Permanent recording. Annual reporting.	Fisheries officer PACA (Ecuador, Guatemala, and Panama).	Fisheries management plans. Copy of formal instruments that adopt the management plans.
	Indicator 17: Number of FIPs that integrate objectives and targets to reduce bycatch and ecosystem impacts.	Midterm two (2) FIPs. End of project four (4) FIPs.	Target FIPs that integrate in their "fisheries action plan" specific objectives and targets to reduce the bycatch and the impacts on the environment. The target FIPs are: Dorado and sharks FIP Guatemala LPF FIP Ecuador LPF FIP Panama Octopus FIP Mauritania	Annual reporting	FIPs consultant	Public profiles posted in FisheryProgress.

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Monitoring Activity. Track results progress						
Results Monitoring	**Indicators**	**Targets**	**Description of indicators and targets**	**Frequency**	**Responsible for data collection**	**Means of verification**
Project Outcome 3.1	Indicator 18: Number of visits per month (annual average) recorded on each of the FishSource profiles of the target fisheries.	Midterm ≥100 visits per months (annual average) End of project ≥300 visits per months (annual average)	Number of visits to the FishSource profiles of the target fisheries.	Continuous recording. Monthly reporting (monthly count).	Monitoring, evaluation, and knowledge consultant	Monthly report from SFP´s FishSource team.
Project Outcome 3.2	Indicator 19: Number of people (men and women, by country) who have participated in events for dissemination of lessons (e.g., workshops, IWC)	Midterm ≥600 (≥30% women) End of project ≥1800 (≥30% women)	Number of persons that participate in meetings / workshops / events that present project lessons. Includes International Waters Conference. Record participants on each meeting/ workshop / event. Records must include name, sex, and affiliation of each person.	Continuous data collection, monthly processing.	Monitoring, evaluation, and knowledge consultant	Event registration forms. Report from each event.
	Indicator 20. Level of engagement in IW:LEARN through participation and delivery of key products. GEF Core sub-indicator 7.4.	Midterm level 3 End of project level 4	Level of engagement in International Waters Learning Exchange and Resource Network (IW:LEARN). Four-point scale: 1 = No participation 2 = Website in line with IW:LEARN guidance active 3 = As above, plus strong participation in training/twinning events and production of at least one experience note and one results note 4 = As above, plus active participation of project staff and country representatives at	Annual	Monitoring, evaluation, and knowledge consultant	Report from Monitoring, evaluation, and knowledge consultant

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Monitoring Activity. Track results progress						
Results Monitoring	**Indicators**	**Targets**	**Description of indicators and targets**	**Frequency**	**Responsible for data collection**	**Means of verification**
			International Waters conferences and the provision of spatial data and other data points via project website.			
	Indicator 21: Number of visitors per month (annual average) recorded in the network of electronic platforms used to disseminate project´s learnings and best practice	Midterm Visits ≥2,000 Unique visits ≥1,500 End of project Visits ≥4,000 Unique visits ≥3,000	Number of visits and unique visits to the project´s network of electronic platforms. Keep track of document downloads. Persons downloading project documents must fill a form providing basic information: name, country, organisation, organisation type (public, private, NGO, CSO).	Continuous recording (web tracking tool), monthly report.	Monitoring, evaluation, and knowledge consultant	Report from web tracking tool
Project Outcome 4.1	Indicator 22: Project-level monitoring and evaluation completed through documentation from Inception Workshop, Annual GEF Project Implementation Reviews (PIR), M&E of GEF core Indicators, Gender Plan, Safeguards Frameworks and Action Plans, Independent Mid-Term Review, and Independent Terminal Evaluation	Midterm [1] Inception Workshop, [2] pertinent PIRs, [3] at least annual Board meetings, [4] annual update of GEF core indicators, gender, stakeholder participation and ESMf, and [4] MTR completed. End of project [1] Independent Terminal	The inception Workshop is held within two months from the first disbursement date and the report is distributed one month after. The annual PIRs are prepared and submitted on time. The Project Board meets at least once per year. The reports are distributed within fifteen calendar days after each meeting. The advance of the indicators of (i) the project results framework, (ii) the GEF core indicators (Annex 12), (iii) the Gender Action Plan, (iv) the Stakeholder Engagement Plan, and (v) the ESMF is measured and updated annually.	Inception Workshop at project start. PIRs annually. Project Board meetings at least annually. Update project indicators annually. MTR at the mid-point of the project. TE at the end of the project.	Monitoring, evaluation, and knowledge consultant	Inception Workshop Report. Project Board meeting reports. PIRs. Annual reports of progress of the indicators of (i) the project results framework, (ii) the GEF core indicators (ii) the Gender Action Plan, (iii) the Stakeholder Engagement Plan, and (iv) the ESMF. Mid-Term Review report

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Monitoring Activity. Track results progress						
Results Monitoring	**Indicators**	**Targets**	**Description of indicators and targets**	**Frequency**	**Responsible for data collection**	**Means of verification**
		Evaluation completed. [2] Final core indicators updated. [3] Final project board meeting carried out.	The MTR will comply with UNDP guidance, will be submitted to the GEF by the mid-point of the project, and will be freely available to project partners, stakeholders and the general public. The TE will comply with UNDP guidance, will be submitted to the GEF by no later than six months after the completion date, and will be freely available to project partners, stakeholders and the general public.			Terminal Evaluation report.

Table 14. Baseline situation and annual catch of the fisheries that will improve their management (GEF Core Indicator 8).

Country	Fishery	Main target species	Status of the stock	Total annual catch t (year)	Status of management plan	Capture to be moved to more sustainable levels (t)
Ecuador	Pomada	Pomada (*Protrachypene precipua*)	Overfished [a]	2,277 t (2022) [b]	Adopted in 2021. The project will support the preparation of the 2028 - 2032 version.	2,277
Ecuador	Large pelagic fish longline (espinel grueso)	Swordfish (*Xiphias gladius*), yellowfin tuna (*Thunnus albacares*), bigeye (*Thunnus obesus*) and marlins or picudos (*Kajikia audax, Makaira nigricans*)	Swordfish = Not overfished [c] Yellowfin tuna= Not overfished [d] Bigeye = Not overfished [e]	1,600 t (2021) [f]	No management plan for this fishery. There is a PAN Atun 2019 focused on the industrial purse seine fishery for tunas. The PAT-EC 2020 includes the sharks that are captured as bycatch.	1,600
Guatemala	Dorado and sharks longline	Dorado (*Coryphaena hippurus*) Silky shark (*Carcharhinus falciformis)*	Dorado = Uncertain [g] Silky shark = Uncertain [i]	3,190 tonnes (2018) [h] Sharks = 650 (2015) [j]	No management plan or fisheries regulations for these species. The PAN-Condrictios 2021 focuses on conservation of sharks.	3,840

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Country	Fishery	Main target species	Status of the stock	Total annual catch t (year)	Status of management plan	Capture to be moved to more sustainable levels (t)
Panama	Shrimp	white shrimp (*Litopennaeus vanamei*)	Not evaluated	1,248 t (2021) [k]	No management plan for shrimp fisheries.	1,248
Panama	Large pelagic fish longline	Yellowfin tuna (*Thunnus albacares*), dorado (*Coryphaena hippurus*)	Yellowfin tuna = Not overfished [d] dorado = Not overfished [g]	Yellowfin tuna 107 t (2021), dorado 890 t (2021) [k]	No management plan for these species.	997
Mauritania	Octopus	*Octopus vulgaris*	Overfished (2018) [l]	39,000 t (2017) [l]	Octopus Management Plan of 2018	39,000
Mauritania	Small pelagic fish	Sardinella (*Sardinella aurita, Sardinella maderensis*)	Overfished (2021) [m]	In 2018, *S. maderensis* had 76,320 t and *S. aurita* 241,680 t (without the capture of seine canoes in 2018) [n]	Small pelagics Management Plan of 2022	318,000
Morocco	Sardine	Sardine (*Sardina pilchardus*)	Zone A + B Not fully exploited (2019) [m], Zone C Not fully exploited (2019) [m]	Zone A+ B, 389,000 t; Zone C, 824,000 t (2020) [m]	A management plan is provided by the décret of 2008. The stock of Zone C has shifted south and is now shared with Mauritania [p], but there are no joint management or harvest strategies.	824,000
Senegal	Small pelagic fish	Sardinella (*Sardinella aurita, Sardinella maderensis*)	Overfished (2021) [m]	*S. maderensis* (96,251 t) for artisanal and 46 t for industrials, *S. aurita* (121,282 t) for artisanal, and 584 t for industrial (2019) [o]	No management plan for these species.	218,163
Senegal	Octopus	*Octopus vulgaris*	Full exploitation (in terms of biomass) (2009-2018) [o]	6,603 tonnes for artisanal, and 1,772 tonnes for industrial (2019) [n]	Octopus Management Plan of 2016	8,375
					Total annual catch of fisheries with improved management	1,417,500

[a] Canales, C. M., Ibarra, M. Chicaiza, D. (2021). Evaluación de la Población de camarón pomada (Protrachypene precipua) del Golfo de Guayaquil, Ecuador. Honolulu: Sustainable Fisheries Partnership Foundation e Instituto Público de Acuicultura y Pesca, Ecuador. 70 p. https://globalmarinecommodities.org/es/publications/nuevo-evaluacion-de-la-poblacion-de-camaron-pomada-del-golfo-de-guayaquil-ecuador/

[b] IPIAP. 2,176 t from the trawlers and 101 t from the bolsos.

[c] IATTC. (2022). Report on the tuna fishery, stocks, and ecosystem in the Eastern Pacific Ocean in 2022. Inter-American Tuna Commission (IATTC), 219 pp.

[d] Minte-Vera, C., Maunder, M. N., Xu, H., Valero, J. L., Lennert-Cody, C., & Aires-da-Silva, A. (2020). Yellowfin tuna in the eastern Pacific Ocean, 2019: benchmark assessment. DOCUMENT SAC-11-07 REV. 11th Meeting of the Scientific Advisory Committee of the IATTC. 79 pp.

[e] Xu, H., Maunder, M. N., Minte-Vera, C., Valero, J. L., Lennert-Cody, C., & Aires-da-Silva, A. (2020). Bigeye tuna in the eastern Pacific Ocean, 2019: benchmark assessment. Inter-American Tropical Tuna Commission. Document SAC-11-06. 11th meeting of the Scientific Advisory Committee, 61 pp.

[f] IPIAP. Landings of all large pelagic fish from the espinel grueso fishery, mainly swordfish, marlins (for domestic market), yellowfin tuna and other species.

[g] The only regional stock assessment is based on the Ecuadorian and Peruvian fleets.
Roa-Ureta, R. H., Amancio, G. R., Abanto, P. M., Izquierdo, I. G., Sior, A. A. N., Elías, E., & Peralta, M. (2021). Stock Assessment of the dolphinfish (*Coryphaena hip*purus)) in the South-East Pacific Ocean. Document SAC-13 INF-O Inter-American Tuna Commission (IATTC). 13th Meeting of the Scientific Advisory Committee, 16-20 May 2022, 40 pp.

[h] Estimate of DIPESCA.

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Country	Fishery	Main target species	Status of the stock	Total annual catch t (year)	Status of management plan	Capture to be moved to more sustainable levels (t)

[i] Clarke, S., Langley, A., Lennert-Cody, C., Aires-da-Silva, A. & Maunder, M., (2018). Pacific-wide Silky Shark (Carcharhinus falciformis) Stock Status Assessment. Document WCPFC-SC14-2018/SA-WP-08. Scientific Committee Fourteeen Regular Session. Western and Central Pacific Fisheries Commission, 137 pp.
Lennert-Cody, C.E., Aires-da-Silva, A. & Maunder, M.N. (2022). Updated stock status indicators for silky sharks in the eastern Pacific Ocean, 1994-2021. Document BYC-11 INF-B Inter-American Tropical Tuna Commission. Working Group on bycatch 11th meeting, 15 pp.
[j] Ixquiac, M., Bocanegra, M., Hernandez, J.A., & Marroquin, J. (2016). Informe sobre recopilación de información biológica y de aprovechamiento de tiburon a pequeña escala para la subsistencia de las comunidades pesqueras y Aplicación de la Guía Práctica sobre la Convención sobre el Comercio Internacional de Especies Amenazadas de Fauna y Flora Silvestres (CITES) y los medios de subsistencia. Documento técnico No. 32-2016. DIPESCA/MAGA - CONAP, 50 pp.
[k] Estimate of ARAP.
[l] FAO. (2020). Report of the FAO/CECAF Working Group on the Assessment of Demersal Resources – Subgroup North Nouakchott, Mauritania, 2–10 December 2019 / Rapport du Groupe de travail FAO/COPACE sur l'évaluation des ressources démersales – Sous-groupe Nord Nouakchott, Mauritanie, 2– 10 decembre 2019. CECAF/ECAF 20/83. Rome. https://doi.org/10.4060/cb1539b
[m] FAO. (2021). FAO working group on the assessment of small pelagic fish off Northwest Africa 2021. Summary Report. Fishery Committee for the Eastern Central Atlantic.
[n] IMROP. (2019). Amenagement des ressources halieutiques et gestion de la biodiversité au service du developpement durable. 9e Edition du Groupe de travail de l'IMROP. Rapport de Synthese.
[o] DPM. (2022). Resultats Generaux des Peches Maritimes. Ministere des peches et de l'économie maritime. Direction des Peches Maritimes (DPM).
[p] Kifani, S. (1998). Climate dependent fluctuations of the Moroccan sardine and their impact on fisheries. Global versus local changes in upwelling systems, 235-248.
Atarhouch, T., Rami, M., Naciri, M., & Dakkak, A. (2007). Genetic population structure of sardine (Sardina pilchardus) off Morocco detected with intron polymorphism (EPIC-PCR). Marine Biology, 150, 521-528.
Mounir, A., Ewague, A., Znari, M., & Elmghazli, H. (2019). Discrimination of the phenotypic sardine Sardina pilchardus stocks off the Moroccan Atlantic coast using a morphometric analysis. African Journal of Marine Science, 41(2), 137-144.

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Methodology notes on the indicator "level of effective participation in the national co-management platforms".

389. The indicator measures the level of effective participation on each national co-management platform. Effective participation is understood as the condition in which the principles of (1) representation, (2) participation and equity and (3) accountability and transparency are achieved:

Principles	Criteria
Representation	The platform represents all relevant stakeholders of the supply chain.
	The members accept the way in which platform members are selected.
Participation & equity	All members participate and are heard in discussions.
	All members can influence decision making within the platform.
Accountability & transparency	Members can hold each other accountable for their actions and decisions.
	Information and decision-making are transparent.

390. The principles and criteria are based on the work of Kusters et al., (2018). The procedure to calculate the "level of effective participation" on each target national co-management platform will be:

1. Apply a questionnaire to a weighed sample of persons that participate on the co-management platform and represent each key stakeholder group.

Key stakeholder group	Number of respondents
Producers. This group includes fishers and boat owners. Depending on the fishery these could include artisanal, small scale or industrial fishers.	Three (3)
Processors. This group includes, depending on the fishery, women processors (e.g., pomada peelers in Ecuador or women processor in Senegal), artisanal processors, small-scale and large-scale processors.	Three (3)
Government. This group includes, depending on the fishery, the pertinent fisheries, environment and maritime authorities and the fisheries research entities (public fisheries institutes or academia).	Three (3)

The questionnaire will use a Likert scale to measure the level of agreement or disagreement with pertinent questions. The questionnaire will be as follows:

How much do you agree with the following statements	Rating scale				
	Strongly agree [5 points]	Agree [4 points]	Undecided [3 points]	Disagree [2 points]	Strongly disagree [1 point]
The platform represents all relevant stakeholders of the supply chain.					
The members accept the way in which platform members are selected.					
All members participate and are heard in discussions.					
All members can influence decision making within the platform.					

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How much do you agree with the following statements	Rating scale				
	Strongly agree [5 points]	Agree [4 points]	Undecided [3 points]	Disagree [2 points]	Strongly disagree [1 point]
Members can hold each other accountable for their actions and decisions.					
Information and decision-making are transparent.					

2. Calculate the "level of effective participation" (LEP) using the following formula:

$$LEP = (\sum_{1}^{3} Producers + \sum_{1}^{3} Procesors + \sum_{1}^{3} Government)/162$$

Where:

$\sum_{1}^{3} X$ Is summation of the points of the responses of each of the three respondents. Where X is Producers, Processors and Government.

162 Is the total number of responses from the three respondents.

Monitoring Activity	Frequency/Timeframe	Expected Action	Partners (if joint)
Inception Workshop and Report	Inception Workshop within two (2) months of the First Disbursement	As per above description	SFP (implementing partner)
Track results progress (see above table for details)	Annually and at mid-point and closure	Slower than expected progress will be addressed by project management.	SFP
Monitor and Manage Risk	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.	SFP
Monitor gender action plan and stakeholders' engagement plan	Ongoing	Relevant developments are documented by the project team and used to inform management decisions.	SFP
Supervision Missions	Annually	Relevant learning and risks are identified by the UNDP officers and used to inform management decisions.	SFP
Learning and Learning Missions	As needed	Relevant lessons are captured by the project team and used to inform management decisions.	SFP
Annual Project Quality Assurance	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.	SFP
Review and Make Course Corrections	At least annually	Performance data, risks, lessons, and quality will be discussed by the project	SFP

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Monitoring Activity	Frequency/Timeframe	Expected Action	Partners (if joint)
		board and used to make course corrections.	
Annual GEF Project Implementation Report (PIR)	Annually typically between June-September	Mandatory contribution by Project Team, country offices, and RTAs. Strengths and weaknesses will be reviewed by project management and used to inform decisions to improve project performance	SFP
Project Review (Project Board)	At least annually	Any quality concerns or slower than expected progress should be discussed by the project board and management actions agreed to address the issues identified.	SFP

Evaluation Plan

Evaluation Title	Partners (if joint)	Related Strategic Plan Output	UNSDCF/CPD Outcome	Planned Completion Date	Key Evaluation Stakeholders
Independent Mid-Term Review (MTR)	Not applicable	4.1 Natural resources protected and managed to enhance sustainable productivity and livelihoods. 4.2 Public and private investment mechanisms mobilized for biodiversity, water, oceans, and climate solutions.	See pertinent information in the project results framework	By the MTR submission date included on cover page of Project Document	Fisheries and environment authorities of the participating countries, FIP implementers, GEF OFPs.
Independent Terminal Evaluation (TE)	Not applicable	4.1 Natural resources protected and managed to enhance sustainable productivity and livelihoods. 4.2 Public and private investment mechanisms mobilized for biodiversity, water, oceans, and climate solutions.	See pertinent information in the project results framework	By the TE submission date included on cover page of Project Document	Fisheries and environment authorities of the participating countries, FIP implementers, GEF OFPs.

Monitoring and Evaluation Budget for project execution

GEF M&E requirements to be undertaken by Project Management Unit (PMU)	Indicative costs (USD)
Inception Workshop and Report	29,800
M&E required to report on progress made in reaching GEF core indicators and project results included in the project results framework	None[a]

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GEF M&E requirements to be undertaken by Project Management Unit (PMU)	Indicative costs (USD)
Preparation of the annual GEF Project Implementation Report (PIR)	None
Monitoring of Stakeholders Engagement Plan and Gender Action Plan	None[b]
Supervision missions	None
Learning missions	None
Independent Mid-term Review (MTR)	24,000
Independent Terminal Evaluation (TE)	24,000
Project board meetings (in-person)	136,800
TOTAL indicative COST	214,600

[a] Carried out by pertinent project team members.

[b] Carried out by team's Gender, safeguards, and participation consultant.

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GOVERNANCE AND MANAGEMENT ARRANGEMENTS

Section 1: General roles and responsibilities in the projects' governance mechanism.

Implementing Partner.

391. The Implementing Partner for this project is Sustainable Fisheries Partnership (SFP), an NGO specialised in transforming the seafood market by engaging supply chains into sustainable and responsible production.
392. The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.
393. The Implementing Partner is responsible for executing this project. Specific tasks include:
    - Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level monitoring and evaluation is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
    - Overseeing the management of project risks as included in this project document and new risks that may emerge during project implementation.
    - Procurement of goods and services, including human resources.
    - Financial management, including overseeing financial expenditures against project budgets.
    - Approving and signing the multiyear workplan.
    - Approving and signing the combined delivery report at the end of the year; and,
    - Signing the financial report or the funding authorization and certificate of expenditures.

Project stakeholders and target groups.

394. The project partners are the fisheries authorities of the six participating countries (Table 15). In addition, as pertinent, the environment authorities in charge of the management of ETP species (e.g., sharks, sea turtles) will contribute to the project.
395. To represent the beneficiaries of the project in the Project Board the chairs of the Global mahi Supply Chain Roundtable (GMSR), the Global octopus Supply Chain Roundtable (GOSR) and the Global Roundtable on marine ingredients (GRMI) were included. These persons will represent the views from the supply chains.
396. There will be inception workshops on each country at project start (output 3.2.1). This will be an opportunity to inform and engage key stakeholders into the project activities. In addition, there will be midterm and final self-assessment meetings with the key stakeholders and direct beneficiaries on each country (output 3.2.1). In these meetings, the progress will be jointly reviewed, and comments, feedback and recommendations will be received for the execution of the project.

Table 15. GMC2 project partners in the participating countries.

Country [1]	**Fisheries authority**	**Environment authority in charge of ETP species**
Ecuador	Undersecretary of Fisheries Resources [2] (SRP)	Undersecretary of Natural Patrimony [3]
Guatemala	Directorate of regulations for fishing and aquaculture [4] (DIPESCA)	Ministry of Environment and Natural Resources (MARN)
Mauritania	Ministry of Fisheries and Maritime Economy (MPEM) [5]	Ministry of the Environment and Sustainable Development (MEDD) [6]
Morocco	Department of Maritime Fisheries (DPM-M) [7]	Sustainable Development Department of the Ministry of Energy Transition and Sustainable Development
Panama	Aquatic Resources Authority of Panama (ARAP)	Ministry of Environment (MiAmbiente)

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Country [1]	Fisheries authority	Environment authority in charge of ETP species
Senegal	Directorate of Maritime Fisheries (DPM-S) [8]	Ministry of Environment and Sustainable Development

[1] In alphabetical order.
[2] Part of the Ministry of Production, Foreign Trade, Investments and Fisheries.
[3] Part of the Ministry of Environment and Water.
[4] Part of the Ministry of Agriculture, Livestock and Food.
[5] Directorate General for the Exploitation of Fishery Resources (DGERH).
[6] Directorate for the Protection and Restoration of Species and Environments.
[7] Part of the Ministry of Agriculture, Maritime Fisheries, Rural Development and Waters and Forests.
[8] Part of the Ministry of Fisheries and Maritime Economy.

United Nations Development Programme (UNDP).

397. UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project. **The UNDP GEF Executive Coordinator, in consultation with UNDP Bureaus and the Implementing Partner, retains the right to revoke the project DOA, suspend or cancel this GEF project.** UNDP is responsible for the Project Assurance function in the project governance structure and presents to the Project Board and attends Project Board meetings as a non-voting member.
398. The UNDP country office in Ecuador will be the "Lead Country Office" for this global project and the UNDP Country Offices in the partner countries will be referred as the "Participating Country Offices". The Resident Representative of the Lead Country Office will assume full and primary responsibility and accountability to sign the UNDP-GEF Project Document for the global and Ecuadorian activities and to ensure the timely implementation of these actions. The same is applicable to each participating Country Office which will sign the country-specific UNDP-GEF Project Document and will be responsible for the implementation of the national activities and budget. The Lead Country Office will be the direct point of contact for the Implementing Partner and will oversee the execution of the pertinent agreements. The Participating Country Offices will undertake country level project assurance.

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Section 2: Project governance structure.

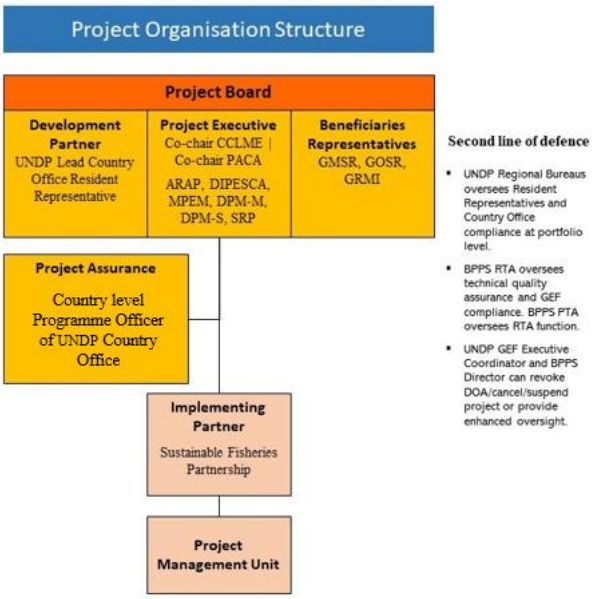


Figure 14. Project Organisation Structure.

399. The project organization chart summarises the governance structure (Figure 14).
400. The UNDP office in each participating country assumes full responsibility and accountability for oversight and quality assurance of this Project and its associated budget and ensures its timely implementation in compliance with the GEF-specific requirements and UNDP's Programme and Operations Policies and Procedures (POPP), its Financial Regulations and Rules and Internal Control Framework. The UNDP Resident Representative of lead country office will assume the assurance role and will present assurance findings to the Project Board, and therefore attends Project Board meetings as a non-voting member. The Regional Technical Advisor will attend Project Board meetings as a non-voting member.

Section 3: Segregation of duties and firewalls vis-à-vis UNDP representation on the project board:

401. As noted in the Minimum Fiduciary Standards for GEF Partner Agencies, in cases where a GEF Partner Agency (i.e., UNDP) carries out both implementation oversight and execution of a project, the GEF Partner Agency (i.e. UNDP) must separate its project implementation oversight and execution duties, and describe in the relevant project document a: 1) Satisfactory institutional arrangement for the separation of implementation oversight and executing functions in different departments of the GEF Partner Agency; and 2) Clear lines of responsibility, reporting and accountability within the GEF Partner Agency between the project implementation oversight and execution functions.
402. In this case, UNDP is only performing an implementation oversight role in the project vis-à-vis our role in the project board and in the project assurance function and therefore a full separation of project implementation oversight and execution duties has been assured (Figure 14).

Section 4: Roles and Responsibilities of the Project Organisation Structure:

a. Project Board

403. All UNDP projects must be governed by a multi-stakeholder board or committee established to review performance based on monitoring and evaluation, and implementation issues to ensure quality delivery of results. The Project Board (also called the Project Steering Committee) is the most senior, dedicated oversight body for a project.
404. The two main (mandatory) and nondelegable roles of the project board are:

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a. **High-level oversight of the execution of the project by the Implementing Partner** (as explained in the "Provide Oversight" section of the POPP). This is the primary function of the project board and includes annual (and as-needed) assessments of any major risks to the project, and decisions/agreements on any management actions or remedial measures to address them effectively. The Project Board reviews evidence of project performance based on monitoring, evaluation, and reporting, including progress reports, evaluations, risk logs and the combined delivery report. The Project Board is responsible for taking corrective action as needed to ensure the project achieves the desired results.
b. **Approval of strategic project execution decisions of the Implementing Partner** with a view to assess and manage risks, monitor and ensure the overall achievement of projected results and impacts and ensure long term sustainability of project execution decisions of the Implementing Partner (as explained in the "Manage Change" section of the POPP).

405. Requirements to serve on the Project Board

a. Agree to the Terms of Reference of the Board and the rules on protocols, quorum, and minuting.
b. Meet annually, at least once.
c. Disclose any conflict of interest in performing the functions of a Project Board member and take all measures to avoid any real or perceived conflicts of interest. This disclosure must be documented and kept on record by UNDP.
d. Discharge the functions of the Project Board in accordance with UNDP policies and procedures.
e. Ensure highest levels of transparency and ensure Project Board meeting minutes are recorded and shared with project stakeholders.

406. Responsibilities of the Project Board

[1] Consensus decision making:

- The project board provides overall guidance and direction to the project, ensuring it remains within any specified constraints, and providing overall oversight of the project implementation.
- Review project performance based on monitoring, evaluation, and reporting, including progress reports, risk logs and the combined delivery report.
- The project board is responsible for making management decisions by consensus.
- To ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency, and effective international competition.
- In case consensus cannot be reached within the board, the UNDP representative on the board will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.

[2] Oversee project execution:

- Agree on Project Coordinator's tolerances as required, within the parameters outlined in the project document, and provide direction and advice for exceptional situations when the project manager's tolerances are exceeded.
- Appraise annual work plans prepared by the Implementing Partner for the Project; review combined delivery reports prior to certification by the implementing partner.
- Address any high-level project issues as raised by the project manager and project assurance.
- Advise on major and minor amendments to the project within the parameters set by UNDP and the donor and refer such proposed major and minor amendments to the UNDP BPPS Nature, Climate and Energy Executive Coordinator (and the GEF, as required by GEF policies).
- Provide high-level direction and recommendations to the project management unit to ensure that the agreed deliverables are produced satisfactorily and according to plans.
- Track and monitor co-financed activities and realisation of co-financing amounts of this project.
- Approve the Inception Report, GEF annual project implementation reports, mid-term review and terminal evaluation reports.
- Ensure commitment of human resources to support project implementation, arbitrating any issues within the project.

[3] Risk Management:

- Provide guidance on evolving or materialised project risks and agree on possible mitigation and management actions to address specific risks.
- Review and update the project risk register and associated management plans based on the information prepared by the Implementing Partner. This includes risks related that can be directly managed by this project, as well as contextual risks that may affect project delivery or continued UNDP compliance and reputation but are

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outside of the control of the project. For example, social and environmental risks associated with co-financed activities or activities taking place in the project's area of influence that have implications for the project.
- Address project-level grievances.

[4] Coordination:
- Ensure coordination between various donor and government-funded projects and programmes.
- Ensure coordination with various government agencies and their participation in project activities.

Composition of the Project Board

407. The composition of the Project Board must include individuals assigned to the following three roles:
    - Project Executive. These are persons who represent ownership of the project and chair the Project Board. The members of the Project Executive are (in country alphabetical order) (1) the Undersecretary of Fisheries Resources of Ecuador (SRP), (2) the Director of regulations for fishing and aquaculture of Guatemala (DIPESCA), (3) the Technical Advisor in charge of Fisheries and Oceanographic Research of the Ministry of Fisheries and Maritime Economy of Mauritania (MPEM), (4) the Director of the Department of Maritime Fisheries of Morocco (DPM-M), (5) the Director of the Aquatic Resources Authority of Panama (ARAP), and (6) the Director of the Directorate of Maritime Fisheries of Senegal (DPM-S). The Project Board will be co-chaired by a representative of the countries of the CCLME and a representative of the countries of the PACA. These persons will be elected among the pertinent board members.
    - Beneficiary Representatives. These are individuals representing the interests of those groups of stakeholders who will ultimately benefit from the project. Their primary function within the board is to ensure the realisation of project results from the perspective of project beneficiaries. The Beneficiary Representatives are: (1) the chair of the Global mahi Supply Chain Roundtable (GMSR), (2) the chair of the Global octopus Supply Chain Roundtable (GOSR), and (3) the chair of the Global Roundtable on marine ingredients (GRMI).
    - Development Partner. These are individuals or groups representing the interests of the parties concerned that provide funding, strategic guidance and/or technical expertise to the project. The Development Partner is the UNDP Resident Representative of lead country office.
408. The GEF operational focal points will be invited to board meetings as non-voting participants.

b. Project Assurance

409. Project assurance is the responsibility of each project board member. However, UNDP has a distinct assurance role for all UNDP projects in carrying out objective and independent project oversight and monitoring functions. UNDP performs quality assurance and supports the Project Board (and the Project Management Unit) by carrying out objective and independent project oversight and monitoring functions, including compliance with the risk management and social and environmental standards of UNDP. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. Project assurance is totally independent of project execution as indicated in the project organisation chart (Figure 14).

410. A designated representative of UNDP playing the project assurance role is expected to attend all board meetings and support board processes as a non-voting representative. It should be noted that while in certain cases UNDP's project assurance role across the project may encompass activities happening at several levels (e.g., global, regional, national), at least one UNDP representative playing that function must, as part of their duties, specifically attend board meeting and provide board members with the required documentation needed to perform their duties. The UNDP representative playing the main project assurance function Programme Officer of the Lead CO.

c. Project Management – Execution of the Project

411. The project management unit (PMU) is headed by the Project Coordinator and includes four members (Figure 15). These persons will be contracted by the Implementing Partner, using GEF resources, solely for the execution of this project. The Implementing Partner will apply strict measures to prevent that the project´s personnel are involved in other matters or activities, in particular those related to the implementing partner. It will be aimed that at least 50% of the PMU members will be women.
412. The Project Coordinator is the most senior representative of the Project Management Unit (PMU) and is responsible for the overall day-to-day management of the project on behalf of the Implementing Partner, including, (i) the mobilisation of all project inputs, and (ii) the supervision over project staff, responsible parties, consultants, and

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sub-contractors. The Project Coordinator will present key deliverables and documents to the board for their review and approval, including progress reports, annual work plans, adjustments to tolerance levels and risk registers. This person will attend all board meetings, will keep minutes and will support board processes as a non-voting representative. Finally, the Project Coordinator will be responsible for preparing and implementing the post-project sustainability plan.

413. There will be one Fisheries Officer on each region. These persons will be responsible for ensuring that the national governance platforms, fisheries management plans and FIPs are adequately implemented in the participating countries.
414. As requested by the delegates of the project partners in the final validation meeting (16 August 2023), there will be the figure of a "national coordinator" on each country. Due to budget constraints, these persons will be local consultants that, under the guidance and oversight of the Project Coordinator, will organise activities on each country with the pertinent public and private project partners.
415. The location of the members of the PMU will be decided by the Implementing Partner at project start. These persons will not be located at UNDP country offices. But it is foreseen that the project partners will provide, as part of their co-financing, office space and working facilities if required. Table 16 summarises the main responsibilities of the members of the project management unit and Annex 11 has the terms of reference for each post.
416. Three part-time consultants will provide support to the PMU for the implementation of key project instruments. A Gender, Safeguards, and Participation consultant will be responsible for the implementation of the Gender Action Plan, the Stakeholder Engagement Plan, and the implementation of pertinent plans outlined in the Environmental and Social Management Framework (ESMF). A Communications consultant will be responsible for the preparation and implementation of the project´s Communication Strategy. Finally, a Monitoring, Evaluation, and Knowledge consultant will be responsible for implementing the Monitoring and Evaluation Plan and the preparation and implementation of the project´s Knowledge Transfer Strategy.

d. Technical Advisory Group

417. The Technical Advisory Group is a coordination instance among the key project partners. Its main roles are to:
    - Ensure fluid inter-sectoral communication and collaboration within and among the participating countries.
    - Guarantee ownership of the activities implemented by the Implementing Partner, ensuring that the results are aligned with the countries' policies and priorities.
    - Provide technical guidance to the Project Coordinator and the project management unit to support the achievement of the project outcomes.
    - Review and pre-approve the annual work plan and its corresponding budget before they are submitted for consideration of the Project Board.

e. National coordination groups

418. In each country there will be a National Coordination Group to facilitate collaboration and synergies among key partners and other projects and initiatives (e.g., FiTI, ILO, FAO) (Figure 15). The Project Coordinator together with the Fisheries Officers will organise the coordination groups, organise meetings (at least every six months), prepare meeting minutes, follow-up agreements and motivate fluid communication among its members. The UNDP country offices will assist in organising the coordination groups. It will be promoted to have each year, at a minimum, a meeting for joint programming and another meeting to assess progress.

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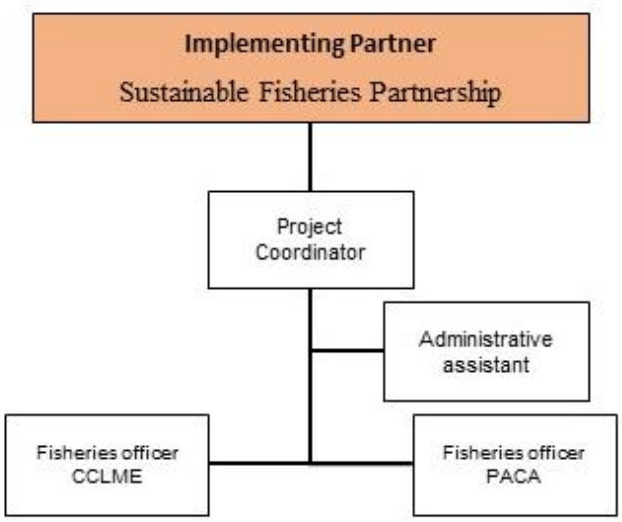


Figure 15. GMC2 project management unit.

Table 16. Main responsibilities of the technical members of the project management unit.

Outcome	Project Coordinator	Fisheries officer CCLME	Fisheries officer PACA
Outcome 1.1. Increased market demand for sustainable marine commodities in relevant international and domestic markets.	Provides strategic guidance for the design and implementation of the buyer engagement strategies. Oversees the implementation of the buyer engagement strategies in international and domestic markets.	Ensures prompt provision of information (domestic market intelligence) and communication among stakeholders for the design and implementation of the buyer engagement activities.	Ensures prompt provision of information (domestic market intelligence) and communication among stakeholders for the design and implementation of the buyer engagement activities.
Outcome 1.2. Increased market demand for socially responsible seafood commodities.	Oversees the preparation of the responsible seafood standard and indicator set and the work with international and domestic buyers.	Ensures prompt provision of pertinent information and fluid communication with buyers in domestic markets.	Ensures prompt provision of pertinent information and fluid communication with buyers in domestic markets.
Outcome 1.3. Increased market demand for seafood commodities from fisheries with reduced bycatch and environmental impact.	Provides strategic guidance and oversees the application of the reduced by-catch and ecosystem impacts standard to the project target fisheries.	Ensures prompt provision of pertinent information and fluid communication with key stakeholders and buyers in domestic markets.	Ensures prompt provision of pertinent information and fluid communication with key stakeholders and buyers in domestic markets.
Outcome 2.1. Increased supply of seafood products that demonstrate improved fisheries governance and stock health.	Provides strategic guidance for the development of the management platforms and the FIPs and ensures that capacity development activities feed into these processes. Oversee the collaborative work on small pelagic fish management between Mauritania and Morocco (2.1.1).	Responsible for the development of the management platforms (2.1.1) and the capacity development activities (2.1.3). Support the development of the FIPs (2.1.2).	Responsible for the development of the management platforms (2.1.1) and the capacity development activities (2.1.3). Support the development of the FIPs (2.1.2).
Outcome 2.2. Increased supply of seafood products that demonstrate improved social responsibility.	Provides strategic guidance for the development of the guidelines to mainstream social responsibility into fisheries governance and seafood supply chain (2.2.1) and the support to implementation or preparation of fisheries management plans (2.2.2). Direct the training on Regulatory Impact Assessment and the support to the countries on the application of this tool.	Responsible to support the implementation or preparation of fisheries management plans (2.2.2). Support the application of Regulatory Impact Assessment. Organises the learning exchange on small pelagic fish and octopus management.	Responsible to support the implementation or preparation of fisheries management plans (2.2.2). Support the application of Regulatory Impact Assessment.

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Outcome	Project Coordinator	Fisheries officer CCLME	Fisheries officer PACA
Outcome 2.3. Increased supply of seafood products that demonstrate reduced bycatch and environmental impact.	Provides strategic guidance and oversees the integration of the reduced by-catch and ecosystem impacts standard in the pertinent fisheries management instruments and FIPs.	Responsible for the integration of objectives and targets to reduce ecosystem impacts and bycatch in the fisheries management plans.	Responsible for the integration of objectives and targets to reduce ecosystem impacts and bycatch in the fisheries management plans. Ensures that addressing the by-catch of sharks and other ETP species is integrated in the management plans and FIPs. Organises the regional work on shark NDFs, and (iii) guides the work with COREMAHI.
Outcome 3.1. Reliable and verifiable information of sustainability performance of target marine commodities is available to supply chain partners and the public to drive their purchasing decisions.	Provides strategic guidance and oversees the preparation of profiles of the target fisheries and FIPs.	Responsible for the preparation of the target fisheries profiles.	Responsible for the preparation of the target fisheries profiles.
Outcome 3.2. Lessons about mainstreaming ecological and social sustainability into seafood supply chains are available worldwide.	Directs the work with the National Coordination Groups and ensure collaborative and synergic work with project partners and other pertinent projects and initiatives. Ensures that lessons are documented and presented to local stakeholders, high-level national authorities, key regional organisations, and the international community. Responsible for preparing and implementing the post-project sustainability plan.	Responsible for organising and supporting the work of the National Coordination Groups. Contributes to document and disseminate project lessons.	Responsible for organising and supporting the work of the National Coordination Groups. Contributes to document and disseminate project lessons.
Outcome 4.1. Project-level monitoring and evaluation, in compliance with UNDP and mandatory GEF-specific monitoring and evaluation requirements	Provides strategic guidance and oversees the implementation of the project monitoring and evaluation plan. Prepares annual PIR.	Contributes to the implementation of the project monitoring and evaluation plan. Responsible for the pertinent actions indicated in the project monitoring and evaluation plan.	Contributes to the implementation of the project monitoring and evaluation plan. Responsible for the pertinent actions indicated in the project monitoring and evaluation plan.

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FINANCIAL PLANNING AND MANAGEMENT

419. The total cost of the project is USD 18,013,284. This is financed through a GEF grant of USD 5,421,915 administered by UNDP and USD 12,591,369 in co-financing. UNDP, as the GEF Implementing Agency, is responsible for the oversight of the GEF resources and the cash co-financing transferred to UNDP bank account only.

Co-financing

420. The actual realization of project co-financing amounts will be monitored by the UNDP Country Office and the PMU on an annual basis in the GEF PIR and will be reported to the GEF during the mid-term review and terminal evaluation process as follows:

Co-financing source	Co-financing type	Name of co-financer	Investment mobilised	Co-financing amount
Civil Society Organization	In-kind	Fisheries Transparency Initiative (FiTI)	Recurrent expenditures	100,000
Civil Society Organization	In-kind	Sustainable Fisheries Partnership (SFP)	Recurrent expenditures	8,800,000
Civil Society Organization	Grant	Sustainable Fisheries Partnership (SFP)	investment mobilised	2,200,000
Private Sector	Grant	Global Octopus Supply Chain Roundtable	investment mobilised	90,000
Private Sector	In-kind	Global Octopus Supply Chain Roundtable	Recurrent expenditures	224,923
Private Sector	Grant	Global Roundtable on Marine Ingredients	investment mobilised	590,600
Private Sector	In-kind	Global Roundtable on Marine Ingredients	Recurrent expenditures	585,846
			Total	**12,591,369**

Budget Revision and Tolerance

421. As per UNDP POPP, the project board may agree with the project manager on a tolerance level for each detailed plan under the overall multi-year workplan. The agreed tolerance should be written in the project document or approved project board meeting minutes. It should normally not exceed 10 percent of the agreed annual budget at the activity level, but within the overall approved multi-year workplan at the activity level. Within the agreed tolerances, the project manager can operate without intervention from the project board. Restrictions apply as follows:

422. Should the following deviations occur, the Project Manager/IP through UNDP Country Office will seek the approval of the BPPS/NCE-VF team to ensure accurate reporting to the GEF. It is **strongly encouraged** to maintain the expenditures within the approved budget at the budgetary account and at the component level:

a) Budget reallocations must prove that the suggested changes in the budget will not lead to material changes in the results to be achieved by the project. A strong justification is required and will be approved on an exceptional basis. Budget re-allocations among the components (including PMC) of the approved Total Budget and Work Plans (TBWP) that represent a value greater than 10% of the total GEF grant.
b) Introduction of new outputs/activities (i.e. budget items) that were not part of the agreed project document and TBWP that represent a value greater than 5% of the total GEF grant. The new budget items must be eligible as per the GEF and UNDP policies.
c) Project management cost (PMC): budget under PMC component is capped and cannot be increased.

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423. UNDP is not in a position to increase the total budget above the amount approved by the donor, therefore any over-expenditure would have to be absorbed from non-GEF resources by the Implementing Partner (GEF Executing Entity)

Project extensions

424. The UNDP-BPPS-NCE team Executive Coordinator must approve all requests for extension of the Project Completion Date and for other milestone extensions with hard deadlines. All extensions impose additional time and cost burdens at all levels and the GEF project budget cannot be increased beyond its originally approved amount. A single extension may be granted on an exceptional basis and subject to the conditions and maximum durations set out in the UNDP POPP. The project management costs during the extension period must remain within the originally approved amount, and any increase in PMC costs shall be covered by non-GEF resources; the additional UNDP oversight costs during the extension period must be covered by non-GEF resources, in accordance with UNDP's policy as set out in UNDP POPP.
425. For any extension request, UNDP CO and IP will consult and jointly present a clear plan indicating how and from which specific sources the additional oversight costs that will be incurred by UNDP will be covered during the extended period. The BPPS-NCE Executive Coordinator will consult the Regional Bureaux (RBX) and may reject the extension request if no (external co-financing by the IP or internal UNDP CO resources) can be identified.
426. All extension requests, along with all supporting documentation, shall be submitted by the IP to the UNDP CO in line with the requirements and within the deadlines set out in the UNDP SOPs and policies in UNDP POPP.

Audit

427. The project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies. Audit cycle and process must be discussed during the Inception workshop. If the Implementing Partner is an UN Agency, the project will be audited according to that Agencies applicable audit policies.

Transfer or disposal of assets

428. In consultation with the Implementing Partner and other parties of the project, UNDP is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project, however, **must be done before the operational closure date**. In all cases of transfer, a transfer document must be prepared and kept on file[32]. The transfer should be done before Project Management Unit complete their assignments.

Completion Date

429. The project completion date is the date of Project Document Signature plus project duration. This date can only be extended through a formal extension request. Prior to completion date, all UNDP-financed inputs must be provided and related activities for the Project completed. No activities, except for the final clearance of the Terminal Evaluation Report and the corresponding management response and the end-of-project review Project Board Meeting should take place after the Completion Date.

Project Closure

430. Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP. All costs incurred to close the project must be included in the project closure budget and reported as final project commitments

[32] See https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PPM_Project%20Management_Closing.docx&action=default.

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presented to the Project Board during the final project review. The only costs a project may incur following the final project review are those included in the project closure budget.

- **Operational Closure**: **Operational closure must happen within nine (9) months from project completion date.** Prior to operational closure, the Terminal Evaluation must have been submitted and the corresponding TE management response and the end-of-project review Project Board meeting must have been completed. The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. Before Operational Closure, the project must have completed the transfer or disposal of any equipment that is still the property of UNDP.
- **Financial Closure: Financial closure must happen within six (6) months of operational closure or after the date of cancellation.** The project will be financially closed when the following conditions have been met: a) the project is operationally completed or has been cancelled; b) the Implementing Partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).
  Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to BPPS/NCE for confirmation before the project will be financially closed in Quantum by the UNDP Country Office.

Cancellation and Suspension

431. All projects considering going through cancellation or suspension must follow UNDP and GEF requirements. Guidance can be found in the UNDP POPP (SOPs for management actions of Vertical Fund projects escalated to the Executive Coordinator and Guidance for GEF project revisions).

Refund to GEF

432. Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the BPPS/NCE team Directorate in New York. No action is required by the UNDP Country Office on the actual refund from UNDP project to the GEF. Unspent project balance is not permitted to be transferred to any other projects.

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TOTAL BUDGET AND WORK PLAN

Total Budget and Work Plan			
Quantum Business Unit	UNDP-ECU		
Quantum Project ID:	01004782	Quantum Project Title:	*ECU-Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems*
Quantum Award ID:	1400440	Quantum Award Title:	*PIMS-6591-GLO-Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems: Award Projects*
UNDP-GEF PIMS No.	6591		
Implementing Partner	Sustainable Fisheries Partnership		

Quantum Outcome (GEF Component)	**Quantum Output and Activity (GEF Outcome)**	**Quantum Responsible Party (UNDP, IP, or Responsible Party)**	**Quantum Fund ID**	**Quantum Donor ID**	**Quantum Budgetary Account Code**	**Quantum Budget Account Description**	**Amount Year 1 (USD)**	**Amount Year 2 (USD)**	***Amount Year 3 (USD)***	***Amount Year 4 (USD)***	***Amount Year 5 (USD)***	**Total (USD)**	**See Budget Note: *(reference as number, not as letter)***
Component 1 - Increase demand for sustainable seafood products from CCLME and PACA.	*Outcome 1.1 Increased market demand for sustainable marine commodities in relevant international and domestic markets.*	*SFP*	*62000*	*10003*	*71200*	*International Consultants*	58,500.00	58,500.00	58,500.00	58,500.00	27,000.00	261,000.00	1
					71800	*Contractual Services - Imp Partn*	15,600.00	15,600.00	15,600.00	15,600.00	15,600.00	78,000.00	2
					71600	*Travel*	5,800.00	5,800.00	5,800.00	5,800.00	5,800.00	29,000.00	3
					75700	*Training, Workshops and Confer*	9,000.00	12,000.00	12,000.00	12,000.00	34000	79,000.00	4
					71300	*Local Consultants*	23,700.00	23,700.00	23,700.00	23,700.00	23,700.00	118,500.00	5
	Total Outcome 1.1						**112,600.00**	**115,600.00**	**115,600.00**	**115,600.00**	**106,100.00**	**565,500.00**	
	Outcome 1.2 Increased market demand for	*SFP*	*62000*	*10003*	*71200*	*International Consultants*	64,000.00	26,000.00	26,000.00			116,000.00	6
					71300	*Local Consultants*	28,200.00	28,200.00	28,200.00	28,200.00	28,200.00	141,000.00	7

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	socially responsible seafood commodities.				*74200*	*Audio Visual&Print Prod Costs*		5,000.00	5,000.00	5,000.00		15,000.00	8
					71800	*Contractual Services - Imp Partn*	9,600.00	9,600.00	9,600.00	9,600.00	9,600.00	48,000.00	9
					75700	*Training, Workshops and Confer*		6,000.00				6,000.00	10
					71600	*Travel*	5,800.00	5,800.00	5,800.00	5,800.00	5,800.00	29,000.00	11
	Total Outcome 1.2						**107,600.00**	**80,600.00**	**74,600.00**	**48,600.00**	**43,600.00**	**355,000.00**	
	Outcome 1.3 Increased market demand for seafood commodities from fisheries with reduced bycatch and environmental impact.	*SFP*	*62000*	*10003*	*71200*	*International Consultants*	13,000.00	26,000.00	26,000.00			65,000.00	12
					71300	*Local Consultants*	9,150.00	9,150.00	9,150.00	9,150.00	9,150.00	45,750.00	13
					74200	*Audio Visual&Print Prod Costs*		5,000.00	5,000.00			10,000.00	14
					71800	*Contractual Services - Imp Partn*	15,600.00	15,600.00	15,600.00	15,600.00	15,600.00	78,000.00	15
					71600	*Travel*	5,800.00	5,800.00	5,800.00	5,800.00	5,800.00	29,000.00	16
	Total Outcome 1.3						**43,550.00**	**61,550.00**	**61,550.00**	**30,550.00**	**30,550.00**	**227,750.00**	
Total Component 1							**263,750.00**	**257,750.00**	**251,750.00**	**194,750.00**	**180,250.00**	**1,148,250.00**	
Component 2 Increased supply of sustainable seafood products from CCLME and PaCA	*Outcome 2.1 Increased supply of seafood products that demonstrate improved fisheries governance and stock health.*	*SFP*	*62000*	*10003*	*71200*	*International Consultants*	104,000.00	104,000.00				**208,000.00**	**17**
					71300	*Local Consultants*	70,200.00	70,200.00	70,200.00	70,200.00	70,200.00	**351,000.00**	**18**
					71600	*Travel*	5,800.00	5,800.00	5,800.00	5,800.00	5,800.00	**29,000.00**	**19**
					71800	*Contractual Services - Imp Partn*	31,200.00	31,200.00	31,200.00	31,200.00	31,200.00	**156,000.00**	**20**
	Total Outcome 2.1						**211,200.00**	**211,200.00**	**107,200.00**	**107,200.00**	**107,200.00**	**744,000.00**	

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	Outcome 2.2. Increased supply of seafood products that demonstrate improved social responsibility.	*SFP*	*62000*	*10003*	*71200*	*International Consultants*	86,333.33	56,000.00	37,916.67	13,000.00	3,250.00	196,500.00	21
					71300	*Local Consultants*	83,900.00	123,085.00	40,900.00	40,900.00	40,900.00	329,685.00	22
					71800	*Contractual Services - Imp Partn*	27,600.00	27,600.00	27,600.00	27,600.00	27,600.00	138,000.00	23
					72400	*Communic & Audio Visual Equip*		12,800.00	6,400.00			19,200.00	24
					74200	*Audio Visual&Print Prod Costs*		4,000.00	2,000.00			6,000.00	25
					71600	*Travel*	5,800.00	5,800.00	5,800.00	5,800.00	5,800.00	29,000.00	26
					75700	*Training, Workshops and Confer*		112,800.00				112,800.00	27
	Total Outcome 2.2						**203,633.33**	**342,085.00**	**120,616.67**	**87,300.00**	**77,550.00**	**831,185.00**	
	Outcome 2.3. Increased supply of seafood products that demonstrate reduced bycatch and environmental impact.	*SFP*	*62000*	*10003*	*71200*	*International Consultants*		22,500.00				22,500.00	28
					71300	*Local Consultants*	17,250.00	27,250.00	17,250.00	17,250.00	27,250.00	106,250.00	29
					75700	*Training, Workshops and Confer*		86,840.00	52,100.00	52,100.00	38,900.00	229,940.00	30
					71800	*Contractual Services - Imp Partn*	27,600.00	27,600.00	27,600.00	27,600.00	27,600.00	138,000.00	31
					71600	*Travel*	5,800.00	5,800.00	5,800.00	5,800.00	5,800.00	29,000.00	32
	Total Outcome 2.3						**50,650.00**	**169,990.00**	**102,750.00**	**102,750.00**	**99,550.00**	**525,690.00**	
Total Component 2							**465,483.33**	**723,275.00**	**330,566.67**	**297,250.00**	**284,300.00**	**2,100,875.00**	
Component 3 - Knowledge management to support the	*Outcome 3.1. Reliable and verifiable information of*	*SFP*	*62000*	*10003*	*71200*	*International Consultants*	29,250.00	58,500.00	58,500.00	58,500.00	58,500.00	263,250.00	33
					71300	*Local Consultants*	89,100.00	29,100.00	89,100.00	89,100.00	89,100.00	385,500.00	34

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transformation of the seafood market	*sustainability performance of target marine commodities is available to supply chain partners and the public to drive their purchasing decisions.*				*71800*	*Contractual Services - Imp Partn*	15,600.00	15,600.00	15,600.00	15,600.00	15,600.00	78,000.00	35
					71600	*Travel*	5,800.00	5,800.00	5,800.00	5,800.00	5,800.00	29,000.00	36
	Total Outcome 3.1						**139,750.00**	**109,000.00**	**169,000.00**	**169,000.00**	**169,000.00**	**755,750.00**	
	Outcome 3.2. Lessons about mainstreaming ecological and social sustainability into seafood supply chains are available worldwide.	*SFP*	*62000*	*10003*	*71800*	*Contractual Services - Imp Partn*	9,600.00	9,600.00	9,600.00	9,600.00	9,600.00	48,000.00	37
					71300	*Local Consultants*	29,100.00	29,100.00	29,100.00	29,100.00	29,100.00	145,500.00	38
					72100	*Contractual services - Companies*	16,000.00	8,000.00	8,000.00	8,000.00	8,000.00	48,000.00	39
					72400	*Communic & Audio Visual Equip*	15,600.00					15,600.00	40
					74200	*Audio Visual&Print Prod Costs*	30,000.00	30,000.00	30,000.00	30,000.00	142,000.00	262,000.00	41
					75700	*Training, Workshops and Confer*	30,000.00		51,600.00		81,600.00	163,200.00	42
					71600	*Travel*	5,800.00	5,800.00	5,800.00	5,800.00	5,800.00	29,000.00	43
	Total Outcome 3.2						**136,100.00**	**82,500.00**	**134,100.00**	**82,500.00**	**276,100.00**	**711,300.00**	
Total Component 3							**275,850.00**	**191,500.00**	**303,100.00**	**251,500.00**	**445,100.00**	**1,467,050.00**	
	Outcome 4.1 Project-level	*SFP*	*62000*	*10003*	*71200*	*International Consultants*			24,000.00		24,000.00	48,000.00	44

Component 4 - Monitoring and Evaluation	*monitoring and evaluation, in compliance with UNDP and mandatory GEF-specific monitoring and evaluation requirements*				*75700*	*Training, Workshops and Confer*	29,800.00	34,200.00	34,200.00	34,200.00	34,200.00	166,600.00	45
	Total Outcome 4.1 (M&E)						**29,800.00**	**34,200.00**	**58,200.00**	**34,200.00**	**58,200.00**	**214,600.00**	
Total Component 4							**29,800.00**	**34,200.00**	**58,200.00**	**34,200.00**	**58,200.00**	**214,600.00**	
Project Management Cost (PMC)	*PMC*	*UNDP*	*62000*	*10003*	*74100*	*Professional Services*	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00	30,000.00	46
		SFP	*62000*	*10003*	*72400*	*Communic & Audio Visual Equip*	20,640.00	7,000.00	7,000.00	7,000.00	7,000.00	48,640.00	47
					72500	*Supplies*	700	700	700	700	700	3,500.00	48
					74500	*Miscellaneous Expenses*	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	25,000.00	49
					71800	*Contractual Services - Imp Partn*	76,800.00	76,800.00	76,800.00	76,800.00	76,800.00	384,000.00	50
Total Project Management Cost							**109,140.00**	**95,500.00**	**95,500.00**	**95,500.00**	**95,500.00**	**491,140.00**	
Total Project Grant							**1,144,023.33**	**1,302,225.00**	**1,039,116.67**	**873,200.00**	**1,063,350.00**	**5,421,915.00**	

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Budget Notes

Budget Note #	Description
1	Consultant to systematise learning from engaging mid-upper and end market buyers to demand sustainable target seafood products (including social responsibility «outcome 1.2» and reduced bycatch «outcome 1.3»). Participatory identification of lessons and recommendations. The document will include extended summaries in Spanish and French. Market specialist coordinator of Global octopus roundtable. Part-time support to GMC2 project (15% time allocation) Market specialist coordinator of Global Roundtable on Marine Ingredients (West African Fisheries Workstream). Part-time support to GMC2 project (15% time allocation) Market specialist coordinator of Global mahi roundtable. Part-time support to GMC2 project (15% time allocation) Consultant to systematise learning from engaging domestic buyers to demand sustainable target seafood products (including social responsibility «outcome 1.2» and reduced bycatch «outcome 1.3») in Ecuador, Guatemala, Morocco and Senegal. Participatory identification of lessons and recommendations. The document will include extended summaries in Spanish and French.
2	Project coordinator. Time allocated to outcome 1.1. Fisheries officer CCLME. Time allocated to outcome 1.1. Fisheries officer PACA. Time allocated to outcome 1.1. Project coordinator. Time allocated to outcome 1.1. Fisheries officer CCLME. Time allocated to outcome 1.1. Fisheries officer PACA. Time allocated to outcome 1.1.
3	Airplane tickets for project team. Outcome 1.1 Travel expenses of project team. Outcome 1.1 Land travel of project team in project area. Outcome 1.1 Airplane tickets for project team. USD600/ttravel expenses of project team Travel expenses of project team
4	Side events during SeafoodExpo events (Boston and Barcelona) or specialised meetings with exporters, traders and retailers. Includes presenting FishSource indicators for social responsibility and reduced bycatch. Cost per meeting USD3000 to cover venue, materials and refreshments. Workshop to exchange experience and document learning on engaging domestic buyers to demand sustainable target seafood products (including social responsibility «outcome 1.2» and reduced bycatch «outcome 1.3») in Ecuador, Guatemala, Morocco and Senegal. 14 persons (three persons per country (twelve in total) + consultant + one project team member). Two days workshop. Three nights of accommodation (arriving one day before, leaving one day after). USD150 per person per night for food and lodging (150*3*14) + USD1800 per person per airplane ticket (1800x14) + USD2500 for venue and materials.
5	Market development consultant. Time allocated to outcome 1.1. FIPs consultant. Time allocated to outcome 1.1. Gender, safeguards and participation consultant. Time allocated to outcome 1.1. Communications consultant. Time allocated to outcome 1.1. Consultant to prepare scoping analysis of domestic end-market channels (retailers, hospitality industry) for sustainable small pelagic fish products in Senegal.
6	Social specialist to develop standard for social responsibility working in collaboration with FishSource team. One FishSource specialist. Part-time support to GMC2 project. Year one 30% time to develop social responsibility standard and apply to the FishSource profiles of the GMC2 target fisheries. Years 2-3, 20% time to follow application of the standard and update FishSource profiles.

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7	Market development consultant. Time allocated to outcome 1.2. Gender, safeguards and participation consultant. Time allocated to outcome 1.2. Communications consultant. Time allocated to outcome 1.2.
8	Online promotion of the use of the FishSource social standard.
9	Project coordinator. Time allocated to outcome 1.2. Fisheries officer CCLME. Time allocated to outcome 1.2. Fisheries officer PACA. Time allocated to outcome 1.2.
10	Meeting with social experts for peer review of the use and utility of FishSource socially responsible standard, systematise learning and provide recommendations for improvement. Lumpsum to cover travel expenses and venue.
11	Airplane tickets for project team. USD600/ticket x 4 tickets/year. Outcome 1.2 Travel expenses of project team. USD120/day x 20 days/year. Outcome 1.2 Land travel of project team in project area. USD5,000 for project duration. Outcome 1.2
12	One FishSource specialist. Part-time support to GMC2 project. Year one 10% time to apply the reduced by-catch and ecosystem impacts standard to the project target fisheries. Years 2-3, 20% time to follow application of the standard and update FishSource profiles.
13	Market development consultant. Time allocated to outcome 1.3. Gender, safeguards and participation consultant. Time allocated to outcome 1.3. Communications consultant. Time allocated to outcome 1.3.
14	Online promotion of the use of the FishSource reduced by-catch standard.
15	Project coordinator. Time allocated to outcome 1.3. Fisheries officer CCLME. Time allocated to outcome 1.3. Fisheries officer PACA. Time allocated to outcome 1.3.
16	Airplane tickets for project team. USD600/ticket x 4 tickets/year. Outcome 1.3 Travel expenses of project team. USD120/day x 20 days/year. Outcome 1.3 Land travel of project team in project area USD5,000 for project duration. Outcome 1.3
17	FIP advisor from SFP, part-time support FIPs from Guatemala, Panama and Ecuador (PACA LME). % time allocation for 16 months FIP advisor from SFP, part-time support FIPs from Mauritania and Senegal (CCLME). % time allocation for 16 months Shrimp FIP. Consultant to undertake FIP scoping of the shrimp fishery (supply chain analysis, stakeholder identification, FIP scope, MSC quick assessment, draft pre-FIP plan). Lumpsum including all expenses.
18	Market development consultant. Time allocated to outcome 2.1. FIPs consultant. Time allocated to outcome 2.1. Gender, safeguards and participation consultant. Time allocated to outcome 2.1. Communications consultant. Time allocated to outcome 2.1. Emerging markets advisor. Consultant to support value chain analyses and strategic development.
19	Airplane tickets for project team. Travel expenses of project team. Land travel of project team in project area. Outcome 2.1.
20	Project coordinator. Time allocated to outcome 2.1. Fisheries officer CCLME. Time allocated to outcome 2.1. Fisheries officer PACA. Time allocated to outcome 2.1.
21	Market specialist of SFP. Part-time support to GMC2 project (two months work) to prepare a review document with current status, trends, tools and initiatives to integrate social responsibility into fisheries governance and supply chains.

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	Market specialist of SFP. Part-time support to GMC2 project (two months work) to prepare (i) a self-evaluation tool and guidelines to integrate social responsibility into fisheries governance processes and (ii) a self-evaluation tool and guidelines to integrate social responsibility into fisheries value chains. Market specialist of SFP. Part-time support to GMC2 project (10% time allocation) to provide support to key actors of the target fisheries and value chains in the use of (i) the self-evaluation tool and guidelines to integrate social responsibility into fisheries governance processes and (ii) the self-evaluation tool and guidelines to integrate social responsibility into seafood supply chains. Market specialist of SFP. Part-time support to GMC2 project (two months work) to (i) assess the performance of the self-evaluation tools and guidelines to integrate social responsibility into fisheries governance processes and value chains, and (ii) prepare update version of the self-evaluation tools and guidelines.
	RIA. Consultant to prepare guidelines and training workshop on Regulatory Impact Analysis in fisheries building on main international guidelines (e.g., OECD, United Nations Department of Economic and Social Affairs) and practical application in fisheries.
	RIA. Online support/advice to countries in the application of Regulatory Impact Analysis in specific cases. Honorarium. USD500 per day x 10 days per country x 6 countries
	COREMAHI. Fisheries specialist of SPF that coordinates and supports the work of COREMAHI. Part-time support to GMC2 project (10% time allocation).
	MTR SPF management. External independent evaluation of the implementation of the small pelagic fisheries management plan (PAP-PP). The preliminary results will be presented in an end-of-mission meeting with key actors. The evaluation will be presented via teleconference to a joint meeting of the CNC-PP, CAAP, and CCNADP. Lumpsum includes honorarium and travel expenses (including field visits).
22	PACA PANs. Fisheries specialist to document, systematise and distill the ecuadorian experience in the preparation of fisheries action plans (e.g., dorado, pomada, cangrejo rojo). Participatory process with VMAP, IPIAP and key stakeholders from the fisheries and associated supply chains. The final product will be a document that systematise the process and present positive and negative lessons. Lumpsum includes honorarium and travel expenses. CCLME. Fisheries consultant to document, systematise and distill the Moroccan experience in the preparation and implementaion of fisheries management plans for small pelagic fish and octopus. Participatory process with public and private stakeholders from the fisheries and associated supply chains. The final product will be a document that systematise the process. the challenges and opportunities and key positive and negative lessons. A standard methodology will be applied in the three CCLME countries. The work will be overseen by the Fisheries Officer of the project management unit. Lumpsum includes honorarium and travel expenses. CCLME. Fisheries consultant to document, systematise and distill the Mauritanian experience in the preparation and implementaion of fisheries management plans for small pelagic fish and octopus. Participatory process with public and private stakeholders from the fisheries and associated supply chains. The final product will be a document that systematise the process. the challenges and opportunities and key positive and negative lessons. A standard methodology will be applied in the three CCLME countries. The work will be overseen by the Fisheries Officer of the project management unit. Lumpsum includes honorarium and travel expenses. CCLME. Fisheries consultant to document, systematise and distill the Senegalese experience in the preparation and implementaion of fisheries management plans for small pelagic fish and octopus. Participatory process with public and private stakeholders from the fisheries and associated supply chains. The final product will be a document that systematise the process. the challenges and opportunities and key positive and negative lessons. A standard methodology will be applied in the three CCLME countries. The work will be overseen by the Fisheries Officer of the project management unit. Lumpsum includes honorarium and travel expenses. Livelihood Action Plans. Lumpsum to prepare livelihood actions plans as needed. Scoped ESIA. Preparation of scoped ESIA of the PACA countries. Includes (i) cultural Heritage Impact Assessment of target fisheries and (ii) Strategic Environmental and Social Assessment of potential fishery conservation and management measures. Includes the baseline analysis of Emberá-Woonaan artisanal shrimp fishers on the Pacific coast of Panama, but this cost is included in output 2.1.3. Scoped ESIA. Preparation of scoped ESIA of the CCLME countries. Includes (i) cultural Heritage Impact Assessment of target fisheries, (ii) ethnic minorities assessment (presence of vulnerable ethnic minorities linked to the target value chains of West Africa), (iii) Strategic Environmental and Social Assessment of potential fishery conservation and management measures.

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	Scoped ESMP. Preparation of management plans as required from the results of the scoped ESIA. COREMAHI. Social specialist to prepare social responsibility targets for COREMAHI´s code of conduct. COREMAHI. External indepedent evaluation of effectiveness COREMAHI´s code of conduct. Market development consultant. Time allocated to outcome 2.2. FIPs consultant. Time allocated to outcome 2.2. Gender, safeguards and participation consultant. Time allocated to outcome 2.2. Communications consultant. Time allocated to outcome 2.2.
23	Project coordinator. Time allocated to outcome 2.2. Fisheries officer CCLME. Time allocated to outcome 2.2. Fisheries officer PACA. Time allocated to outcome 2.2.
24	Equipment (e.g., laptops, tablets, printer) and software (e.g., database) to implement a registry of shark fishers and traders in the main ports.
25	Edit and publish two documents: (i) a self-evaluation tool and guidelines to integrate social responsibility into fisheries governance processes and (ii) a self-evaluation tool and guidelines to integrate social responsibility into fisheries value chains. PDF document for online distribution in Spanish, French and English. Edit and publish two documents (final versions): (i) a self-evaluation tool and guidelines to integrate social responsibility into fisheries governance processes and (ii) a self-evaluation tool and guidelines to integrate social responsibility into fisheries value chains. PDF document for online distribution in Spanish, French and English. RIA. Edit and publish guidelines on Regulatory Impact Analysis in fisheries (PDF document for online distribution in Spanish, French and English). Translation of guidelines to Spanish and French. Translation of final guidelines to Spanish and French. RIA. Translation of guidelines to Spanish and French.
26	Airplane tickets for project team. Travel expenses of project team. USD120/day x 20 days/year. Outcome 2.2. Land travel of project team in project area. Outcome 2.2.
27	RIA. In-person training workshops in Morocco, Mauritania and Senegal. About 20 persons per country (i.e., fisheries officers, planning secretary, environment officers, maritime authority). One-week training workshop. Cost per workshop: Airplane tickets for trainers (USD1800 x 2 trainers) + Daily Subsistence Allowance (USD200 per person per day x 2 person x six days) + USD3000 for locale, food and materials. RIA. In-person training workshops in Guatemala, Panama and Ecuador. About 20 persons per country (i.e., fisheries officers, planning secretary, environment officers, maritime authority). One-week training workshop. Cost per workshop: Airplane tickets for trainers (USD1800 x 2 trainers) + Daily Subsistence Allowance (USD200 per person per day x 2 person x six days) + USD3000 for locale, food and materials. PACA PANs. Workshops and meetings for participatory process with VMAP, IPIAP and key stakeholders to document, systematise and distill the ecuadorian experience in the preparation of fisheries action plans (e.g., dorado, pomada, small pelagic fish, cangrejo rojo). PACA PANs. Regional workshop on the ecuadorian experience in the preparation of fisheries action plans. Three days workshop to be held in Ecuador. Interactive workshop to include interaction with fisheries stakeholders in Manta and Guayaquil. The workshop will serve to establish a community of practice among practitioners of the three countries. The cost includes: (1) fisheries specialist that prepares the sessions plan and facilitate the workshop (USD3600), (2) international (USD600 per ticket x 10 persons) and local travel (USD500 bus transportation) of delegates from Guatemala and Panama (five persons per country), (3) accomodation and food for participants (USD200 x 11 persons x 4 nights = 8,800), (4) USD300 materials. CCLME. Workshops and meetings for participatory process with Moroccan key stakeholders to document, systematise and distill the experience in preparation and implementaion of fisheries management plans for small pelagic fish and octopus.

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	CCLME. Workshops and meetings for participatory process with Mauritanian key stakeholders to document, systematise and distill the experience in preparation and implementaion of fisheries management plans for small pelagic fish and octopus. CCLME. Workshops and meetings for participatory process with Senegalese key stakeholders to document, systematise and distill the experience in preparation and implementaion of fisheries management plans for small pelagic fish and octopus. CCLME. Learning exchange among Morocco, Mauritania and Senegal on the preparation and implementatnion of management plans for small pelagic fish and octopus. Three days workshop to be held in one of the participating countries. Participatory workshop with representatives of fishers, processors and government. The learning exchange will use the FAO guide for fisheries learning exchanges [Rocliffe, S. (2018). Fisheries learning exchanges: a short guide to best practice. Food and Agriculture Organization (FAO) & Blue Ventures Conservation, 31pp.] The meeting will serve to establish a community of practice among practitioners of the three countries. 19 participants, six per country plus facilitator. The cost includes: (1) fisheries specialist that prepares the sessions plan and facilitate the workshop (USD3600), (2) international (USD950 per ticket x 12 persons) and local travel (USD800 ground transportation of delegates for field visit), (3) accomodation and food for participants (USD200 x 19 persons x 4 nights = 15,200), (4) USD400 materials.
28	Shark NDFs. Consultant to provide online support/advice to countries for the prepartion of shark NDFs. Honorarium. USD500 per day x 15 days per country x 3 countries.
29	Market development consultant. Time allocated to outcome 2.3. FIPs consultant. Time allocated to outcome 2.3. Gender, safeguards and participation consultant. Time allocated to outcome 2.3. Communications consultant. Time allocated to outcome 2.3. COREMAHI. External indepedent evaluation of effectiveness of the bycatch reduction and ETP conservation measures and targets of COREMAHI´s code of conduct.
30	Shark NDFs. Regional meeting to identify barriers and challenges for assessing risks on transboundary shark species. Three-days workshop with fisheries and CITES delegates of Guatemala, Panama and Ecuador. Four persons per country plus a sharks NDF advisor and one person from IATTC (14 persons in total). Cost of the workshop: USD7,260 per workshop (3 workshops). Total: USD 21,780. Shark NDFs. Intersectoral training workshops in Guatemala, Panama and Ecuador. On each country three-days workshop with delegates from key entities (e.g., CITES scientific authority, maritime authority, fisheries authority, trade and exports authority, customs authority). 16 persons per workshop plus trainer. Cost of each workshop: USD8,720. Total: USD26,160 Shark NDFs. Two regional meetings to exchange lessons and experience on the preparation of NDFs for shark species. Two-days workshop with fisheries and CITES delegates of Guatemala, Panama and Ecuador. Three persons per country and one person from the project unit (13 persons in total). Cost of each workshop: USD13,200. Total: USD26,400. COREMAHI. Participation of COREMAHI delegates in IATTC and SAC meetings on years 2, 3,4 and 5. Two trips per year, two persons per trip, a delegate and a technical advisor. Cost of each workshop: USD8,000. Total: USD64,000. COREMAHI annual meetings. Meetings to be held in the participating countries (Ecuador, Guatemala, and Panama). Each meeting will have about 30 participants (including persons from Costa Rica and Peru). The cost per meeting includes venue, travel support to delegates from fishers organisations from the participating countries (processors and exporters are expected to pay for their costs), travel expenses of invited advisors (e.g., stock assessment, bycatch or social specialists), facilitator, and materials. Total: USD91,600
31	Project coordinator. Time allocated to outcome 2.3. Fisheries officer CCLME. Time allocated to outcome 2.3. Fisheries officer PACA. Time allocated to outcome 2.3.
32	Airplane tickets for project team. Outcome 2.3. Travel expenses of project team.Outcome 2.3. Land travel of project team in project area. Outcome 2.3.
33	FishSource analysts (3 persons). Part-time support to GMC2 project (15% time allocation) to maintain and update the profiles of the project target fisheries.
34	Fisheries consultants to understake specific duties to develop or assess target fishery profiles for FishSource.

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	Market development consultant. Time allocated to outcome 3.1. FIPs consultant. Time allocated to outcome 3.1. Gender, safeguards and participation consultant. Time allocated to outcome 3.1. Monitoring, evaluation and knowledge consultant. Time allocated to outcome 3.1. Communications consultant. Time allocated to outcome 3.1. Fisheries consultants to understake specific duties to develop or assess FIP profiles for FishSource.
35	Project coordinator. Time allocated to outcome 3.1. Fisheries officer CCLME. Time allocated to outcome 3.1. Fisheries officer PACA. Time allocated to outcome 3.1.
36	Airplane tickets for project team. Travel expenses of project team. Land travel of project team in project area.
37	Project coordinator. Time allocated to outcome 3.2. Fisheries officer CCLME. Time allocated to outcome 3.2. Fisheries officer PACA. Time allocated to outcome 3.2.
38	Market development consultant. Time allocated to outcome 3.2. FIPs consultant. Time allocated to outcome 3.2. Gender, safeguards and participation consultant. Time allocated to outcome 3.2. Monitoring, evaluation and knowledge consultant. Time allocated to outcome 3.2. Communications consultant. Time allocated to outcome 3.2.
39	Development of project website according to IW:LEARN guidelines, linked to web portals of project partners. Webportal in three languages: English, French and Spanish. Maintenance and operation of project website (outsourced).
40	Equipment and software for website and social-media platforms. Two servers (USD8,000) + dos video cameras (USD1,400) + dos voice recorders (USD200) + software to edit video, audio and images (USD2000) + website and webinar administration software (USD4,000)
41	Communication materials (e.g., market briefs, radio spots, Youtube videos, brochures, press releases) for the implementation of the project communication strategy. Includes translation of documents, translation to local languages (e.g., Wolof) and pedagogic interpretation. About USD5000 per country per year. Prepare and edit learning documents (eight documents). The documents will be in a format to be accessible to the general public (visually appealing, plain language). Each document will have the main text in English and will include extended summaries in French, Spanish and English. The documents will be in high-quality for web browsing and download. Project memoirs. Prepare and distribute project memoirs. Prepare and edit a communication document accessible to the general public (visually appealing, plain language) with key stories and testimonies and a concise summary of the project results and lessons. The document will be in high-quality PDF format for online distribution and browsing. There will be two versions, French and English, both with an English summary. Project memoirs. Translate the project memoirs to other language. Project memoirs. Prepare eight short videos that summarise the project achievements and lessons, including testimonies of key stakeholders and beneficiaries. One video per country (six videos) and two videos for regional views (i.e., PACA and CCLME). The videos will be in the local language (four videos in French and four videos in Spanish) with subtitles in English. The short videos will be made available through IW:LEARN and other pertinent channels of the project partners. USD3000 per video.
42	Initiation workshop with national stakeholders on each country (six workshops). One-day meeting. USD5,000 / workshop. Includes materials, venue, food and lodging and travel support for participants from distant rural areas (if necessary). Particular attention will be given to ensure participation of representatives of women and youth groups, as pertinent.

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	Onsite meetings for self-assessment with key stakeholders on each country. Includes refreshments, venue, materials and travel support for participants from distant rural areas (if necessary). One-day meeting, two meetings per country (mid-term and end). USD 3,000 per meeting x 6 countries x two times (mid-term and end of project). Particular attention will be given to ensure participation of representatives of women and youth groups, as pertinent. Closing workshop with national stakeholders on each country (six one-day workshops). USD5,000 / workshop. Includes materials, venue, food and lodging and travel support for participants from distant rural areas (if necessary). Particular attention will be given to ensure participation of representatives of women and youth groups, as pertinent. Participation in IWC2025 y 2027. Seven persons per meeting (six country delegates + project coordinator). Six-days trip (two days for travel). Cost per person = USD3,000/ticket + 6 days x 250 DSA/day + 300 various expenses (e.g., visa). Particular attention will be given to motivate the participation of women delegates.
43	Airplane tickets for project team. Outcome 3.2. Travel expenses of project team. Outcome 3.2. Land travel of project team in project area. Outcome 3.2.
44	Mid-term review. Independent mid-term review. International consultant, includes honorarium, travel (national and international), food and lodging. Honorarium about 15,000 + airplane tickets and land travel about 6,000 + about 3,000 food and lodging (about 20 days field visit). Terminal evaluation. Independent Terminal evaluation. International consultant, includes honorarium travel (national and international), food and lodging. Honorarium about 15,000 + airplane tickets and land travel about 6,000 + about 3,000 food and lodging (about 20 days field visit).
45	Inception workshop. Two-days meeting. 10 board members and country participants. Includes field visits. Total: USD 29,800 In-person meetings of the project board. Two-days meeting, including visit to a project site. Total: USD136,800
46	Annual financial audit (USD30,000).
47	Online communications service (e.g., Zoom, Teams) + high-speed internet service + webhosting Equipment for project offices (computers, all-in-one printers) Annual fees for software licences (e.g., webinars, office, accounting). Equipment for project offices (computers, all-in-one printers)
48	Office supplies (e.g., paper, pencils, printer ink) . USD700/year.
49	Office operation costs like bank charges and services and postage.
50	Project coordinator. Time allocated to administrative duties. Administrative assistant

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LEGAL CONTEXT

433. This project forms part of an overall programmatic framework under which several separate associated country level activities will be implemented. When assistance and support services are provided from this Project to the associated country level activities, this document shall be the "Project Document" instrument referred to in: (i) the respective signed SBAAs for the specific countries; or (ii) in the Supplemental Provisions to the Project Document attached to the Project Document in cases where the recipient country has not signed an SBAA with UNDP, attached hereto and forming an integral part hereof. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."
434. This project will be implemented by Sustainable Fisheries Partnership ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply**.**

RISK MANAGEMENT

1. Consistent with the Article III of the SBAA *[or the Supplemental Provisions to the Project Document]*, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
   a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
   b) assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan.

2. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document and the Project Cooperation Agreement between UNDP and the Implementing Partner.

3. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the United Nations Security Council Sanctions Consolidated Sanctions List, and that no UNDP funds received pursuant to the Project Document are used for money laundering activities. The United Nations Security Council Sanctions Consolidated Sanctions List can be accessed via https://www.un.org/securitycouncil/content/un-sc-consolidated-list.

4. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.

   (a) In the implementation of the activities under this Project Document, the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").

   (b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment ("SH"). SH is

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defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment. SH may occur in the workplace or in connection with work. While typically involving a pattern of conduct, SH may take the form of a single incident. In assessing the reasonableness of expectations or perceptions, the perspective of the person who is the target of the conduct shall be considered.

5. a) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities) and shall require from its sub-parties referred to in paragraph 4 (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, the Implementing Partner will, and will require that such sub-parties will take all appropriate measures to:

    i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;

    ii. Offer employees and associated personnel training on prevention and response to SH and SEA, where the Implementing Partner and its sub-parties referred to in paragraph 4, have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and such sub-parties may use the training material available at UNDP;

    iii. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties referred to in paragraph 4 have been informed or have otherwise become aware, and status thereof;

    iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and

    v. Promptly and confidentially, record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in paragraph 4 with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.

    b) The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties referred to in paragraph 4, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.

6. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).

7. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

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8. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

9. UNDP is committed to the highest ethical standards and will not tolerate the diversion of the resources entrusted to it through Money Laundering or Terrorist Financing and will not partner with entities that tolerate the diversion of resources through Money Laundering or Terrorist Financing. To that effect, the Implementing Partner represents and warrants that it has not, and it shall not, at any time in the implementation of the Project engage in Terrorism Financing or Money Laundering. The Implementing Partner shall communicate the restriction of this paragraph to its and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Documents and shall take all reasonable measures to ensure that such persons do not engage in Terrorism Financing or Money Laundering.

10. The Implementing Partner shall immediately disclose to UNDP any actual, apparent, potential or attempted Terrorism Financing or Money Laundering activity that it becomes aware of. The Implementing Partner shall fully cooperate with any investigation or review of Terrorism Financing or Money Laundering activity by UNDP.

11. The Implementing Partner acknowledges and agrees that Terrorism Financing or Money Laundering constitute financial irregularities and that if the Implementing Partner or any of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document engages in Terrorism Financing or Money Laundering activity that would constitute a material breach of this Project Document, which entitles UNDP to immediately terminate the Project without incurring any liability or penalty.

12. Furthermore, the Implementing Partner expressly acknowledges and agrees that, in the event that UNDP were to determine through an investigation or otherwise that Terrorism Financing or Money Laundering occurred, UNDP shall have, in addition to its right to immediately terminate the Project, the rights to:

    i. apply and enforce the relevant sanctions in accordance with UNDP internal regulations, rules, procedures, practices, policies and guidelines, including referral of the matter to national authorities when appropriate; and
    ii. recover all losses, financial or otherwise, suffered by UNDP in connection with such Terrorism Financing or Money Laundering activity.

13. For the purpose of this Project Document the following terms shall have the definition ascribed to the below:

    i. “Money Laundering” is generally considered as concealment of the origins of money obtained illegally, typically by passing it through a complex sequence of financial or commercial transactions. ML usually involves three stages: (i) introducing the proceeds of crime into the financial system (placement); (ii) transactions to convert or transfer the funds to other locations or financial institutions (layering); and (iii) reintroducing the funds into the legitimate economy as "clean" money and investing it in various assets or business ventures (reintegration) appearing to have been legally obtained. The FATF recommends that ML be criminalized by every country on the basis of article 3(1)(b) and (c) of the Vienna Convention and article 6(1) of the Palermo Convention.

    ii. “Terrorist Financing” means providing support to individuals or entities that appear on the United Nations Security Council Consolidated Sanctions List accessible at https://www.un.org/securitycouncil/content/un-sc-consolidated-list.

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14. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using the UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption, anti-fraud and anti-money laundering and countering the financing of terrorism policies are in place and enforced for all funding received from or through UNDP.

15. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices (b) UNDP Anti-Money Laundering and Countering the Financing of Terrorism Policy; and (c) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

16. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP programmes and projects in accordance with UNDP regulations, rules, policies and procedures. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.

17. The Implementing Partner will promptly inform UNDP in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

    Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

18. UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud, corruption or other financial irregularity, or otherwise paid other than in accordance with the terms and conditions of this Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail the Implementing Partner's obligations under this Project Document.

    Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud, corruption or other financial irregularity, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

    Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with the Implementing Partner, responsible parties, subcontractors and sub-recipients.

19. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.

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20. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

21. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management Standard Clauses" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management" are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this Project Document.

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MANDATORY ANNEXES

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Annex 1: GEF Budget Template

Expenditure Category	Detailed Description	Component (USDeq.)								Sub-Total	M&E	PMC	Total (USDeq.)	Responsible Entity
		Component 1			*Component 2*			*Component 3*						(Executing Entity receiving funds from the GEF Agency)[1]
		Sub-components 1.1	*Sub-components 1.2*	*Sub-components 1.3*	*Sub-component 2.1*	*Sub-component 2.2*	*Sub-component 2.3*	*Sub-component 3.1*	*Sub-component 3.2*					
Equipment	ASOAMAN FIP. Equipment for implementation of electronic logbooks on ASOAMAN operations. Dorado and sharks FIP. Equipment for implementation of electronic logbooks and vessel monitoring of the dorado and sharks FIP´s fleet. Shrimp FIP. Equipment for implementation of electronic logbooks and vessel monitoring of fleet of the FIP. LPF FIP. Equipment for implementation pilot initiative to test and evaluate the use of electronic monitoring systems in longline vessels. The FIP will cover the other costs of the pilot. SPF SCIP. equipment for improving traceability, fisheries data recording and vessel monitoring like tablets, GPS and				75,000					75,000			75,000	Sustainable Fisheries Partnership

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	transponders. The detailed breakdown will be prepared as part of the SCIP budget.													
Equipment	CLPA network. Equipment for the implementation of the web-based platform to facilitate information exchange among CLPAs (e.g., servers, tablets, computers). Lumpsum allocation, the detailed breakdown will be prepared when the web-based platform is developed.				10,000					10,000			10,000	Sustainable Fisheries Partnership
Equipment	Equipment and software for website and social-media platforms. Two servers (USD8,000) + dos video cameras (USD1,400) + dos voice recorders (USD200) + software to edit video, audio and images (USD2000) + website and webinar administration software (USD4,000)								15,600	15,600			15,600	Sustainable Fisheries Partnership
Equipment	Guatemalan PAN sharks. Equipment (e.g., laptops, tablets, printer) and software (e.g., database) to implement a registry of shark fishers and traders in the main ports of the Pacific coast of Guatemala.					27,200				27,200			27,200	Sustainable Fisheries Partnership

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Equipment	Online communications service (e.g., Zoom, Teams) + high-speed internet service + webhosting Equipment for project offices (computers, all-in-one printers) Annual fees for software licences (e.g., webinars, office, accounting). Equipment for project offices (computers, all-in-one printers)									-		48,640	48,640	Sustainable Fisheries Partnership
Equipment	SPF SCIP. Equipment to improve artisanal small pelagic fish processing and food safety practices (e.g., improved kilns like the FAO-Thiaroye processing technique). The detailed breakdown will be prepared as part of the SCIP budget.				25,000					25,000			25,000	Sustainable Fisheries Partnership
Grants	Joal CLPA. Lumpsum to support: [1] the implementation of Joal CLPA small pelagic fish management measures like monitoring and control, implementation of closed seasons or applied research (the activities will be in line with the local and national management plans for small pelagic fish) and [2] the implementation of the resource mobilisation strategy. The funds will be administered by the CLPA based upon a detailed budget and workplan agreed with the GMC2 Fisheries				30,000					30,000			30,000	Sustainable Fisheries Partnership

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	officer for Africa and endorsed by the Project coordinator. UNDP policies on Low-Value Grant will be followed.												
Contractual services-Individual	Project Coordinator - PMU	18,000	18,000	18,000	36,000	18,000	18,000	18,000	18,000	162,000		198,000	360,000	Sustainable Fisheries Partnership
Contractual services-Individual	Administrative assistant - PMU									-		186,000	186,000	Sustainable Fisheries Partnership
Contractual services-Individual	Fisheries officer CCLME - PMU	30,000	15,000	30,000	60,000	60,000	60,000	30,000	15,000	300,000			300,000	Sustainable Fisheries Partnership
Contractual services-Individual	Fisheries officer PACA - PMU	30,000	15,000	30,000	60,000	60,000	60,000	30,000	15,000	300,000			300,000	Sustainable Fisheries Partnership
Contractual services-Company	Development of project website according to IW:LEARN guidelines, linked to web portals of project partners. Webportal in three languages: English, French and Spanish. Maintenance and operation of project website (outsourced).								48,000	48,000			48,000	Sustainable Fisheries Partnership
Contractual services-Company	Ecuadorian PAT-Ec. Consultant team to prepare a detailed analysis of the Ecuadorian domestic consumption, market and value chain for shark meat and parts and their contribution to food security, income and livelihoods. Lumpsum						30,000			30,000			30,000	Sustainable Fisheries Partnership

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	includes honorarium and travel expenses.													

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Contractual services-Company	LPF platform. Consultant team (fisheries governance specialist and lawyer) to prepare (i) a key stakeholder mapping, (ii) a proposal for the establishment and operation of a management platform for the longline fishery for large pelagic fish (tuna, marlins, swordfish) based on the lessons from the other ecuadorian fisheries platforms (e.g., dorado, small pelagic fish), (iii) a draft ministerial agreement to establish the management platform, and (iv) a proposed workplan to develop the management platform. The management platform will ensure the engagement of pertinent women groups. Lumpsump including honorarium, travel expenses and meetings. Consultant team (fisheries governance specialist, social specialist and lawyer) to prepare (i) a key stakeholder mapping, (ii) a proposal for the establishment and operation of a management platform for the dorado and sharks fishery (in line with PAN sharks 2021-2026), (iii) draft a legal instrument to establish the management platform, and (iv) a proposed workplan to develop the				140,000					140,000			140,000	Sustainable Fisheries Partnership

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	management platform. The management platform will ensure the representation of key stakeholders of the value chain like fishers, traders, processors, women and young persons. Shrimp management platform. Consultant team (fisheries governance specialist, social specialist and lawyer) to prepare (i) a key stakeholder mapping, (ii) a proposal for the establishment and operation of a management platform (comité de manejo) for the shrimp fisheries of the Pacific coast (in line with the fisheries law of 2021), (iii) draft a legal instrument to establish the management platform, and (iv) a proposed workplan to develop the management platform. The management platform will ensure the representation of key stakeholders of the value chain like fishers, traders, processors, women, young persons and indigenous peoples (as pertinent). The design of the participatory management platform will use the results of the situation analysis of shrimp fisheries by Emberá-Wounaan indigenous groups. Shrimp management platform. Consultant team													

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	(fisheries specialist, specialist on indigenous peoples) to document shrimp fishing operations by people of Emberá-Wounaan Comarca on the Pacific coast (e.g., fishing gear, fishing areas, landing ports, catch composition, number of fishers, level of organisation) and the uses of the capture (shrimp and bycatch) (e.g., self-consumption, trade and related supply chain). Particular attention will be given to the roles of women and young persons in the fishing activities. Large pelagic fish platform. Consultant team (fisheries governance specialist, social specialist and lawyer) to prepare (i) a key stakeholder mapping, (ii) a proposal for the establishment and operation of a management platform (comité de manejo) for the longline fishery for large pelagic of the Pacific coast (in line with the fisheries law of 2021), (iii) draft a legal instrument to establish the management platform, and (iv) a proposed workplan to develop the management platform. The management platform will ensure the representation of key stakeholders of the value chain like fishers,													

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	traders, processors, women, and young persons.													

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Contractual services-Company	PAN pomada. Undercover investigation of illegal fishing and catch laundering in the pomada value chain. Lumpsum including honorarium and travel expenses. PAN pomada. Consultant team to undertake the participatoy process to prepare the PAN pomada 2028 - 2032 and the fisheries management plan. Lumpsum includes honorarium and travel expenses. PAN large pelagic fish. Consultant team to (i) prepare a proposal of a fisheries management plan with a corresponding Regulatory Impact Analysis and (ii) undertake the participatoy process to prepare the PAN large pelagic fish. Lumpsum includes honorarium and travel expenses. Guatemalan PAN sharks. Consultant team to undertake the participatoy process to prepare the Guatemalan PAN sharks 2027 - 2031. Lumpsum includes honorarium and travel expenses. Guatemalan PAN sharks. Consultant team to prepare a detailed analysis of the Guatemalan domestic consumption and value chain for shark meat, parts,					395,000				395,000			395,000	Sustainable Fisheries Partnership

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	and products and the contribution to food security, livelihoods and income. Lumpsum includes honorarium and travel expenses. Guatemalan dorado and sharks action plan. Consultant team to (i) prepare a proposal of a fisheries action plan with a corresponding Regulatory Impact Analysis and (ii) undertake the participatoy process to prepare the action plan. Lumpsum includes honorarium and travel expenses. Shrimp management plan. Consultant team to undertake the participatory process to prepare the shrimp management plan. The process will include a Regulatory Impact Analysis of the draft plan. Lumpsum includes honorarium and travel expenses. LPF management plan. Consultant team to undertake the participatory process to prepare the LPF management plan. The process will include a Regulatory Impact Analysis of the draft plan. Lumpsum includes honorarium and travel expenses. SEN Octopus management plan. Consultant team to undertake the participatory													

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	process to update the Senegalese SEN Octopus management plan. Lumpsum includes honorarium and travel expenses. MTR SPF management. Consultant team to (i) calculate the present values of employment and economic contribution of the existing small pelagic fish value chains and (ii) prepare a forecast of future employment and economic contribution of three scenarios: (a) 100% capture destined to added value human consumption (domestic and export markets) and use of fish residues to produce fishmeal and oil, (b) 100% capture destined to production of fishmeal and oil, and (c) an intermediate scenario. Lumpsum including honorarium, field work and meetings. MTR SPF management. Consultant team to facilitate the participatory process to prepare a national policy and a strategic plan to develop Mauritanian value chains for added value small pelagic fish (e.g., canned, frozen, sun dried, smoked, ready-to-eat products). The consultant team will organise multisectoral and multilevel workshops with													

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	key stakeholders (fishers, processors, government) to construct the policy and strategic plan. MTR SPF management. Consultant team to (i) calculate the current national fish and seafood per capita consumption, (ii) calculate the current national per capita consumption of small pelagic fish, and (iii) identify the consumer preferences and major barriers to seafood and small pelagic fish consumption. Lumpsum including honorarium, field work and meetings. MTR SPF management. Consultant team to facilitate the participatory process to design a national programme to promote seafood consumption (in particular small pelagic fish). The consultant team will organise multisectoral and multilevel workshops with key stakeholders (fishers, processors, government) to construct the programme including a detailed budget. MTR Octopus management plan. Consultant team to undertake the participatory process to update the Mauritanian Octopus management plan.													

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Contractual services-Company	Pilot buyer engagement. Consultant team to prepare a detailed analysis of Moroccan consumers´ (urban and rural) and tourist sector willingness to purchase sustainable seafood products. The analysis will provide information about the willingness to buy sustainable small pelagic fish and the consumer habits and preferences for products (e.g., canned, frozen) and channels (e.g., stores, restaurants). Pilot buyer engagement. Consultant team to prepare a detailed analysis of domestic end-market channels (retailers, hospitality industry) for sustainable seafood products, with emphasis on products from Moroccan FIPs (sardine and anchovy).	85,000								85,000			85,000	Sustainable Fisheries Partnership

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Contractual services-Company	Pomada FIP. Trainers on (i) pomada trawl fishers on best practices both trawl and bolso fishers on data collection. ASOAMAN FIP. Trainers for ASOAMAN fishers on best practices (e.g., release of turtles and sharks) and data collection. Design traceability system for the FIP members that comply with the requiremens of the Integrated Aquaculture and Fisheries System of Ecuador (SIAP). Pilot testing of electronic logbook (equipment and software) in longliners based on previous experience and best available technology. Test equipment, software and data-transmission options to identify the most viable and cost-effective options. The logbook system must comply with requirements of the SIAP. Includes technical assistance, software development or adaptation, training and support to implement pilot phase. Dorado and sharks FIP. Training of fishers, traders and processors of the dorado and sharks FIP on best practices (e.g., release of turtles and sharks, icing of the capture) and data collection (e.g., species identification, data recording				314,000					314,000			314,000	Sustainable Fisheries Partnership

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	in logbooks). Design traceability system for the dorado and sharks FIP members (all value chain, from capture to final consumer). Dorado and sharks FIP. Develop electronic logbook application for the dorado and sharks FIP´s fleet. Includes development, training and support to implement pilot phase. Shrimp FIP. Trainers for fishers, traders and processors of the shrimp FIP on best practices and data collection. The specific actions will be included in the FIP workplan depending on the needs found during the FIP scoping. Design traceability system for the shrimp FIP members. Develop electronic logbook application for the shrimp FIP´s fleet. Includes development, training and support to implement pilot phase. LPF FIP. Trainers for fishers, traders and processors of the FIP on best practices (e.g., release of turtles and sharks) and data collection. Electronic monitoring advisor to design a pilot initiative to test and evaluate the feasibility (e.g., cost) of the use of electronic monitoring systems in longline vessels.													

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Contractual services-Company	Pomada. Consultant team (social, labour) to document social, economic and labour conditions of pomada bolso fishers in Ecuador. Particular attention will be given to the roles of women and young persons in the fishing activities. Consultant team (governance and fisheries specialists) to assess baseline capacities of pomada fishers´ organisations to effectively participate and have a voice in the governance platform. Identify capaciy needs and prepare a workplan for capacity development, including fostering constructive collaboration among fishers´ organisations. Particular attention will be given to the contributions of women and young persons to fisheries governance. Pomada. Consultant team (social, labour) to document social, economic and labour conditions of women pomada shrimp peelers in Posorja. Consultant team (social, labour) to document social, economic and labour conditions of fishers and traders (comerciantes) associated with the dorado and sharks fisheries. . Consultant team (governance and fisheries				181,000					181,000			181,000	Sustainable Fisheries Partnership

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	specialists) to assess baseline capacities of independent fishers, traders (comerciantes) and existing fishers´ organisations to effectively participate and have a voice in the governance platforms for dorado and sharks. Identify capaciy needs and prepare a workplan for capacity development, including fostering constructive collaboration among independent fishers and fishers´ organisations. Artisanal shrimp fishers. Consultant team (social, labour) to document social, economic, and labour conditions of Panamanian artisanal shrimp fishers in the Pacific coast. This study will complement the examination of Emberá-Wounaan shrimp fishers. Must coordinate with the indigenous peoples specialist that will prepare the baseline analysis of Emberá-Wounaan shrimp fishers. Artisanal shrimp fishers. Consultant team (governance and fisheries specialists) to assess baseline capacities of key artisanal shrimp fishers´ organisations to effectively participate and have a voice in the governance platform. Identify capacity needs and													

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	prepare a workplan for capacity development, including fostering constructive collaboration among fishers´ organisations. CLPA network. Develop a web-based platform to facilitate information exchange among CLPAs. The platform will include a digital repository to compile and make public the CLPA acts, local plans and other formal documents. The platform will be easily accessible and adjusted to the condition of internet access of the CLPA users.CLPA network. Maintenance and operation of the web-based platform to facilitate information exchange among CLPAs (outsourced). Joal CLPA. Consultant team (governance and fisheries specialists) to assess baseline capacities of Joal CLPA to effectively participate and have a voice in the governance framework for the small pelagic fish fishery. Identify capacity needs and prepare a workplan for capacity development with indicators and targets to measure progress. Women processors. Consultant team (social, gender) to document social, economic and labour													

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	conditions of women that process small pelagic fish in the Joal area (related to the SCIP) and to participatively prepare a workplan to potentiate their capacities to contribute to improvements in the supply chain and fisheries governance.													

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International Consultants	Consultant to systematise learning from engaging domestic buyers to demand sustainable target seafood products (including social responsibility «outcome 1.2» and reduced bycatch «outcome 1.3») in Ecuador, Guatemala, Morocco and Senegal. Participatory identification of lessons and recommendations. The document will include extended summaries in Spanish and French. Pilot buyer engagement. SFP seafood markets advisor to guide the pilot buyers engagement pilot in Morocco. Part-time support to GMC2 project (20% time allocation).	106,000								106,000			106,000	Sustainable Fisheries Partnership
International Consultants	Consultant to systematise learning from engaging mid-upper and end market buyers to demand sustainable target seafood products (including social responsibility «outcome 1.2» and reduced bycatch «outcome 1.3»). Participatory identification of lessons and recommendations. The document will include extended summaries in Spanish and French. Market specialist coordinator of Global octopus roundtable. Part-time support to GMC2	326,000								326,000			326,000	Sustainable Fisheries Partnership

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	project (15% time allocation) Market specialist coordinator of Global Roundtable on Marine Ingredients (West African Fisheries Workstream). Part-time support to GMC2 project (15% time allocation) Market specialist coordinator of Global mahi roundtable. Part-time support to GMC2 project (15% time allocation) Consultant to develop a scoping document and engagement strategy of key stakeholders and market trends in mid-upper market and end-market for: 1) Fresh and frozen pomada products from Ecuador, 2)Fresh and frozen swordfish, sharks and large pelagic fish (excluding dorado) products from Ecuador, 3) Fresh and frozen dorado from Guatemala, 4) Octopus products from Mauritania, 5) Fresh and frozen dorado products from Panama, 6) Wild-caught shrimp products from Panama, 7) Octopus products from Senegal.													

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International Consultants	FIP advisor from SFP, part-time support FIPs from Guatemala, Panama and Ecuador (PACA LME). % time allocation for 16 months FIP advisor from SFP, part-time support FIPs from Mauritania and Senegal (CCLME). % time allocation for 16 months Pomada FIP consultants: 1) to prepare MSC pre-assessment or updated Rapid Assessment and update of FIP scoping document and workplan of current pomada FIP (bottom trawl) and the bolso fishery. In both cases use the new MSC Fisheries standard 3.0. USD15,000 per assessment, 2) to design improved monitoring system to collect data from pomada trawlers and bolsos, in line with the requirements of the Integrated Aquaculture and Fisheries System of Ecuador (SIAP), 3) Advisor to work with IPIAP to assess spatial distribution of pomada stock units, 4) Advisor to work with IPIAP to prepare annual stock assessment of pomada, 5) Fisheries stock assessment specialists to assess quality, relevancy, and accuracy of annual pomada stock assessment (peer-review), 6) Fisheries social specialist to prepar				547,000					547,000			547,000	Sustainable Fisheries Partnership

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	social risk assessment and workplan. ASOAMAN FIP consultants:1)to prepare MSC pre-assessment, FIP scoping document, workplan and budget for the ASOAMAN large pelagic fish FIP, 2) Consultant to update the MSC pre-assessment, FIP scoping document, workplan and budget for the ASOAMAN large pelagic fish FIP, 3) ASOAMAN FIP. Fisheries social specialist to prepare social risk assessment and workplan for the ASOAMAN large pelagic fish FIP, 4) to underake FIP scoping of the dorado and sharks fishery (supply chain analysis, stakeholder idntification, FIP scope, MSC quick assessment, draf pre-FIP plan). Dorado and sharks FIP consultants: 1) Consultant to prepare MSC pre-assessment, FIP scoping document, workplan and budget for the dorado and sharks FIP. Dorado and sharks FIP, 2) to update the MSC pre-assessment, FIP scoping document, workplan and budget for the dorado and sharks FIP, 43Fisheries social specialist to prepare social risk assessment and workplan for the dorado and sharks FIP. Shrimp FIP Consultants: 1)to prepare													

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	MSC pre-assessment, FIP scoping document, workplan and budget for the shrimp FIP, 2) to update the MSC pre-assessment, FIP scoping document, workplan and budget for the shrimp FIP, 3) social specialist to prepare social risk assessment and workplan for the shrimp FIP, 4) Advisor to work with ARAP to undertake a stock assessment of the shrimp species, 5) Shrimp FIP. Advisor to work with ARAP to update the shrimp stock assessment, 6) Fisheries stock assessment specialists to assess quality, relevancy, and accuracy of shrimp stock assessment (peer-review). LPF FIP consultants: 1) Consultant to review and strengthen the monitoring system to collect data from the fishing operations and the supply chain 2) social specialist to prepare social risk assessment and workplan for the LPF FIP. SPF SCIP. Advisor from SFP, part-time support the preparation and implementation of the value chain improvement project. 5% time allocation. Octopus FIP consultants: 1) to undertake FIP scoping of the Senegalese octopus fishery (supply chain													

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	analysis, stakeholder identification, FIP scope, MSC quick assessment, draf pre-FIP plan), 2) to prepare Rapid Assessment, FIP scoping document, workplan and budget for the Senegalese octopus FIP, 3)to update the Rapid Assessment, FIP scoping document, workplan and budget for the Senegalese octopus FIP, 4) Fisheries social specialist to prepare social risk assessment and workplan for the Senegalese octopus FIP. MTR octopus FIP consultant: 1) Fisheries social specialist to prepare social risk assessment and workplan for the Mauritanian octopus FIP.													
International Consultants	FIP advisor from SFP, part-time support FIPs from Guatemala, Panama and Ecuador (PACA LME). % time allocation for 16 months FIP advisor from SFP, part-time support FIPs from Mauritania and Senegal (CCLME). % time allocation for 16 months				216,000					216,000			216,000	Sustainable Fisheries Partnership

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	Shrimp FIP. Consultant to undertake FIP scoping of the shrimp fishery (supply chain analysis, stakeholder identification, FIP scope, MSC quick assessment, draft pre-FIP plan).													
International Consultants	FishSource analysts (3 persons). Part-time support to GMC2 project (15% time allocation) to maintain and update the profiles of the project target fisheries.							263,250		263,250			263,250	Sustainable Fisheries Partnership
International Consultants	Market specialist of SFP. Part-time support to GMC2 project (two months work) to prepare a review document with current status, trends, tools and initiatives to integrate social responsibility into fisheries governance and supply chains. Market specialist of SFP. Part-time support to GMC2 project (two months work) to prepare (i) a self-evaluation tool and guidelines to integrate social responsibility into fisheries governance processes and (ii) a self-evaluation tool and guidelines to integrate social responsibility into fisheries value chains. Market specialist of SFP. Part-time support to GMC2 project (10% time allocation) to provide support to key actors of the target fisheries and value chains in the use					84,500				84,500			84,500	Sustainable Fisheries Partnership

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	of (i) the self-evaluation tool and guidelines to integrate social responsibility into fisheries governance processes and (ii) the self-evaluation tool and guidelines to integrate social responsibility into seafood supply chains. Market specialist of SFP. Part-time support to GMC2 project (two months work) to (i) assess the performance of the self-evaluation tools and guidelines to integrate social responsibility into fisheries governance processes and value chains, and (ii) prepare update version of the self-evaluation tools and guidelines.													
International Consultants	Mid-term review. Independent mid-term review. International consultant, includes honorarium, travel (national and international), food and lodging. Honorarium about 15,000 + airplane tickets and land travel about 6,000 + about 3,000 food and lodging (about 20 days field visit). Terminal evaluation. Independent Terminal evaluation. International consultant, includes honorarium travel (national and international), food and lodging. Honorarium about 15,000 + airplane tickets and									-	48,000		48,000	Sustainable Fisheries Partnership

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	land travel about 6,000 + about 3,000 food and lodging (about 20 days field visit).													
International Consultants	One FishSource specialist. Part-time support to GMC2 project. Year one 10% time to apply the reduced by-catch and ecosystem impacts standard to the project target fisheries. Years 2-3, 20% time to follow application of the standard and update FishSource profiles.			65,000						65,000			65,000	Sustainable Fisheries Partnership
International Consultants	RIA. Consultant to prepare guidelines and training workshop on Regulatory Impact Analysis in fisheries building on main international guidelines (e.g., OECD, United Nations Department of Economic and Social Affairs) and practical application in fisheries. RIA. Online support/advice to countries in the application of Regulatory Impact Analysis in specific cases. Honorarium. USD500 per day x 10 days per country x 6 countries COREMAHI. Fisheries specialist of SPF that coordinates and supports the work of COREMAHI.					137,000				137,000			137,000	Sustainable Fisheries Partnership

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	Part-time support to GMC2 project (10% time allocation). MTR SPF management. External independent evaluation of the implementation of the small pelagic fisheries management plan (PAP-PP). The preliminary results will be presented in an end-of-mission meeting with key actors. The evaluation will be presented via teleconference to a joint meeting of the CNC-PP, CAAP, and CCNADP. Lumpsum includes honorarium and travel expenses (including field visits).												
International Consultants	Shark NDFs. Online support/advice to countries for the prepartion of shark NDFs. Honorarium. USD500 per day x 15 days per country x 3 countries.						22,500			22,500			22,500	Sustainable Fisheries Partnership
International Consultants	Social specialist to develop standard for social responsibility working in collaboration with FishSource team. One FishSource specialist. Part-time support to GMC2 project. Year one 30% time to develop social responsibility standard and apply to the FishSource profiles of the GMC2 target fisheries. Years 2-3, 20% time to follow application of		116,000							116,000			116,000	Sustainable Fisheries Partnership

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	the standard and update FishSource profiles.													
Local Consultants	Consultants to: 1) Assess interest of key levels of domestic supply chains (with special emphasis in end and mid-upper levels) in supplying sustainable seafood products in Ecuador. Online and in-person interviews, meetings and focal groups, 2) prepare scoping analysis of domestic end-market channels (retailers, hospitality industry) for sustainable seafood products from Ecuadorian FIPs (dorado, swordfish, large pelagic fish, sharks), 3)assess interest of key levels of domestic supply chains (with special emphasis in end and mid-upper levels) in supplying sustainable seafood products in Guatemala. Online and in-person interviews meetings and focal groups, 4)prepare scoping analysis of domestic end-market channels (retailers, hospitality industry) for sustainable seafood products from Guatemalan FIPs (dorado and sharks). Two local market specialists	378,500								378,500			378,500	Sustainable Fisheries Partnership

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	to adapt the Responsible Seafood Sourcing Standard, to design the pilot buyer engagement programme and to implement it. Consultant to assess interest of key levels of domestic supply chains (with special emphasis in end and mid-upper levels) in supplying sustainable seafood products in Senegal. Online and in-person interviews, meetings and focal groups. Market development consultant. Time allocated to outcome 1.1. FIPs consultant. Time allocated to outcome 1.1. Gender, safeguards and participation consultant. Time allocated to outcome 1.1. Communications consultant. Time allocated to outcome 1.1. Consultant to prepare scoping analysis of domestic end-market channels (retailers, hospitality industry) for sustainable small pelagic fish products in Senegal.													

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Local Consultants	Ecuadorian PAT-Ec. Facilitated intersectoral dialogue on implications of Ecuadorian domestic shark consumption and trade on conservation and management measures (e.g., food security, employment). The dialogue process will foster policy coherence and an agreed policy framework for shark conservation, trade, and management measures. A facilitation team (two persons) will organise and facilitate meetings, prepare memoirs of each meeting with the agreements achieved, and a final memoir of the process. Eight half-day dialogue meetings. Cost per meeting: USD580 (1) facilitation team (2 persons | USD500 including preparation of meeting and memoir), (2) venue USD80 (refreshments and materials). Travel cost of facilitators is not included, will be covered by the project. Independent external evaluation of effectiveness of regulations to reduce bycatch of sharks in Guatemalan longline fisheries. Lumpsum includes honorarium and travel expenses. Independent external evaluation of effectiveness							99,765			99,765			99,765	Sustainable Fisheries Partnership

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	of regulations to reduce bycatch in Panamanian longline fisheries. Lumpsum includes honorarium and travel expenses. Market development consultant. Time allocated to outcome 2.3. FIPs consultant. Time allocated to outcome 2.3. Gender, safeguards and participation consultant. Time allocated to outcome 2.3. Communications consultant. Time allocated to outcome 2.3. COREMAHI. External indepedent evaluation of effectiveness of the bycatch reduction and ETP conservation measures and targets of COREMAHI´s code of conduct.													
Local Consultants	Fisheries consultants to understake specific duties to develop or assess target fishery profiles for FishSource. Market development consultant. Time allocated to outcome 3.1. FIPs consultant. Time allocated to outcome 3.1. Gender, safeguards and participation consultant. Time allocated to outcome 3.1. Monitoring, evaluation and knowledge consultant. Time allocated to outcome 3.1.							385,500		385,500			385,500	Sustainable Fisheries Partnership

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	Communications consultant. Time allocated to outcome 3.1. Fisheries consultants to understake specific duties to develop or assess FIP profiles for FishSource.													
Local Consultants	Gender consultants (6) to: 1)prepare the gender profiles of the Ecuadorian large pelagic fish and pomada supply chains, 2) prepare the gender profile of the Guatemalan dorado and sharks supply chain, 3) prepare the gender profiles of the Mauritanian small pelagic fish and octopus supply chains, 4) prepare the gender profile of the Moroccan small pelagic fish supply chain, 5) prepare the gender profiles of the Panamanian shrimp and large pelagic fish supply chains. Special attention will be given to the shrimp fishing activities of Emberá-Wounan persons, 6) prepare the gender profiles of the Senegalese small pelagic fish and octopus supply chains. Market development consultant. Time allocated to outcome 1.2. FIPs consultant. Time allocated to outcome 1.2. Gender, safeguards and		202,000							202,000			202,000	Sustainable Fisheries Partnership

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	participation consultant. Time allocated to outcome 1.2. Communications consultant. Time allocated to outcome 1.2.													
Local Consultants	Market development consultant. Time allocated to outcome 1.3. Gender, safeguards and participation consultant. Time allocated to outcome 1.3. Communications consultant. Time allocated to outcome 1.3.			45,750						45,750			45,750	Sustainable Fisheries Partnership
Local Consultants	Market development consultant. Time allocated to outcome 3.2. FIPs consultant. Time allocated to outcome 3.2. Gender, safeguards and participation consultant. Time allocated to outcome 3.2. Monitoring, evaluation and knowledge consultant. Time allocated to outcome 3.2. Communications consultant. Time allocated to outcome 3.2.								145,500	145,500			145,500	Sustainable Fisheries Partnership

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Local Consultants	MTR octopus FIP. Fisheries scientist to work with IMROP to conduct a participatory root cause analysis of the generation of marine litter by plastic octopus pots. There will be direct field work with artisanal fishers to understand their views, their modes of operation and to identify the causes of the problem (e.g., gear design, fishers' behaviour, lack of disposal facilities). Based on the root cause analysis, this person will identify actions to prevent the problem (e.g., use clay pots, gear modifications) and will prepare a plan to field test the possible solutions using participatory action research methods. Market development consultant. Time allocated to outcome 2.3. FIPs consultant. Time allocated to outcome 2.3. Gender, safeguards and participation consultant. Time allocated to outcome 2.3. Communications consultant. Time allocated to outcome 2.3. MTR octopus FIP. Fisheries scientist to work with IMROP to conduct a field test of methods to reduce marine litter caused by plastic octopus pots. The work will						80,925			80,925			80,925	Sustainable Fisheries Partnership

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	be based on participatory action research methods and will be implemented together with artisanal fishers related to the Mauritanian octopus FIP. This person will systematically document and analyse the findings and positive and negative lessons. The results of each trial will be discussed and analysed with the fishers to try to find improvements. At the end, this person together with pertinent IMROP personnel will prepare a scientific report which will include recommendations about the most viable options that were identified and ways to scale them up.													

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Local Consultants	PACA PANs. Fisheries specialist to document, systematise and distill the ecuadorian experience in the preparation of fisheries action plans. Participatory process with VMAP, IPIAP and key stakeholders from the fisheries and associated supply chains.. CCLME. Fisheries consultant to document, systematise and distill the Moroccan experience in the preparation and implementaion of fisheries management plans for small pelagic fish and octopus. Participatory process with public and private stakeholders from the fisheries and associated supply chains. Fisheries consultant to document, systematise and distill the Mauritanian experience in the preparation and implementaion of fisheries management plans for small pelagic fish and octopus. Participatory process with public and private stakeholders from the fisheries and associated supply chains. Fisheries consultant to document, systematise and distill the Senegalese experience in the preparation and implementaion of fisheries management plans for small					590,325				590,325			590,325	Sustainable Fisheries Partnership

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	pelagic fish and octopus. Participatory process with public and private stakeholders from the fisheries and associated supply chains. A standard methodology will be applied in the three CCLME countries. Livelihood Action Plans. prepare livelihood actions plans as needed. Scoped ESIA. Preparation of scoped ESIA of the PACA countries. Preparation of scoped ESIA of the CCLME countries. Scoped ESMP. Preparation of management plans as required from the results of the scoped ESIA. PAN pomada. Facilitator to support the Ecuadorian fisheries authority in the application of Regulatory Impact Analysis in the existing management framework of the pomada fishery. Social consultant to support the Ecuadorian fisheries authority in the development of mitigation strategies to protect bolso fishers and women shrimp peelers, based on the results of the Regulatory Impact Analysis. Labour consultant to evaluate labour and working conditions in pomada shrimp trawlers. Facilitator to support the Ecuadorian fisheries authority in the application													

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	of Regulatory Impact Analysis to eliminate illegal fishing and catch laundering in the pomada fishery. Enforcement advisor to assist the Ecuadorian fisheries authority to prepare an action plan to eliminate illegal fishing and catch laundering in the pomada value chain. External independent evaluation of the implementation of the PAN pomada and the effectiveness of fishery regulation measures. PAN large pelagic fish. Labour consultant to evaluate labour and working conditions in large pelagic fish longline vessels and prepare a proposed action plan to address gaps. External independent mid-term evaluation of the implementation of the PAN large pelagic fish and the effectiveness of fishery regulation measures. Guatemalan PAN sharks. External independent evaluation of the implementation of the Guatemalan PAN sharks. Guatemalan PAN sharks. Facilitated intersectoral dialogue on implications of Guatemalan domestic shark consumption and trade on conservation and													

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	management measures. The dialogue process will foster policy coherence and an agreed policy framework for shark conservation, trade, and management measures. Guatemalan dorado and sharks action plan. External independent mid-term evaluation of the implementation of the dorado and sharks action plan and the effectiveness of fishery regulation measures. COREMAHI. Social specialist to prepare social responsibility targets for COREMAHI´s code of conduct. External indepedent evaluation of effectiveness COREMAHI´s code of conduct. Shrimp management plan. Facilitator to support ARAP in the application of Regulatory Impact Analysis in the existing management framework of the shrimp fishery in the Pacific coast. The analysis will identify impacts on Emberá-Wounaan artisanal shrimp fishers. Labour consultant to evaluate labour and working conditions in shrimp trawlers. External independent mid-term evaluation of the implementation of the shrimp management plan and the effectiveness of the													

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	fishery regulation measures. LPF management plan. Labour consultant to evaluate labour and working conditions in industrial longliners. External independent mid-term evaluation of the implementation of the LPF management plan and the effectiveness of the fishery regulation measures. SEN SPF management. Public policy specialist to support the Senegalese fisheries authority in [1] the application of Regulatory Impact Analysis in the existing management framework of the fishery for small pelagic fish and social responsibility assessment of governance process and supply chain, and [2] conducting intersectoral dialogue to develop key measures to address the identified gaps. Social consultant to support the Senegalese fisheries authority in the development of mitigation strategies to protect vulnerable groups during the development of key measures to address the gaps identified in the Regulatory Impact Analysis and social responsibility assessment. SEN Octopus management plan. External													

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	independent evaluation of the implementation of the Senegalese octopus management plan and the effectiveness of fishery regulation measures. MTR Octopus management plan. Facilitator to support the Mauritanian fisheries authority in the application of Regulatory Impact Analysis to the current octopus fisheries management framework and facilitate multisectoral dialogue to analyse the results of the assessment. Market development consultant. Time allocated to outcome 2.2.FIPs consultant. Time allocated to outcome 2.2.Gender, safeguards and participation consultant. Time allocated to outcome 2.2.Communications consultant. Time allocated to outcome 2.2. MTR Octopus management plan. External independent evaluation of the implementation of the Mauritanian octopus management plan and the effectiveness of fishery regulation measures.													

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Local Consultants	Pomada FIP. Advisor to train members of the FIP research team and IPIAP in using the Risk-Based Framework (RBF) in a fishery assessment. Dorado and sharks FIP. Fisheries scientist to organise, coordinate and support the implementation of the research team and research plan of the dorado and sharks FIP. Shrimp FIP. Fisheries scientist to organise, coordinate and support the implementation of the research team and research plan of the shrimp FIP. SPF SCIP. 1) Coordinator of the value chain improvement project in Joal, 3) Facilitator of the semestral meetings. Octopus FIP: 1) Fisheries scientist to organise, coordinate and support organisation of a public - private research team and the implementation of an applied research plan for the Senegalese octopus FIP. It is expected that the FIP will fund the other members of the research team, 2) Economist | Financial specialist to design a financial mechanism to integrate the costs of production and deployment of clay pots into the production costs of octopus, 3) Facilitator of lessons				457,400					457,400			457,400	Sustainable Fisheries Partnership

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	learned meetings, one after each trial of buying and deploying clay pots to support octopus reproduction. effective local coordination, (ii) then prepare a strategy and workplan to establish and consolidate a local coordination team, (iii) then conform a coordination team that ensure fluid coordination and operation among FIP participants , (iv) initiate the operation of the local coordination team and implement actions to facilitate its work. SPF FIP. Fisheries scientist to design and test trial a monitoring system to collect data from the Mauritanian coastal fleet that fish for small pelagic fish and to estimate it capture, landings and catch composition. MTR octopus FIP. Fisheries scientist to design and test trial a monitoring system. The system will register bycatch and incidental captures of ETP species. Two months work for the design phase plus ten months for test trial and refinement of the monitoring system (twelve months work in total). Market development consultant. Time allocated to outcome 2.1. FIPs consultant. Time allocated to													

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	outcome 2.1. Gender, safeguards and participation consultant. Time allocated to outcome 2.1. Communications consultant. Time allocated to outcome 2.1. Emerging markets advisor. Consultant to support value chain analyses and strategic development. MTR octopus FIP. Facilitator to support the institutional and governance development of the Association Mauritanienne the Producteurs et Exportateurs de Poulpe (AMPEP) as a key actor of the Mauritanian octopus FIP. This person will provide practical hands-on support (i) to develop positive dialogue and negotiation skills, (ii) to prepare and agree on key instruments like internal rules and regulations, administration of a common fund, a strategic plan, self-evaluation tools, and a code of conduct, and (iii) to understand the requirements of the sustainable seafood market. At the end it is expected that AMPEP can (i) effectively represent the actors of the value chain, (ii) positively interact and collaborate with the fisheries authority and other pertinent government													

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	entities, and (iii) sustain the FIP. Twelve-months support to AMPEP.													

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Local Consultants	Pomada platform consultants: 1) to design and carry out two awareness sessions for the Dialogue Roundtable and Technical Committee of the pomada fishery, 2)to prepare situation analysis of dialogue roundtable and technical committee of the pomada fishery and workplan to support the advance of these entities, 3)to assess gender integration in curren PAN pomada 2021-2027 and to prepare a workplan with affirmative actions to mainstream gender into the implementation of the plan, 4) Part-time facilitator to support the work of the dialogue roundtable and technical committee of the pomada fishery, 5) Consultant to (i) undertake external independent governance assessment, (ii) facilitate self-assessment and reflection of the members of the dialogue roundtable and technical committee of the pomada fishery, and (iii) agree on a follow-up action plan to address key gaps. LPF platform consultants: 1) Part-time facilitator to support the work of the management platform of the longline large pelagic fish fishery, 2) design and carry				638,400					638,400			638,400	Sustainable Fisheries Partnership

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	out two gender awareness sessions for the members of the management platform for the longline large pelagic fish fishery, 3) Consultant to (i) undertake external independent governance assessment, (ii) facilitate self-assessment and reflection of the members of the management platform of the longline large pelagic fish fishery, and (iii) agree on a follow-up action plan to address key gaps. Facilitator to support the work of the management platform of the dorado and sharks fishery. Gender consultant to design and carry out two awareness sessions of at least one hour each for the members of the management platform for the dorado and sharks fishery. Prepare a financial strategy for the operation of the platform of the dorado and sharks fishery (first annual performance assessment). Consultant to (i) undertake external independent governance assessment, (ii) facilitate self-assessment and reflection of the members of the management platform of the dorado and sharks fishery, and (iii) agree on a follow-up action plan to address key gaps. Shrimp management platform													

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	consultants: 1) Facilitator to support the work of the management platform of the shrimp fisheries in the Pacific coast. Part-time for the shrimps governance plaform and part-time for the longline large pelagic fish governance platform. 2) design and carry out two gender awareness sessions for the members of the management platform for the shrimp fishery. Shrimp management platform. Consultant to (i) undertake external independent governance assessment, (ii) facilitate self-assessment and reflection of the members of the management platform of shrimp fishery, and (iii) agree on a follow-up action plan to address key gaps. Large pelagic fish platform consultants: 1) Facilitator to support the work of the management platform of longline fishery for large pelagic fish of the Pacific coast, part-time for the shrimps governance plaform and part-time for the longline large pelagic fish governance platform, 2) design and carry out two gender awareness sessions for the members of the management platform for the longline large pelagic fish													

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	fishery, 3) Consultant to (i) undertake external independent governance assessment, (ii) facilitate self-assessment and reflection of the members of the management platform of the longline fishery for large pelagic fish of the Pacific coast, and (iii) agree on a follow-up action plan to address key gaps. SPF platform consultants: 1)to undertake a participatory situation analysis of the Senegalese governance framework for the small pelagic fish fishery to strengthen governance and to track progress, 2) to assess gender integration in current sardinellas management plan and the mangement framework for small pelagic fish and to prepare a workplan with affirmative actions to (i) mainstream gender into the implementation of the plan and (ii) potentiate women integration into the small pelagic fish governance framework, 3) Governance facilitator (i) to support the work of the Senegalese governance framework for the small pelagic fish fishery, (ii) to coordinate the implementation of the workplans to strengthen fisheries governance and the													

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	integration of women into the governance framework, and (iii) to ease the application of Regulatory Impact Analysis, 4) to design and carry out two awareness sessions for the members of the management platform, 5) Consultant to (i) undertake external independent assessment of the governance framework (measure progress), (ii) facilitate self-assessment and reflection of the members of CNGPP, and (iii) agree on a follow-up actions to advance the workplans to strengthen fisheries governance and the integration of women into the governance framework, 6) Governance consultant to prepare: (i) a situation analysis of operation and performance of the management structure of the Mauritanian fishery for small pelagic fish (i.e., CNC-PP, CAAP, CCNADP and the PAP-PP coordination unit), and (ii) workplan to strengthen the capacities and operation of (a) the CNC-PP and (b) the PAP-PP coordination unit. 7) to modernise and potentiate the Mauritanian CNC-PP. Fund to develop actions to implement the workplans to strengthen fisheries													

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	governance and the integration of women into the governance framework, 8) to design and carry out two awareness sessions for the members of the management platform. Outcome 2.1 Consultants: Market development, FIPs, Gender, safeguards and participation, Communications, Emerging markets advisor. Consultant to support value chain analyses and strategic development. SPF platform. For each meeting: (i) support the PAP-PP coordination unit in the assessment of progress of the PAP-PP and the preparation of the proposal of annual action plan and budget for the following year, (ii) prepares and runs the meeting, (iii) facilitate the review of assessment of progress, (iv) systematically capture and document learning, and (iv) prepares a memoire that is distributed to all participants.													

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Local Consultants	Pomada. Social worker to provide support for the development of governance and co-management skills of pomada bolso fishers´ organisations. Consultant to assist the pomada fishers organisations in developing skills for data collection and to implement a traceability process. Consultant supervised by IPIAP. Independent external evaluation of progress in the development of governance and co-management skills of pomada bolso fishers' organisations. Social specialist to support SRP to prepare a workplan to empower of women shrimp peelers. Local social worker to work with women shrimp peelers (one year support) to foster collaboration, positive dialogue, build trust, and develop a joint voice to participate in pomada fisheries governance and value chain improvement. Gender consultant to identify, document and quantify the involvement and contributions of women in the dorado and sharks value chains and prepare a gender strategy. Social worker to provide support for the development of governance and co-management skills of dorado				363,600					363,600			363,600	Sustainable Fisheries Partnership

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	and sharks fishers and pertinente fishers´ organisations. Independent external evaluation of progress in the development of governance and co-management skills of fishers, traders (comerciantes) and pertinent fishers´ organisations of the dorado and sharks fisheries. Artisanal shrimp fishers. Baseline analysis of the conditions of Emberá-Wounaan artisanal shrimp fishers, their families and organisations. Indigenous peoples specialist. Social worker to provide support for the development of governance and co-management skills of key artisanal shrimp fishers' organisations (may include Emberá-Wounaan shrimp fishers organisations if pertinent). Independent external evaluation of progress in the development of governance and co-management skills of key artisanal shrimp fishers' organisations. CLPA network. Governance consultant to: (1) undertake a rapid situation analysis of the operation of the CLPAs and the coordination network using information from previous cooperation work and in-depth interviews and													

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	focus groups with CLPAs, and (2) prepare a workplan to strengthen the coordination network. Financial | administration specialist to assess the barriers that limit the operation of the Support Fund for the Operation of CLPAs and to prepare a strategy to operationalise the fund. specialised studies and works like preparation of legal instruments or review of accounts. Joal CLPA. Financial specialist to prepare a resource mobilisation strategy that outlines how the CLPA will secure the financial and non-financial resources needed to accomplish its mandate and functions according to its workplan. Facilitator of the semestral meetings of the Joal CLPA. For each meeting: (i) prepares and runs the meeting, (ii) facilitate the assessment of progress, (iii) systematically capture and document learning, and (iv) prepares a memoire that is distributed to all CLPA members. Women processors. Local social worker to work with women processors (24 months support) to foster collaboration, positive dialogue, build trust, and develop a joint voice as													

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	processors and to constructively engage into the CLPA and other fisheries governance structures. Market development consultant. Time allocated to outcome 2.1. FIPs consultant. Time allocated to outcome 2.1. Gender, safeguards and participation consultant. Time allocated to outcome 2.1.Communications consultant. Time allocated to outcome 2.1. Emerging markets advisor. Consultant to support value chain analyses and strategic development.Women processors. Facilitator of the semestral meetings of the Joal CLPA. For each meeting: (i) prepares and runs the meeting, (ii) facilitate the assessment of progress, (iii) systematically capture and document learning, and (iv) prepares a memoire that is distributed to all participants.													
Training, Workshops, Meetings	Inception workshop. Two-days meeting. 10 board members and country participants. In-person meetings of the project board. Two-days meeting, including visit to a project site.									-	166,600		166,600	Sustainable Fisheries Partnership

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Training, Workshops, Meetings	Initiation workshop with national stakeholders on each country (six workshops). One-day meeting. USD5,000 / workshop. Includes materials, venue, food and lodging and travel support for participants from distant rural areas (if necessary). Particular attention will be given to ensure participation of representatives of women and youth groups, as pertinent. Onsite meetings for self-assessment with key stakeholders on each country. Includes refreshments, venue, materials and travel support for participants from distant rural areas (if necessary). One-day meeting, two meetings per country (mid-term and end). USD 3,000 per meeting x 6 countries x two times (mid-term and end of project). Particular attention will be given to ensure participation of representatives of women and youth groups, as pertinent. Closing workshop with national stakeholders on each country (six one-day workshops). USD5,000 / workshop. Includes materials, venue, food and lodging and travel support								163,200	163,200			163,200	Sustainable Fisheries Partnership

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	for participants from distant rural areas (if necessary). Particular attention will be given to ensure participation of representatives of women and youth groups, as pertinent. Participation in IWC2025 y 2027. Seven persons per meeting (six country delegates + project coordinator). Six-days trip (two days for travel).													
Training, Workshops, Meetings	Meeting with social experts for peer review of the use and utility of FishSource socially responsible standard, systematise learning and provide recommendations for improvement.		6,000							6,000			6,000	Sustainable Fisheries Partnership
Training, Workshops, Meetings	MTR octopus FIP. Lumpsum for meetings and field work with fishers (e.g., focal groups) to conduct the participatory root cause analysis of the generation of marine litter by plastic octopus pots. This budget allocation will cover materials and refreshments. MTR octopus FIP. Lumpsum for meetings and field work with fishers to field test of methods to reduce marine litter caused by plastic octopus pots. This budget						15,000			15,000			15,000	Sustainable Fisheries Partnership

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	allocation will cover meeting materials and refreshments.													
Training, Workshops, Meetings	Pomada FIP. Bolso fishery participatory monitoring. Quarterly meetings of IPIAP with bolso fishers for technical assistance, joint data processing and presentation of results. Dorado and sharks FIP. Develop capacities of the members of the dorado and sharks FIP to address social issues during implementation (FIP social workplan). Training in social issues, social audit tools, social performance, fisheries governance. Includes cost of trainer, one week workshop and post-training advice and follow-up. Training workshop (25 participants): Airplane ticket for trainer, food and lodging, venue, food and materials of the participants. Develop capacities of the members of the shrimp FIP and large pelagic fish FIP to address social issues during implementation (FIP social workplan). Training in social issues, social audit tools, social performance, fisheries governance. Includes cost of trainer, one week workshop				83,800					83,800			83,800	Sustainable Fisheries Partnership

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	and post-training advice and follow-up. Training workshop (25 participants): Airplane ticket for trainer, food and lodging, venue, food and materials of the participants. SPF SCIP. Semestral meetings of partners of the SCIP to assess progress, identify and document lessons, and adjust planning. SPF SCIP. training of fishers, CLPA members, and women processors. The detailed breakdown will be prepared as part of the SCIP budget. Octopus FIP. Meetings to identify and document lessons and reflect on ways to better internalise the costs of production and deployment of clay pots into the production costs of octopus. Three meetings, the first to plan the initial trial, the other two after each trial of buying and deploying clay pots to support octopus reproduction. MTR octopus FIP. Capacity development activities (e.g., hands-on training)of the Association Mauritanienne the Producteurs et Exportateurs de Poulpe (AMPEP).													

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Training, Workshops, Meetings	Pomada platform. Meetings of the dialogue roundtable and technical committee of the pomada fishery. SPF platform. Meetings with members of the small pelagic fish governance framework for assessment of governance performance and integration of women. SPF platform. Meetings and training activities to develop actions to implement the workplans to strengthen fisheries governance and the integration of women into the governance framework. LPF platform. Meetings of the management platform of the longline large pelagic fish fishery. Meetings of the management platform of the dorado and sharks fishery. Shrimp management platform. Meetings of the management platform of the shrimp fisheries of the Pacific coast. Large pelagic fish platform. Meetings of the management platform of the longline fishery for large pelagic fish of the Pacific coast. SPF platform. Meetings of the Commission Nationale de gestion des Petits Pélagiques (CNGPP). SPF platform. Lumpsum for capacity building of the				143,500					143,500			143,500	Sustainable Fisheries Partnership

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	Mauritanian CNC-PP. Training will focus on topics like the development of positive dialogue, decision-making process and consensus building. The specific needs will be included in the workplan to strengthen the CNC-PP. SPF platform. Semestral meetings of the Mauritanian CNC-PP. USD500 per meeting to cover materials, refreshments, and travel support for representatives of artisanal fishers. Meetings will be organised by the Permanent Secretariat of the CND-PP (see decree that created the CNC-PP). SPF platform. Annual meetings of the Mauritanian small pelagic fish management structure to (i) review progress of the PAP-PP, (ii) review the situation of the fishery, and (iii) prepare the annual action plan and budget for the following year. SPF binational cooperation. Mauritania. Lumpsum allocation to participate in binational technical meetings to analyse the status of the stocks of shared small pelagic fish resources and to discuss coordinated harvest strategies. SPF binational cooperation.													

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	Morocco. Lumpsum allocation to participate in binational technical meetings to analyse the status of the stocks of shared small pelagic fish resources and to discuss coordinated harvest strategies.													

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Training, Workshops, Meetings	Pomada. Training sessions and workshops to develop governance and co-management skills and understanding of FIPs of pomada bolso fishers´ organisations. Annual meetings of the pomada bolso fishers´ organistaions. Training sessions and workshops to empower women shrimp peelers. Meetings of women shrimp peelers. Ttraining sessions and workshops to develop governance and co-management skills and understanding of FIPs of fishers, traders (comerciantes) and pertinent fishers´organisations. Annual meetings of the artisanal fishers of the dorado and sharks fisheries. Training sessions and workshops to develop governance and co-management skills and understanding of FIPs of key artisanal shrimp fishers' organisations (may include Emberá-Wounaan shrimp fishers organisations if pertinent). The specific needs will be included in the capacity development workplan. Artisanal shrimp fishers. Annual meetings of representatives of key artisanal shrimp fishers' organisations (may include				**129,800**					129,800			129,800	Sustainable Fisheries Partnership

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	Emberá-Wounaan shrimp fishers organisation). Meetings of Emberá-Wounaan artisanal shrimp fishers to facilitate dialogue and to prepare their contributions to the co-management platform. CLPA network. Training and meetings of members of the CLPA coordination network. The detailed breakdown will be prepared as part of the workplan to strengthen the coordination network.Training sessions and workshops of the Joan CLPA members to (i) develop governance and co-management skills, (ii) undertake the resource mobilisation strategy, and (iii) understand the market for sustainable seafood products. The specific needs will be included in the capacity development workplan. Semestral meetings of the Joal CLPA to assess progress, identify and document lessons, and adjust planning. Women processors. Lumpsum to cover training sessions and workshops to empower women processors (e.g., food safety practices, business planning, use of improved kilns). The specific needs will be included in the empowerment workplan.													

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	Women processors. Meetings of women processors. Semestral meetings of the women processors to assess progress, identify and document lessons, and adjust planning.													

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Training, Workshops, Meetings	RIA. In-person training workshops in Morocco, Mauritania and Senegal. One-week training workshop. RIA. In-person training workshops in Guatemala, Panama and Ecuador. One-week training workshop. PACA PANs. Workshops and meetings for participatory process with VMAP, IPIAP and key stakeholders to document, systematise and distill the ecuadorian experience in the preparation of fisheries action plans (e.g., dorado, pomada, small pelagic fish, cangrejo rojo). PACA PANs. Regional workshop on the ecuadorian experience in the preparation of fisheries action plans. Three days workshop to be held in Ecuador. Interactive workshop to include interaction with fisheries stakeholders in Manta and Guayaquil. The workshop will serve to establish a community of practice among practitioners of the three countries. CCLME. Workshops and meetings for participatory process with Moroccan key stakeholders to document, systematise and distill the experience in preparation and implementaion of fisheries management plans for small					**381,300**				381,300			381,300	Sustainable Fisheries Partnership

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	pelagic fish and octopus. CCLME. Workshops and meetings for participatory process with Mauritanian key stakeholders to document, systematise and distill the experience in preparation and implementaion of fisheries management plans for small pelagic fish and octopus. CCLME. Workshops and meetings for participatory process with Senegalese key stakeholders to document, systematise and distill the experience in preparation and implementaion of fisheries management plans for small pelagic fish and octopus. CCLME. Learning exchange among Morocco, Mauritania and Senegal on the preparation and implementatnion of management plans for small pelagic fish and octopus. Participatory workshop with representatives of fishers, processors and government. The learning exchange will use the FAO guide for fisheries learning exchanges [Rocliffe, S. (2018). Fisheries learning exchanges: a short guide to best practice. Food and Agriculture Organization (FAO) & Blue Ventures Conservation, 31pp.] The meeting will serve to establish a community of													

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	practice among practitioners of the three countries. PAN pomada. Participatory meetings to prepare the PAN pomada 2028 - 2032. PAN large pelagic fish. Participatory meetings to prepare the PAN large pelagic fish. Guatemalan PAN sharks. Participatory meetings to prepare the Guatemalan PAN sharks 2027 - 2031. Particular attention will be given to facilitate the participation of women and young persons. Guatemalan dorado and sharks action plan. Participatory meetings to prepare the dorado and sharks action plan. Shrimp management plan. Participatory meetings to prepare the shrimp management plan. The process will include a Regulatory Impact Analysis of the draft plan. The final plan will include mitigation / compensation measures to protect Emberá-Wounaan artisanal shrimp fishers and vulnerable groups. Particular attention will be given to facilitate the participation of women and young persons. LPF management plan. Participatory meetings to prepare the LPF management plan. The process will include a													

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	Regulatory Impact Analysis of the draft plan. The final plan will include mitigation / compensation measures to protect vulnerable groups. Particular attention will be given to facilitate the participation of women and young persons. SEN SPF management. Various intersectoral meetings to develop key measures to address the gaps identified in the Regulatory Impact Analysis and social responsibility assessment. SEN Octopus management plan. Participatory meetings to update the Senegalese SEN Octopus management plan. Particular attention will be given to facilitate the participation of women and young persons. SEN Octopus management plan. Missions from Moroccan fisheries officers to provide technical assistance for the preparation of the Senegalese SEN Octopus management plan. Technical assistance based upon the Memorandum of Understanding signed on November 2016. MTR SPF management. Two study visits from public - private delegation to Morocco to exchange experience on processing and adding value to small pelagic fish and the													

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	use of by-products and wastes (e.g., skins, scales, bones, trimmings) to produce added value products. The study visits will be based upon article 6 of the Cooperation Agreement in Maritime Fisheries and Aquaculture signed in 2022 by both countries. The details of the study visits will be agreed by the parties during project implementation. The GMC2 project will cover transportation, accommodation, and food. MTR SPF management. Lumpsum for participatory meetings to prepare a strategic plan to develop Mauritanian value chains for added value small pelagic fish. The detailed breakdown of the meeting costs will be prepared as part of the workplan to prepare a national policy and a strategic plan to develop Mauritanian value chains for added value small pelagic fish. MTR SPF management. Study visit to know firsthand the experience and lessons of a successful national programme to promote seafood consumption. The budget allocation is calculated assuming that the study visit will be to Peru to know the experience of "A													

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	comer pescado", in particular la experience in the promotion of consumption of Peruvian anchovy and other small pelagic fish. MTR SPF management. participatory meetings to design a national programme to promote seafood consumption (in particular small pelagic fish). The detailed breakdown of the meeting costs will be prepared as part of the workplan to develop the national programme. MTR Octopus management plan. Participatory meetings to apply Regulatory Impact Assessment to current management framework and to update the Mauritanian Octopus management plan.													

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Training, Workshops, Meetings	Shark NDFs. Regional meeting to identify barriers and challenges for assessing risks on transboundary shark species. Three-days workshop with fisheries and CITES delegates of Guatemala, Panama and Ecuador. Four persons per country plus a sharks NDF advisor and one person from IATTC (14 persons in total). Shark NDFs. Intersectoral training workshops in Guatemala, Panama and Ecuador. On each country three-days workshop with delegates from key entities (e.g., CITES scientific authority, maritime authority, fisheries authority, trade and exports authority, customs authority). Shark NDFs. Two regional meetings to exchange lessons and experience on the preparation of NDFs for shark species. Two-days workshop with fisheries and CITES delegates of Guatemala, Panama and Ecuador. Three persons per country and one person from the project unit (13 persons in total). Cost of each workshop: . COREMAHI. Participation of COREMAHI delegates in IATTC and SAC meetings on years 2, 3,4 and 5. Two trips						**229,940**			229,940			229,940	Sustainable Fisheries Partnership

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	per year, two persons per trip, a delegate and a technical advisor. COREMAHI annual meetings. Meetings to be held in the participating countries (Ecuador, Guatemala, and Panama). Each meeting will have about 30 participants (including persons from Costa Rica and Peru). The cost per meeting includes venue, travel support to delegates from fishers organisations from the participating countries (processors and exporters are expected to pay for their costs), travel expenses of invited advisors (e.g., stock assessment, bycatch or social specialists), facilitator, and materials.													
Training, Workshops, Meetings	Side events during SeafoodExpo events (Boston and Barcelona) or specialised meetings with exporters, traders and retailers. Includes presenting FishSource indicators for social responsibility and reduced bycatch. Cost per meeting USD3000 to cover venue, materials and refreshments.	**45,000**								45,000			45,000	Sustainable Fisheries Partnership

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Training, Workshops, Meetings	Workshop to exchange experience and document learning on engaging domestic buyers to demand sustainable target seafood products (including social responsibility «outcome 1.2» and reduced bycatch «outcome 1.3») in Ecuador, Guatemala, Morocco and Senegal. 14 persons (three persons per country (twelve in total) + consultant + one project team member). Two days workshop. Three nights of accommodation (arriving one day before, leaving one day after). Meetings and workshops with target end-market channels (engagement, technical support, training) in Ecuador. Includes presenting FishSource indicators for social responsibility and reduced bycatch. Meetings and workshops with target end-market channels (engagement, technical support, training) in Guatemala. Includes presenting FishSource indicators for social responsibility and reduced bycatch. Pilot buyer engagement. Meetings and training activities with public and private key stakeholders. Detailed estimates will be	**122,000**								122,000			122,000	Sustainable Fisheries Partnership

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	prepared once the pilot buyer engagement programme is designed. Meetings and workshops with target end-market channels (engagement, technical support, training) in Senegal. Includes presenting FishSource indicators for social responsibility and reduced bycatch.													
Travel	Airplane tickets for project team. Outcome 2.3. Travel expenses of project team.Outcome 2.3. Land travel of project team in project area. Outcome 2.3.						**14,500**			14,500			14,500	Sustainable Fisheries Partnership
Travel	Airplane tickets for project team. Travel expenses of project team. Land travel of project team in project area.							**14,500**		14,500			14,500	Sustainable Fisheries Partnership
Travel	Airplane tickets for project team. Travel expenses of project team. Land travel of project team in project area. Outcome 2.1. Travel expenses (ground transportation) of the consultant that supports the governance platform for				**29,665**					29,665			29,665	Sustainable Fisheries Partnership

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	dorado and sharks. Shrimp management platform. Travel expenses (ground transportation) of the consultant that supports the governance platforms for shrimp and large pelagic fish.													
Travel	Airplane tickets for project team. Travel expenses of project team. Land travel of project team in project area. Outcome 2.2.					**14,500**				14,500			14,500	Sustainable Fisheries Partnership
Travel	Airplane tickets for project team. Travel expenses of project team. USD120/day x 20 days/year. Outcome 2.2. Land travel of project team in project area. Outcome 2.2.					**14,500**				14,500			14,500	Sustainable Fisheries Partnership
Travel	Airplane tickets for project team. Travel expenses of project team. Land travel of project team in project area. Outcome 2.1. Pomada FIP. Lumpsum por land and boat travel to support participatory data collection (fisheries monitoring) of bolsos in collaboration with selected fishers organisations. The project will cover petrol, bus tickets and refreshments of fishers and IPIAP personnel. Data will be collected for				**15,215**					15,215			15,215	Sustainable Fisheries Partnership

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	two years. SPF SCIP. Land travel of the coordinator of the value chain improvement project in Joal.												
Travel	Airplane tickets for project team. Travel expenses of project team. Land travel of project team in project area. Outcome 2.3. MTR octopus FIP. Lumpsum for land travel of the fisheries scientist and IMROP personnel to conduct the participatory root cause analysis of the generation of marine litter by plastic octopus pots. The GMC2 project will cover items like petrol, meals and accommodation when needed.						**30,500**			30,500			30,500	Sustainable Fisheries Partnership
Travel	Airplane tickets for project team. Outcome 1.1 Travel expenses of project team. Outcome 1.1 Land travel of project team in project area. Outcome 1.1	**14,500**								14,500			14,500	Sustainable Fisheries Partnership
Travel	Airplane tickets for project team. Outcome 3.2. Travel expenses of project team. Outcome 3.2. Land travel of project team								**29,000**	29,000			29,000	Sustainable Fisheries Partnership

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	in project area. Outcome 3.2.													
Travel	Airplane tickets for project team. USD600/ticket x 4 tickets/year. Outcome 1.2 Travel expenses of project team. USD120/day x 20 days/year. Outcome 1.2 Land travel of project team in project area. USD5,000 for project duration. Outcome 1.2		**29,000**						29,000			29,000	Sustainable Fisheries Partnership
Travel	Airplane tickets for project team. USD600/ticket x 4 tickets/year. Outcome 1.3 Travel expenses of project team. USD120/day x 20 days/year. Outcome 1.3 Land travel of project team in project area USD5,000 for project duration. Outcome 1.3			**29,000**					29,000			29,000	Sustainable Fisheries Partnership

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Travel	Airplane tickets for project team. USD600/ticket x 4 tickets/year. Outcome 2.1. Travel expenses of project team. USD120/day x 20 days/year. Outcome 2.1. Land travel of project team in project area. Outcome 2.1. Pomada. Land travel to provide support for the development of governance and co-management skills of pomada bolso fishers´ organisations. Pomada. Land and boat travel to (i) support pomada fishers organisations in developing skills for data collection and to implement a traceability process, (ii) field work of IPIAP pomada team, and (iii) present results of data processing and analysis to pomada fishers organisations. Pomada. Land travel of local social worker to provide support women shrimp peelers. Land travel (two years) to provide support for the development of governance and co-management skills of dorado and sharks independent fishers and pertinent fishers´ organisations. Artisanal shrimp fishers. Land travel to provide support for the development				**36,870**					36,870			36,870	Sustainable Fisheries Partnership

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	of governance and co-management skills of key artisanal shrimp fishers' organisations. Women processors. Land travel of local social worker to work with the women processors for the development of their governance, constructive dialogue and collaboration skills.													
Travel	Airplane tickets for project team. Travel expenses of project team. Land travel of project team in project area.							**14,500**		14,500			14,500	Sustainable Fisheries Partnership
Travel	Land travel of project team in project area. Outcome 1.1 Pilot buyer engagement. Lumpsum for travel expenses. Detailed estimates will be prepared once the pilot buyer engagement programme is designed.	**49,500**								49,500			49,500	Sustainable Fisheries Partnership
Office Supplies	Guatemalan PAN sharks. Various supplies (e.g., formulaires, consumables) to implement a registry of shark fishers and traders in					**5,000**				5,000			5,000	Sustainable Fisheries Partnership

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	the main ports of the Pacific coast of Guatemala.												
Office Supplies	Office supplies (e.g., paper, pencils, printer ink) . USD700/year.									-		**3,500**	3,500	Sustainable Fisheries Partnership
Office Supplies	Pomada FIP. Lumpsum for small equipment (e.g., GPS), materials (e.g., netting, printouts) and consumables to support the fishers work in participatory fisheries monitoring. The detailed allocation of resources will be decided when the improved monitoring sytem is prepared.				**2,700**					2,700			2,700	Sustainable Fisheries Partnership
Office Supplies	Pomada. Supplies (printouts, office materials, consumables) to be used in the preparation of the register of pomada peelers in Posorja.				**2,000**					2,000			2,000	Sustainable Fisheries Partnership
Other Operating Costs	Annual financial audit (USD10,000 per year).									-		**50,000**	50,000	Sustainable Fisheries Partnership

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Other Operating Costs	Communication materials (e.g., market briefs, radio spots, Youtube videos, brochures, press releases) for the implementation of the project communication strategy. Includes translation of documents, translation to local languages (e.g., Wolof) and pedagogic interpretation. About USD5000 per country per year. Prepare and edit learning documents (eight documents). The documents will be in a format to be accessible to the general public (visually appealing, plain language). Each document will have the main text in English and will include extended summaries in French, Spanish and English. The documents will be in high-quality for web browsing and download. Project memoirs. Prepare and distribute project memoirs. Prepare and edit a communication document accessible to the general public (visually appealing, plain language) with key stories and testimonies and a concise summary of the project results and lessons. The document will be in high-quality PDF format for online distribution and browsing. There will be two								**262,000**	262,000			262,000	Sustainable Fisheries Partnership

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	versions, French and English, both with an English summary. Project memoirs. Translate the project memoirs to other language. Project memoirs. Prepare eight short videos that summarise the project achievements and lessons, including testimonies of key stakeholders and beneficiaries. One video per country (six videos) and two videos for regional views (i.e., PACA and CCLME). The videos will be in the local language (four videos in French and four videos in Spanish) with subtitles in English. The short videos will be made available through IW:LEARN and other pertinent channels of the project partners. USD3000 per video.													
Other Operating Costs	Edit and publish two documents: (i) a self-evaluation tool and guidelines to integrate social responsibility into fisheries governance processes and (ii) a self-evaluation tool and guidelines to integrate social responsibility into fisheries value chains. PDF document for online distribution in Spanish, French and English. Edit and publish two documents (final versions): (i) a self-evaluation tool and					**4,000**				4,000			4,000	Sustainable Fisheries Partnership

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	guidelines to integrate social responsibility into fisheries governance processes and (ii) a self-evaluation tool and guidelines to integrate social responsibility into fisheries value chains. PDF document for online distribution in Spanish, French and English.													
Other Operating Costs	Guatemala dorado and sharks FIP. Equipment and materials for field test of methods to reduce catch rates in longlines (e.g., hooks, fishing gear, buoys). MTR octopus FIP. Equipment, materials, and consumables for participatory field test of methods to reduce marine litter caused by plastic octopus pots (e.g., petrol for the fishing boats, ropes, buoys, clay pots, logbooks). Panama LPF FIP. Equipment and materials for field test of methods to reduce catch rates in longlines (e.g., hooks, fishing gear, buoys).						**65,000**			65,000			65,000	Sustainable Fisheries Partnership
Other Operating Costs	Guatemalan PAN sharks. Materials to implement a registry of shark fishers and traders in the main ports of the Pacific coast of Guatemala.					**1,500**				1,500			1,500	Sustainable Fisheries Partnership
Other Operating Costs	Office operation costs like bank charges and services and postage.									-		**25,000**	25,000	Sustainable Fisheries Partnership

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Other Operating Costs	Online promotion of the use of the FishSource reduced by-catch standard.			**10,000**						10,000			10,000	Sustainable Fisheries Partnership
Other Operating Costs	Online promotion of the use of the FishSource social standard.		**15,000**							15,000			15,000	Sustainable Fisheries Partnership
Other Operating Costs	Promotional materials to incentivise purchasing seafood products from Ecuadorian FIPs (dorado, swordfish, large pelagic fish, sharks) in target end-market channels. Promotional materials to incentivise purchasing seafood products from Guatemalan FIP (dorado, sharks) in target end-market channels. Pilot buyer engagement. Lumpsum for communication and promotional materials and communication campaigns to incentivise the use of the Responsible Seafood Sourcing Standard and purchasing seafood products from Moroccan FIPs (sardine, anchovy) in target end-market channels. Detailed estimates will be prepared once the pilot buyer engagement programme is designed. Promotional materials to incentivise purchasing sustainable small pelagic fish products in Senegal´s target end-market channels.	**96,000**								96,000			96,000	Sustainable Fisheries Partnership

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Other Operating Costs	RIA. Edit and publish guidelines on Regulatory Impact Analysis in fisheries (PDF document for online distribution in Spanish, French and English). PAN pomada. Edit and publish the PAN pomada 2028-2032 (PDF document for online distribution). PAN large pelagic fish. Edit and publish the PAN large pelagic fish (PDF document for online distribution). Guatemalan PAN sharks. Edit and publish the Guatemalan PAN sharks 2027 - 2031 (PDF document for online distribution). Guatemalan PAN sharks. Communication materials (e.g., radio spots, posters, social media) to support the registry of shark fishers and traders in the main ports of the Pacific coast of Guatemala. Guatemalan dorado and sharks action plan. Edit and publish the dorado and sharks action plan (PDF document for online distribution). Shrimp management plan. Edit and publish the shrimp management plan for the Pacific coast (PDF document for online distribution). LPF management plan. Edit and publish the LPF management plan for the					**34,000**				34,000			34,000	Sustainable Fisheries Partnership

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	Pacific coast (PDF document for online distribution). SEN Octopus management plan. Edit and publish the Senegalese updated octopus management plan (PDF document for online distribution). A booklet in Wolof summarising the updated management plan will be printed and distributed. A PDF version of the booklet will be available for online distribution. Translation of guidelines to Spanish and French. Translation of final guidelines to Spanish and French. RIA. Translation of guidelines to Spanish and French. MTR Octopus management plan. Edit and publish the Mauritanian updated octopus management plan (PDF document for online distribution).													

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Other Operating Costs	SPF binational cooperation. Materials, consumables (e.g., petrol, laboratory consumables), and small equipment for the joint research to improve the estimations of the stock condition and refine the Mauritanian calculations of allowable catch rate of shared small pelagic fish resources. The research activities will be based upon articles 3 and 5 of the Cooperation Agreement in Maritime Fisheries and Aquaculture signed in 2022 by both countries. The details of the use of the research fund will be agreed by the parties during project implementation. An equal amount is included in the GMC2 budget for Morocco. The detailed workplan and investment will be endorsed by the project coordinator. SPF binational cooperation. Materials, consumables (e.g., petrol, laboratory consumables), and small equipment for the joint research to improve the estimations of the stock condition and refine the Mauritanian calculations of allowable catch rate of shared small pelagic fish resources. The research activities will be based upon articles 3 and 5 of the				**240,000**					240,000			240,000	Sustainable Fisheries Partnership

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	Cooperation Agreement in Maritime Fisheries and Aquaculture signed in 2022 by both countries. The details of the use of the research fund will be agreed by the parties during project implementation. An equal amount is included in the GMC2 budget for Mauritania. The detailed workplan and investment will be endorsed by the project coordinator.													
Other Operating Costs	SPF SCIP. Lumpsum for communication materials like radio spots, brochures, social media, and posters to enable the implementation of the SCIP in actions like promotion of products, registration of fishers, sensitise consumers. The detailed breakdown will be prepared as part of the SCIP budget.				**17,000**					17,000			17,000	Sustainable Fisheries Partnership

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Other Operating Costs	SPF SCIP. Materials to be used in the SCIP like rope, fishing nets, buoys, racks and trays for kilns, paper logbooks and laboratory containers and reagents. The detailed breakdown will be prepared as part of the SCIP budget. SPF SCIP. Lumpsum for other expenses to support the implementation of the SCIP. The detailed breakdown will be prepared as part of the SCIP budget SPF FIP. Lumpsum for test trial of the monitoring system of the Mauritanian coastal fleet that fish for small pelagic fish. The allocation cover items like consumables (e.g., petrol, formularies), field travel and small equipment (e.g., GPS, tablets). The detailed breakdown will be prepared after the monitoring system is developed. MTR octopus FIP. Test trial of the monitoring system of the Mauritanian octopus fishery.The detailed breakdown will be prepared after the monitoring system is developed. Octopus FIP. Trials to refine the mechanism to internalise the costs of production and deployment of clay pots into the production costs of octopus. Work to be done in				**165,000**					165,000			165,000	Sustainable Fisheries Partnership

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	two breeding seasons (two trials). The allocation includes buying pots from women potters, and transportation and deployment of the pots (e.g., petrol for pirogues, cargo lorries).													
Other Operating Costs	Women processors. Improvements of the processing techniques of small pelagic fish (e.g., improved kilns, sanitation and hygiene of storage areas). The budget allocation includes assorted materials and goods like food grade painting, small appliances, or parts for improved kilns.				**25,000**					25,000			25,000	Sustainable Fisheries Partnership
		1,300,500	**416,000**	**227,750**	**4,043,950**	**1,826,825**	**726,130**	**755,750**	**711,300**	**10,008,205**	**214,600**	**511,140**	**10,733,945**	

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Annex 2: Project map and Geospatial Coordinates of project sites



Project Map in Africa. The Canary Current Large Marine Ecosystem,

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Project Map in LAC. The Pacific Central-American Large Marine Ecosystem.

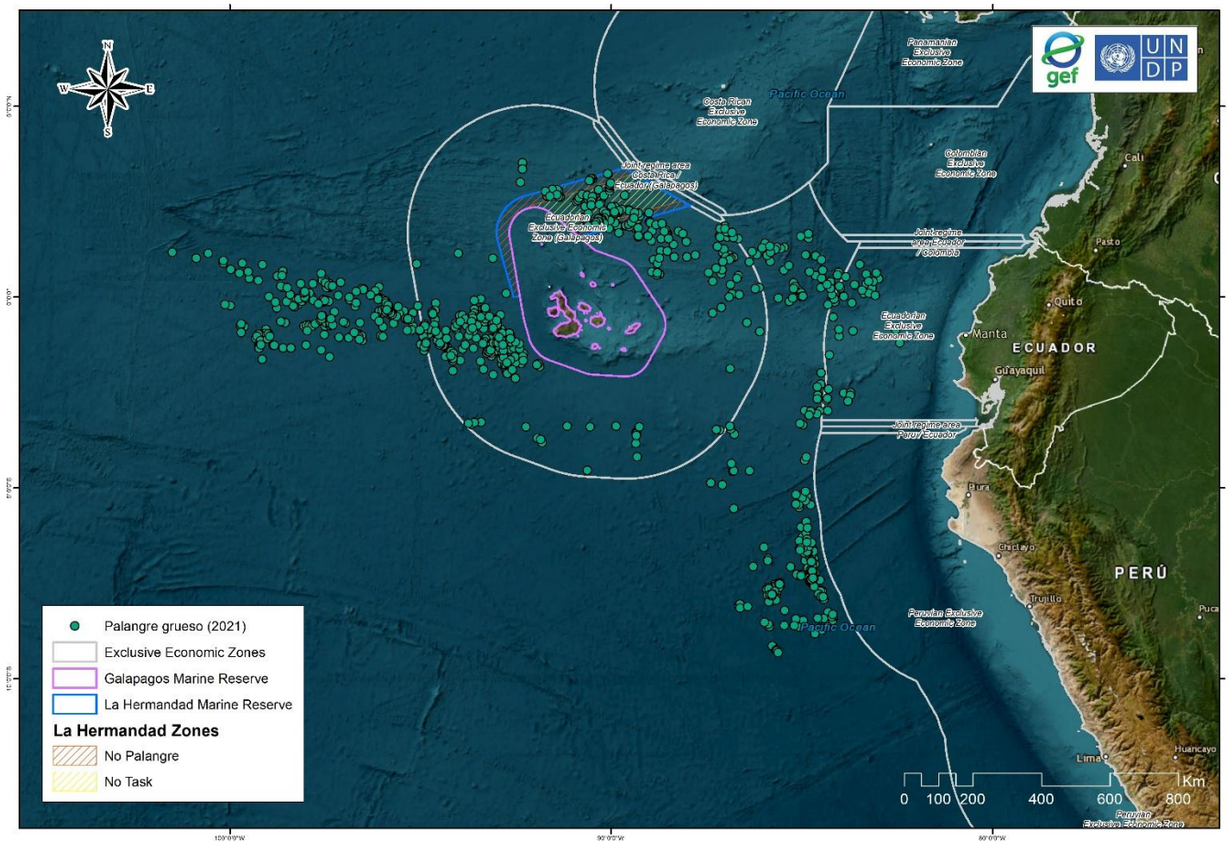
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Fishing Areas of pomada in Ecuador

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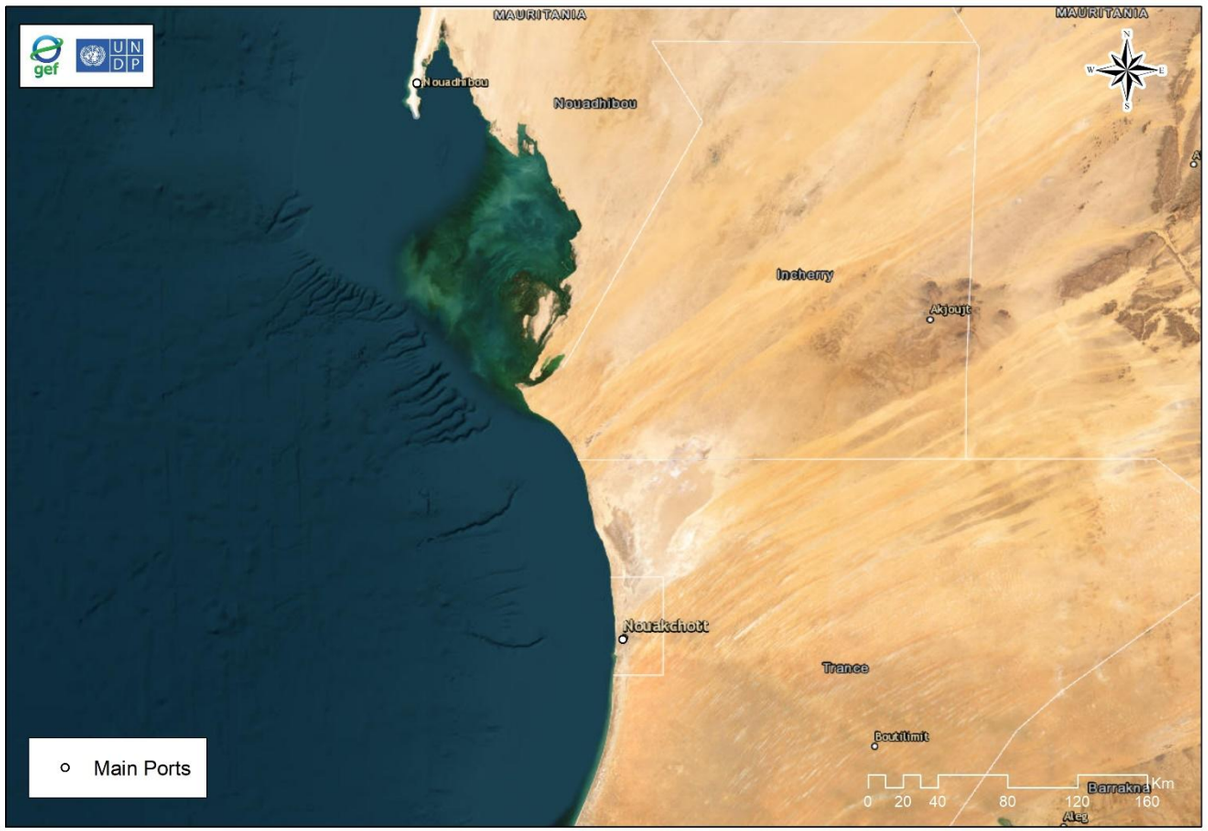
Fishing Areas of Palangre Grueso in Ecuador

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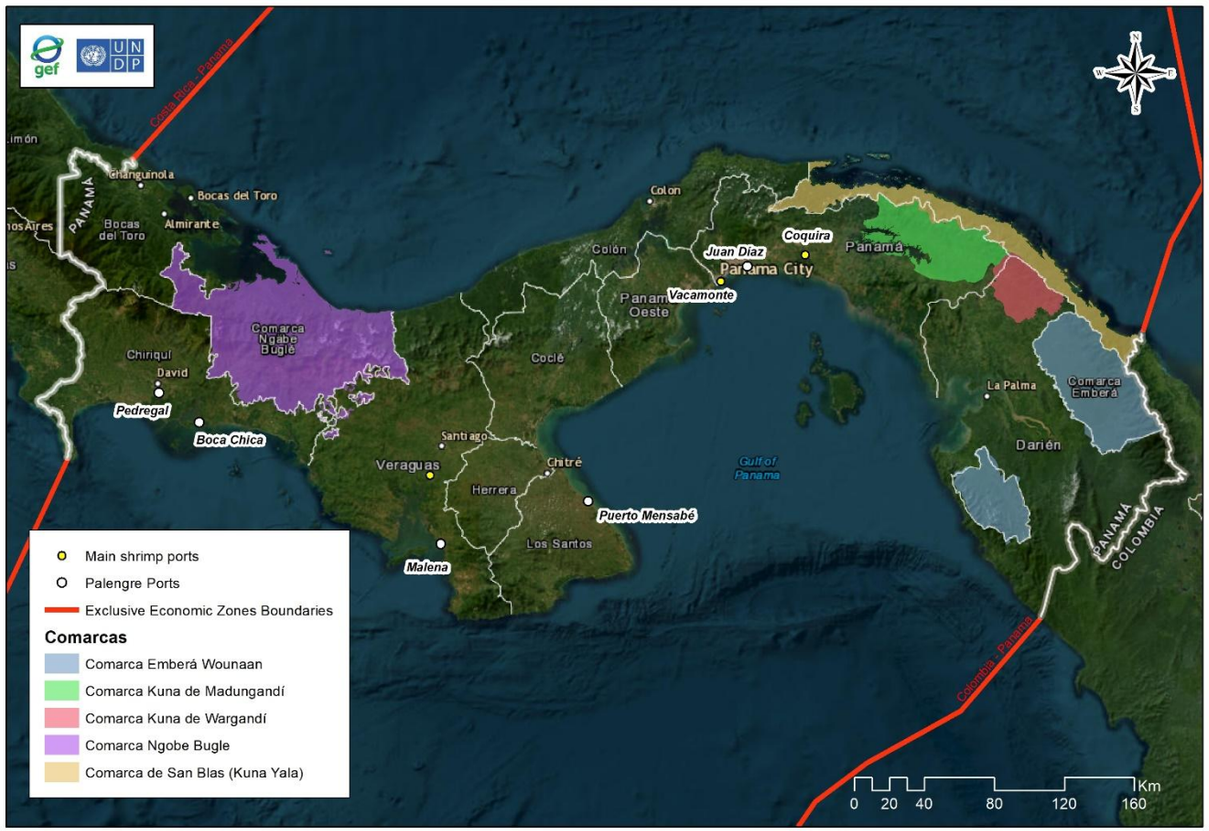
Main Ports of the dorado and sharks fishery in Guatemala

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Main Landing Ports of small pelagic fish and octopus in Mauritania

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Main Landing Ports of shrimp and large pelagic fish in Panama

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CLPAs in Senegal

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Geolocation information of the main landing ports.

Location Name	Latitude	Longitude	Geo Name ID	Location & Activity Description
Posorja	-2.69213	-80.24949	12233240	Main landing port. Pomada Ecuador
Manta	-0.940652	-80.725546	Not available	Main landing port. Large pelagic fish Ecuador
Sipacate	13.928404	-91.149089	Not available	Main landing port. Large pelagic fish Guatemala
San José	13.928	-90.788	Not available	Main landing port. Large pelagic fish Guatemala
Buena Vista	13.8225	-90.31056	3590048	Main landing port. Large pelagic fish Guatemala
Nouadhibou	20.89766	-17.05108	9252503	Main landing port. Small pelagic fish and octopus Mauritania
Nouakchott	17.98837	-16.0294	9781236	Main landing port. Small pelagic fish and octopus Mauritania
Pedregal	8.366	-82.434	Not available	Main landing port. Shrimp and large pelagic fish Panama
Boca Chica	8.21925	-82.21944	12194461	Main landing port. Shrimp and large pelagic fish Panama
Malena	7.57641	-80.9627	3704742	Main landing port. Shrimp and large pelagic fish Panama
Puerto Mensabe	7.75611	-80.16749	12241829	Main landing port. Shrimp and large pelagic fish Panama
Vacamonte	8.87022	-79.67113	3700243	Main landing port. Shrimp and large pelagic fish Panama
Juan Díaz	9.04059	-79.44083	3708306	Main landing port. Shrimp and large pelagic fish Panama
Coquira	9.12623	-79.0613	12279249	Main landing port. Shrimp and large pelagic fish Panama

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Location Name	Latitude	Longitude	Geo Name ID	Location & Activity Description
St. Louis	15.992043	-16.507980	Not available	Main landing port. Small pelagic fish Senegal
Kayar	14.91893	-17.11978	2250677	Main landing port. Small pelagic fish Senegal
Dakar	14.68417	-17.42833	2253352	Main landing port. Small pelagic fish Senegal
Mbour	14.42196	-16.96375	2248477	Main landing port. Small pelagic fish Senegal
Joal	14.183511	-16.861833	Not available	Main landing port. Small pelagic fish Senegal
Djifére	13.939927	-16.761239	Not available	Main landing port. Small pelagic fish Senegal
Kafountine	12.92528	-16.73889	2251002	Main landing port. Small pelagic fish Senegal
Cap-Skirring	12.35011	-16.71707	7302183	Main landing port. Small pelagic fish Senegal
Dakar	14.68417	-17.42833	2253352	Main landing port. Octopus
Zinguinchor	12.587898	-16.266959	Not available	Main landing port. Octopus

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Annex 3: Multi Year Work Plan

Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Project start and exit strategy		Signing of PRODOC by participating countries	x																			
		Sign agreement with host entities to accommodate the project unit																				
		Formal designation of members of the project board	x																			
		Sign agreement with the implementing partner	x																			
		Contract project team	x																			
		Activate temporary grievance redress mechanism	x	x																		
		Implement full scale grievance redress mechanism			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Introductory training of project partners and key stakeholder of each participating country on the tools (e.g., FIPs, FishSource) and standards to be used in the project.			x	x																
		Prepare post-project sustainability plan (exit strategy)										x										
		Implement post-project sustainability plan (exit strategy)											x	x	x	x	x	x	x	x	x	x
		Introductory training in gender equality and women empowerment		x																		
		Prepare gender profiles of each target value chain			x																	
		Incorporate results of gender profiles in project actions.				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
		Scoped ESIA. Prepare cultural heritage impact assessment of target fisheries			x																	
		Scoped ESIA. Prepare baseline analysis of Emberá-Wounaan shrimp fishers[33],			x																	
		Scoped ESIA. Prepare assessment of ethnic minorities related to target supply chain in West Africa.			x																	
		Scoped ESIA. Prepare Strategic Environmental and Social Assessment of potential fishery conservation and management measures			x																	
		Inception workshop		x																		
Outcome 1.1. Increased market demand for sustainable	1.1.1. 12 improved seafood purchasing policies and target sustainability commitments	Prepare scoping analyses to identify key stakeholders and market trends in mid-upper market and end-market of target seafood products[34].		x	x																	
		Design engagement strategies[35].			x																	
		Implement engagement strategies.				x	x	x	x	x	x	x	x	x	x	x	x	x				

[33] Activity included in 2.1.3 below.

[34] Fresh and frozen dorado from Guatemala and dorado and tuna (mainly yellowfin tuna) from Panama, shrimps from Panama, pomada from Ecuador, swordfish, sharks and marlins from Ecuador, octopus from Mauritania and Senegal, and small pelagic fish from Mauritania.

[35] Processors, exporters and international buyers (traders, retailers) from dorado from Guatemala and Panama and octopus from Mauritania and Senegal to be invited to integrate the global mahi and octopus roundtables. Processors, exporters and international buyers from large pelagic fish from Ecuador and Panama, shrimp from Panama and pomada from Ecuador will be engaged with specific targeted strategies.

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
marine commodities in relevant international and domestic markets.	adopted by major supply chain partners in international markets sourcing export-oriented commodities.	Provide information, guidance, and support to key target buyers for the development of (i) seafood purchasing policies and (ii) target sustainability commitments.				x	x	x	x	x	x	x	x	x	x	x	x	x				
		Assess effectiveness of engagement strategies and adjust accordingly.									x							x				
		Systematise learning about engaging mid-upper and end market buyers to demand sustainable target seafood products (including social responsibility «outcome 1.2» and reduced bycatch «outcome 1.3»)																	x			
	1.1.2. Four improved seafood purchasing policies and targeted sustainability commitments adopted by key players in domestic markets.	Assess interest of key levels of domestic supply chains (with special emphasis in end and mid-upper levels) in supplying sustainable seafood products in Ecuador, Guatemala, Morocco, and Senegal.			x																	
		Guatemala buyer engagement trial																				
		Guatemala. Prepare scoping analysis of domestic end-market channels (retailers, hospitality industry) for responsibly sourced and sustainable seafood products from Guatemalan FIPs (dorado and sharks).								x	x											
		Guatemala. Design domestic markets engagement trial for seafood products from Guatemalan FIPs (dorado and sharks).								x	x	x										
		Guatemala. Implement domestic engagement trial in Guatemala.										x	x	x	x	x	x	x				
		Guatemala. Provide information, guidance, and support to target domestic buyers for the development of (i) seafood purchasing policies and (ii) target sustainability commitments.									x	x	x	x	x	x	x	x				
		Guatemala. Assess effectiveness of engagement trial in Guatemala and adjust accordingly.												x				x				
		Guatemala. Document, systematise and share lessons																x				
		Senegal buyer engagement trial																				
		Senegal. Prepare scoping analysis of domestic end-market channels (retailers, hospitality industry) for responsibly sourced and sustainable small pelagic fish products in Senegal.				x																
		Senegal. Design domestic engagement trial for sustainable small pelagic fish products in Senegal.					x															
		Senegal. Implement domestic market engagement trial in Senegal.						x	x	x	x	x	x	x	x							
		Senegal. Provide information, guidance, and support to target domestic buyers for the development of (i) seafood purchasing policies and (ii) target sustainability commitments.						x	x	x	x	x	x	x	x							

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Senegal. Assess effectiveness of engagement strategy in Senegal and adjust accordingly.									x				x							
		Senegal. Document, systematise and share lessons													x							
		Ecuador buyer engagement trial																				
		Ecuador. Prepare scoping analysis of domestic end-market channels (retailers, hospitality industry) for responsibly sourced and sustainable seafood products from Ecuadorian FIPs (dorado, swordfish, large pelagic fish, sharks).			x																	
		Ecuador. Design domestic engagement trial for seafood products from Ecuadorian FIPs (dorado, swordfish, large pelagic fish, sharks).				x																
		Ecuador. Implement domestic engagement trial in Ecuador.				x	x	x	x	x	x	x	x	x	x	x	x	x				
		Ecuador. Provide information, guidance, and support to target domestic buyers for the development of (i) seafood purchasing policies and (ii) target sustainability commitments.				x	x	x	x	x	x	x	x	x	x	x	x	x				
		Ecuador. Assess effectiveness of engagement trial in Ecuador and adjust accordingly.							x				x				x					
		Ecuador. Document, systematise and share lessons																x				
		Morocco buyer engagement pilot																				
		Morocco. Prepare detailed analysis of domestic end-market channels (e.g., retailers, hospitality industry) for sustainable and responsible seafood products, with emphasis on small pelagic fish products (in particular sardines) from Moroccan FIPs[36].			x																	
		Morocco. Adapt the Responsible Seafood Sourcing Standard[37] to the national scenario.				x	x															
		Morocco. Design and implement a pilot buyer engagement programme with emphasis on products from small pelagic fish (in particular sardines).					x	x	x	x	x	x	x	x	x	x	x	x				
		Morocco. Provide information, guidance, and support to target domestic end-market buyers for the development of (i) seafood purchasing policies and (ii) target sustainability commitments.					x	x	x	x	x	x	x	x	x	x	x	x				
		Morocco. Participatory assessment of the effectiveness of the engagement strategy in Morocco and adjust accordingly.						x		x		x		x		x		x				
		Morocco. Systematise and disseminate learning about engaging domestic buyers to demand sustainable target seafood products (including social responsibility «outcome 1.2» and reduced bycatch «outcome 1.3»)																	x			

[36] Until June 2023: European sardine *(Sardina pilchardus*) and (FIP 4196) and European anchovy (*Engraulis encrasicolus*) (FIP 9872).

[37] The Responsible Seafood Sourcing Standard was developed in The Philippines as is implemented by the "Better Seafood Philippines" programme (betterseafoodph.org).

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Morocco. Prepare a scaling-up strategy and sustainability mechanism for the buyer engagement programme.																x	x			
Outcome 1.2. Increased market demand for socially responsible seafood commodities.	1.2.1. Socially responsible seafood standard integrated into the FishSource rating system and available to major supply chain partners worldwide.	Develop indicator set standard prototype.		x	x																	
		Pilot trial of indicator set for standard prototype.			x																	
		Refine or adjust standard.				x																
		Launch the socially responsible standard indicator set in FishSource and apply it to the project target fisheries.				x	x	x	x													
		Peer review with experts of use and utility of FishSource socially responsible standard indicators, systematise learning and provide recommendations for improvement.								x												
		Adjust socially responsible standard indicator set, as necessary.								x												
		Promote the use of the FishSource socially responsible standard.								x	x	x	x	x	x	x	x	x				
		Systematise learning from development and application of FishSource socially responsible standard.																	x			
	1.2.2. Three major international supply chain partners integrate socially responsible seafood requirements in their policies and commitments.	Provide information, guidance, and support to key target international buyers to integrate socially responsible requirements in their policies and commitments (as part of 1.1.1 work).				x	x	x	x	x	x	x	x	x	x	x	x	x				
	1.2.3. Two key players in domestic supply chains integrate socially responsible seafood commitments in their policies and commitments.	Provide information, guidance, and support to key domestic buyers to integrate socially responsible requirements in their policies and commitments (as part of 1.1.2 work).				x	x	x	x	x	x	x	x	x	x	x	x	x				
Outcome 1.3. Increased market demand for seafood commodities from fisheries with reduced bycatch and	1.3.1. Three major international supply chain partners take action to demand seafood sourced from fisheries with reduced bycatch and ecosystem impacts.	Apply the reduced bycatch and ecosystem impacts standard to the project target fisheries.				x																
		Promote the use of the FishSource reduced bycatch and ecosystem impacts standard among target supply chains.					x	x	x	x	x	x	x	x								
		Provide information, guidance and support to key target international buyers so that they integrate reduced bycatch and ecosystem impacts requirements in their policies and implement pertinent commitments in their supply chains (as part of 1.1.1 work).				x	x	x	x	x	x	x	x	x								

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
environmental impact.		Track implementation of the reduction of bycatch and ecosystem impacts commitments in the target supply chains.				x	x	x	x	x	x	x	x	x								
		Systematise learning from promoting the adoption of FishSource reduced bycatch and ecosystem impacts standard in the target supply chains.													x							
	1.3.2. Two key players in domestic supply chains take action to demand seafood sourced from fisheries with reduced bycatch and ecosystem impacts.	Provide information, guidance, and support to key domestic buyers to integrate reduced bycatch requirements in their policies and commitments (as part of 1.1.2 work).				x	x	x	x	x	x	x	x	x	x	x	x	x				
Outcome 2.1. Increased supply of seafood products that demonstrate improved fisheries governance and stock health.	2.1.1. Seven government led national co-management platforms that improve fisheries governance and stock health.	*[1] Ecuador. Support the development and operation of the Dialogue Roundtable and Technical Committee of the pomada fishery.*																				
		Ecuador. Situation analysis of Dialogue Roundtable and Technical Committee of the pomada fishery.		x																		
		Ecuador. Assess gender integration in the PAN pomada 2021-2027 and propose actions for gender mainstreaming through a gender-responsive action plan.		x																		
		Ecuador. Prepare and implement workplan to support the advance and operation of the Dialogue Roundtable and Technical Committee of the pomada fishery, including gender mainstreaming.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
		Ecuador. Awareness sessions on gender and fisheries for stakeholders of the dialogue roundtable and technical committee of the pomada fishery				x				x												
		Ecuador. Annual performance assessment of the pomada Dialogue Roundtable						x				x				x						
		[2] Ecuador. Develop the management platform for the longline large pelagic fish fishery.																				
		Ecuador. Design the management platform for the longline large pelagic fish fishery.			x																	
		Ecuador. Establish management platform for the longline large pelagic fish fishery.				x																
		Ecuador. Prepare and implement workplan to support the advance and operation of the management platform for the longline large pelagic fish fishery.				x	x	x	x	x	x	x	x	x	x	x	x	x				
		Ecuador. Prepare official national position about regional conservation and management measures for pertinent				x	x	x	x	x	x	x	x	x	x	x	x	x				

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		species covered by the Antigua Convention[38] to be sustained in IATTC meetings (as part of the meetings of the management platform).																				
		Ecuador. Awareness sessions on gender and fisheries for stakeholders of the management platform of the longline large pelagic fish fishery				x				x												
		Ecuador. Annual performance assessment of the management platform for the longline large pelagic fish fishery.								x				x				x				
		[3] Guatemala. Develop the management platform for the dorado and sharks fishery.																				
		Guatemala. Design the management platform for the dorado and sharks fishery (in line with PAN sharks 2021 - 2026).						x														
		Guatemala. Establish the management platform for the dorado and sharks fishery (in line with PAN sharks 2021 - 2026).							x													
		Guatemala. Prepare and implement workplan to support the advance and operation of the management platform for the dorado and sharks fishery.							x	x	x	x	x	x	x	x	x	x	x	x		
		Guatemala. Awareness sessions on gender and fisheries for stakeholders of the management platform of the dorado and shark fishery.							x				x									
		Guatemala. Annual performance assessment of the management platform for the dorado and sharks fish fishery.										x				x				x		
		Guatemala. Prepare financial strategy for the operation of the management platform.											x									
		[4] Panama. Develop the management platform for the shrimp fisheries of the Pacific coast.																				
		Panama. Design the management platform for the shrimp fisheries of the Pacific coast.				x																
		Panama. Establish the management platform for the shrimp fisheries of the Pacific coast.					x															
		Panama. Prepare and implement workplan to support the advance and operation of the management platform for the shrimp fisheries of the Pacific coast.					x	x	x	x	x	x	x	x	x	x	x	x	x	x		
		Panama. Awareness sessions on gender and fisheries for stakeholders of the management platform of the shrimp fisheries of the Pacific coast.						x				x										
		Panama. Annual performance assessment of the management platform for the shrimp fisheries of the Pacific coast.								x				x				x				

[38] This includes tunas, swordfish, marlins, sharks and species that interact with the fishery (seabirds, marine mammals, and sea turtles).

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		[5] Panama. Develop the management platform for the longline fishery for large pelagic fish of the Pacific coast.																				
		Panama. Design the management platform for the longline fishery for large pelagic fish of the Pacific coast.					x															
		Panama. Establish the management platform for the longline fishery for large pelagic fish of the Pacific coast.						x														
		Panama. Prepare and implement workplan to support the advance and operation of the management platform for the longline fishery for large pelagic fish of the Pacific coast.						x	x	x	x	x	x	x	x	x	x	x	x	x		
		Panama. Awareness sessions on gender and fisheries for stakeholders of the management platform of the longline fishery for large pelagic fish of the pacific coast.							x				x									
		Panama. Annual performance assessment of the management platform for the longline fishery for large pelagic fish of the Pacific coast.									x				x				x			
		[6] Senegal. Support the operation of the governance framework for the small pelagic fish fishery.																				
		Senegal. Situation analysis of the governance framework for the small pelagic fish fishery (CNAPP, CNPCM, CLPAs, GIE CONIPAS, FENETRANS[39]).				x																
		Senegal. Assess gender integration in the 2023 sardinellas management plan and propose a complementary GAP.				x																
		Senegal. Implement a workplan to address governance gaps and to promote effective women participation in the governance framework.					x	x	x	x	x	x	x	x	x	x	x	x				
		Senegal. Awareness sessions on gender and fisheries for stakeholders of the governance framework of the small pelagic fish fishery.						x				x										
		Senegal. Annual performance assessment of the management framework for small pelagic fish.								x				x				x				
		[7] Mauritania. Support the management framework of the fishery for small pelagic fish.																				
		Mauritania. Situation analysis of the management structure (CNC-PP, CAAP and CCNADP[40]).			x																	
		Mauritania. Prepare a workplan to support CNC-PP and PAP-PP coordination unit.			x																	
		Mauritania. Implement workplan to strengthen the operation of the CNC-PP.				x	x	x	x	x	x	x	x									

[39] Commission nationale d'Appui à l'Aménagement des Pêcheries (CNAPP), Conseil National Consultatif des Pêches Maritimes(CNPCM), Conseil Local de Pêche Artisanale (CLPA), Groupements d'intérêt économique (GIE), Conseil National Interprofessionnel de la Pêche Artisanale au Sénégal (CONIPAS), Fédération Nationale des Femmes Transformatrices du Sénégal (FENETRANS).

[40] Commission Nationale de Concertation sur les Petits Pélagique (CNC-PP), Commission d'appui à l'aménagement des pêcheries (CAAP), Conseil Consultatif National pour l'Aménagement et le Développement des Pêcheries (CCNADP).

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Mauritania. Awareness sessions on gender and fisheries for stakeholders of the management structure of the small pelagic fish fishery.				x				x												
		Mauritania. Annual assessment of PAP-PP and preparation of annual action plan and budget.				x				x				x				x				
		Mauritania. Annual assessment of governance performance of the management framework of the fishery for small pelagic fish.				x				x				x				x				
		[8] Support collaborative management of small pelagic fish between Morocco and Mauritania.																				
		Prepare joint research workplan to improve estimation of stock condition and allowable catch rate of shared resources.				x																
		Strengthen the implementation of a joint research workplan.				x	x	x	x	x	x	x	x	x	x	x	x	x				
		Undertake and make public joint stock assessments of shared small pelagic fish resources.				x				x				x				x				
		Develop agreed harvest strategy for shared small pelagic fish resources.					x	x	x	x	x	x	x	x								
		Develop agreed protocol to document and report interactions of the small pelagic fleets with ETP species					x	x	x	x	x	x	x	x								
	2.1.2. Eight industry-led verifiable Fishery Improvement Projects that contribute to improved fisheries governance and stock health.	*[1] Ecuador. Support the implementation of the pomada FIP.*																				
		Ecuador. Complete MSC pre-assessment or updated Rapid Assessment (MSC fisheries standard 3.0) and update the FIP scoping document and workplan of the pomada trawl FIP.					x								x							
		Ecuador. Complete MSC pre-assessment or updated Rapid Assessment (MSC fisheries standard 3.0) of the pomada bolso fishery.					x															
		Ecuador. Design improved monitoring system to collect data from pomada trawlers and bolsos in line with the SIAP.		x																		
		Ecuador. Implement improved monitoring system in pomada trawlers in line with SIAP (funded by pomada FIP)			x	x	x	x	x	x	x	x	x	x	x	x	x	x				
		Ecuador. Implement pilot participatory monitoring system with selected pomada bolso organisations.				x	x	x	x	x	x	x	x									
		Ecuador. Training of trawler and bolso fishers on best practice and data collection.				x	x	x	x	x	x	x	x	x	x							
		Ecuador. Assess spatial distribution of population units of pomada.								x	x											
		Ecuador. Stock assessment of pomada.				x				x				x								
		Ecuador. Comprehensive stock assessment of pomada (trawlers and bolsos).																x				
		Ecuador. Train FIP research team (industry and IPIAP) in Risk Based Framework Assessment (RBF)				x																
		Ecuador. Prepare RBF for pomada fishery (funded by pomada FIP).					x									x						

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Ecuador. Prepare social performance risk assessment and workplan for the pomada FIP.				x																
		Ecuador. Implement workplan to address the gaps identified in the social performance risk assessment (funded by pomada FIP).					x	x	x	x	x	x	x	x	x	x	x	x				
		Ecuador. Encourage the integration of bolso fishers into the FIP.											x	x	x	x						
		[2] Ecuador. Launch the ASOAMAN large pelagic fish FIP.																				
		Ecuador. Prepare MSC pre-assessment or Rapid Assessment, FIP scoping document, workplan and budget for the ASOAMAN FIP.				x																
		Ecuador. Update MSC pre-assessment or Rapid Assessment, FIP scoping document, workplan and budget for the ASOAMAN FIP.													x							
		Ecuador. Prepare social performance risk assessment and workplan for the ASOAMAN FIP.					x															
		Ecuador. Implement workplan to address the gaps identified in the social performance risk assessment (funded by ASOAMAN FIP).						x	x	x	x	x	x	x	x	x	x	x				
		Ecuador. Register ASOAMAN FIP in FisheryProgress and FishSource.						x														
		Ecuador. Training of ASOAMAN fishers on best practice and data collection.						x	x	x	x	x	x	x	x	x	x	x				
		Ecuador. Design a traceability system that complies with the SIAP.					x															
		Ecuador. FIP members implement traceability system that complies with the SIAP (funded by ASOAMAN FIP).						x	x	x	x	x	x	x	x	x	x	x				
		Ecuador. Pilot testing of electronic logbook on the fleet.						x	x													
		Ecuador. Long-term implementation of electronic logbook on the ASOAMAN fleet (funded by ASOAMAN FIP).								x	x	x	x	x	x	x	x	x				
		[3] Guatemala. Launch the dorado and sharks FIP.																				
		Guatemala. FIP scoping (supply chain analysis, participants, FIP scope, MSC pre-assessment, draft pre-FIP plan).		x	x	x																
		Guatemala. Organise governance and implementation arrangements for FIP development.				x																
		Guatemala. Prepare MSC pre-assessment or Rapid Assessment, FIP scoping document, workplan and budget for the dorado and sharks FIP.				x	x															
		Guatemala. Update MSC pre-assessment or Rapid Assessment, FIP scoping document, workplan and budget for the dorado and sharks FIP.														x						
		Guatemala. Organise and support FIP research team.					x	x	x	x	x	x	x									

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Guatemala. Prepare social performance risk assessment and workplan for the dorado and sharks FIP.					x															
		Guatemala. Implement workplan to address social risks of the dorado and sharks FIP (funded by the FIP).						x	x	x	x	x	x	x	x	x	x	x				
		Guatemala. Register dorado and sharks FIP in FisheryProgress and FishSource.						x														
		Guatemala. Training of fishers, traders and processors on best practice and data collection.						x	x	x	x	x	x	x	x	x	x	x				
		Guatemala. Design and support initial implementation of electronic logbook on the FIP fleet.							x	x												
		Guatemala. Long-term implementation of electronic logbook on the fleet (funded by the dorado and shark FIP).									x	x	x	x	x	x	x	x				
		Guatemala. Design and initial implementation of traceability system into the supply chain.							x	x	x	x	x									
		Guatemala. Document and disseminate experience and lessons of FIP implementation.								x				x				x				
		[4] Panama. Support the development of a FIP for the shrimp fisheries.																				
		Panama. Assess the situation of the Panamanian shrimp FIPs[41].			x																	
		Panama. FIP scoping (supply chain analysis, participants, FIP scope, MSC pre-assessment, draft pre-FIP plan).			x	x	x															
		Panama. Organise governance and implementation arrangements for FIP development.					x															
		Panama. Prepare MSC pre-assessment or Rapid Assessment, FIP scoping document, workplan and budget for shrimp FIP.					x	x														
		Panama. Update MSC pre-assessment or Rapid Assessment, FIP scoping document, workplan and budget for the shrimp FIP.																x				
		Panama. Organise and initial support of the FIP research team.						x	x	x	x	x	x									
		Panama. Prepare social performance risk assessment and workplan for the shrimp FIP.						x														
		Panama. Implement workplan to address social risks of the shrimp FIP (funded by the FIP).						x	x	x	x	x	x	x	x	x	x	x				
		Panama. Register shrimp FIP in FisheryProgress and FishSource.							x													
		Panama. Training of fishers, traders and processors that are part of the FIP on best practice and data collection.							x	x	x	x	x	x	x	x	x	x				
		Panama. Design and support initial implementation of electronic logbook on the FIP fleet.							x	x												

[41] Until July 2023, the two Panamanian shrimp FIPs were rated “inactive” (https://fisheryprogress.org/fip-profile/inactive-panama-shrimp-bottom-trawl) and “negligible progress” (https://fisheryprogress.org/fip-profile/panama-northern-nylon-shrimp-bottom-trawl).

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Panama. Long-term implementation of electronic logbook on the fleet (funded by the FIP).									x	x	x	x	x	x	x	x				
		Panama. Design and initial implementation of traceability system into the supply chain.									x	x	x	x	x							
		Panama. Stock assessment of shrimp.										x	x						x			
		Panama. Document and disseminate experience and lessons of FIP implementation.									x			x				x				
		[5] Panama. Support the implementation of the large pelagic fish longline FIP																				
		Panama. Establish a cooperation agreement between ARAP and the FIP implementers.			x	x																
		Panama. Update the monitoring system to collect data from the fishing operations and the supply chain.				x																
		Panama. Implement updated monitoring system (funded by the FIP).					x	x	x	x	x	x	x	x	x	x	x	x				
		Panama. Training of FIP fishers on best practice and data collection (e.g., fisheries data, bycatch, ETP species).					x	x	x	x	x	x	x	x	x	x	x	x				
		Panama. Pilot use of electronic monitoring onboard longline vessels.					x	x	x	x	x											
		Panama. Document and distribute lessons from the pilot use of electronic monitoring onboard longline vessels.									x											
		Panama. Prepare social performance risk assessment and workplan for the large pelagic fish FIP.				x																
		Panama. Implement workplan to address social risks (funded by the FIP).					x	x	x	x	x	x	x	x	x	x	x	x				
		[6] Senegal. Launch a small pelagic fish supply chain improvement project in the Joal CLPA.																				
		Senegal. Prepare situation analysis of the supply chain of small pelagic fish in Joal.				x																
		Senegal. Prepare a workplan and budget (in line with domestic market engagement strategy in 1.1.2) for the small pelagic fish supply chain improvement project.					x															
		Senegal. Convene key actors and organise the governance and funding arrangements for a supply chain improvement project.					x															
		Senegal. Implement the small pelagic fish supply chain improvement project in Joal.						x	x	x	x	x	x	x	x							
		Senegal. Seek allies and build strategic partnerships to sustain long-term support to the supply chain improvement project in Joal.					x	x	x	x												
		Senegal. Assess progress and document lessons of the implementation of the small pelagic fish supply chain improvement project in Joal.							x		x		x		x							

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Senegal. Prepare a lessons learned document and recommendations for scaling-up solutions.														x						
		[7] Senegal. Launch octopus FIP.																				
		Senegal. FIP scoping (supply chain analysis, stakeholders, FIP scope, draft pre-FIP plan).		x	x	x																
		Senegal. Define governance and implementation arrangements for FIP development.				x																
		Senegal. Prepare Rapid Assessment, FIP scoping document, workplan and budget for the octopus FIP.				x	x															
		Senegal. Update Rapid Assessment, FIP scoping document, workplan and budget for the octopus FIP.																x				
		Senegal. Organise and support the establishment of a public-private alliance to undertake an applied research plan (funded by the FIP).					x	x	x	x	x	x	x	x	x	x	x	x				
		Senegal. Prepare social risk assessment and workplan for the octopus FIP.					x															
		Senegal. Assessment of the clay pot production value chain and the social and economic condition of women potters.					x															
		Senegal. Implement a workplan to address the social risks of the octopus FIP (funded by the FIP).						x	x	x	x	x	x	x	x	x	x	x				
		Senegal. Design and test a financial mechanism to internalise pot costs into the costs of the product.						x	x	x	x	x	x	x								
		Senegal. Implement a financial mechanism to internalise pot costs into the costs of the product (funded by the FIP).													x	x	x	x	x	x	x	x
		Senegal. Register Senegal´s octopus FIP in FisheryProgress and FishSource.						x														
		Senegal. Document and disseminate experience and lessons of FIP implementation.								x				x				x				
		[8] Mauritania. Support the implementation of the small pelagic fish purse seine FIP.																				
		Mauritania. Support the implementation of a workplan to address the social risks of the FIP (funded by the FIP).			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
		Mauritania. Establish a local FIP coordination team.			x	x	x	x														
		Mauritania. Maintain the operation of the local FIP coordination team (funded by the FIP).					x	x	x	x	x	x	x	x	x	x	x	x	x	x		
		Mauritania. Design and test monitoring system to collect data from the coastal fleet.					x	x														
		Mauritania. Implement monitoring system to collect data from the coastal fleet (funded by the FIP).							x	x	x	x	x	x	x	x	x	x	x	x		
		[9] Mauritania. Support the implementation of the octopus FIP[42].																				

[42] By July 2023 this was a "prospective FIP", see: https://fisheryprogress.org/fip-profile/prospective-mauritania-octopus-bottom-trawl-jig-pottrap

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Mauritania. Prepare social performance risk assessment and workplan for the octopus FIP.				x	x															
		Mauritania. Implement workplan to address social risks of the FIP (funded by the FIP).					x	x	x	x	x	x	x	x	x	x	x	x				
		Mauritania. Design monitoring system to collect data from the three fleets (pirogues, inshore fishing boats, trawlers) based on a public-private alliance among fishers – processors - fisheries research entity.				x																
		Mauritania. Test and adjust monitoring system.					x	x	x													
		Mauritania. Implement improved monitoring system (funded by the FIP).								x	x	x	x	x	x	x	x	x	x	x		
		Mauritania. Strengthen the governance and operation of AMPEP.			x	x	x	x														
	2.1.3. Artisanal and small-scale fishers and local supply chain partners effectively engage into fisheries improvement projects and co-management platforms.	*Ecuador. Development of participatory governance and fisheries co-management skills of pomada bolso fishers' organisations.*																				
		Ecuador. Assessment of social, economic, labour and working conditions of pomada bolos fishers.			x																	
		Ecuador. Assess capacity needs of pomada bolso fishers' organisations to engage into participatory governance and fisheries co-management.			x																	
		Ecuador. Prepare and implement a workplan to support the development of governance and co-management skills of pomada bolso fishers' organisations.			x	x	x	x	x	x	x	x	x	x	x	x	x	x				
		Ecuador. Support the establishment of a coalition of pomada bolso fishers' organisations.					x	x	x													
		Ecuador. Build capacity and develop skills to engage in FIPs.							x	x	x	x										
		Ecuador. Develop capacities and skills to implement a traceability process in line with the SIAP.							x	x	x	x										
		Ecuador. Support the development of capacities to establish alliances for long-term support to the organisations.							x	x	x	x										
		Ecuador. Annual meetings of the pomada bolso fishers' organisations to analyse the condition of the fishery and exchange lessons.						x				x				x						
		Ecuador. Annual review of progress in the development of governance and co-management skills of pomada bolso fishers' organisations.						x				x				x						
		Ecuador. Empowering women pomada peelers to engage into fisheries governance and value chain improvement.																				
		Ecuador. Prepare a register of pomada peeler in Posorja.			x																	
		Ecuador. Prepare a register of pomada peeling facilities (formal and informal) in Posorja (to be funded by SRP).			x																	

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Ecuador. Assessment of social, economic, labour and working conditions of women shrimp peelers in Posorja.			x																	
		Ecuador. Prepare workplan to support the empowerment of women pomada peelers to effectively participate in fisheries governance.				x	x															
		Ecuador. Seek partners and build strategic alliances to sustain long-term support to empower women shrimp peelers.					x	x	x													
		Ecuador. Foster collaboration and trust among women pomada peelers to have a voice in fisheries governance and value chain improvement.					x	x	x	x												
		Ecuador. Support the development of capacities of women pomada peelers to build alliances and establish collaboration with public and private development entities.					x	x	x	x												
		Ecuador. Discussions of labour conditions issues of women pomada peelers in the Dialogue Roundtable and other fora.						x	x	x												
		Guatemala. Development of participatory governance and fisheries co-management skills of artisanal fishers.																				
		Guatemala. Assessment of social, economic, labour and working conditions of fishers and local traders associated to the dorado and sharks fisheries and value chains.			x																	
		Guatemala. Assess the involvement and contributions of women in the dorado and sharks value chains and define a gender strategy to promote their access, participation, decision making and visibility in the value chains.			x																	
		Guatemala. Assessment of capacity needs of artisanal fishers and existing pertinent fishers' organisations to engage into participatory governance and fisheries co-management			x																	
		Guatemala. Prepare and implement workplan to support the development of governance and co-management skills of artisanal fishers and pertinent organisations			x	x	x	x	x	x	x	x	x	x	x	x	x	x				
		Guatemala. Foster collaboration and trust among artisanal fishers to have a joint voice in fisheries management and value chain improvement.					x	x	x													
		Guatemala. Seek and engage partners (CSOs, public, international cooperation) to provide long-term support to artisanal fishers.			x	x	x	x	x													
		Guatemala. Build capacities and develop skills of artisanal fishers to engage in FIPs.							x	x	x	x										
		Guatemala. Annual meetings of the artisanal fishers to promote fisher-to-fisher learning exchange.						x				x				x						
		Guatemala. Annual review of progress in the development of governance and co-management skills of artisanal fishers.						x				x				x						

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Guatemala. Document and disseminate experience and lessons of the development of skills of artisanal fishers.															x					
		Panama. Development of participatory governance and fisheries co-management skills of artisanal shrimp fishers' organisations of the Pacific coast.																				
		Panama. Assessment of social, economic, labour and working conditions of Panamanian artisanal shrimp fishers (including Emberá-Wounaan fishers).				x																
		Panama. Baseline analysis of the conditions of Emberá-Wounaan shrimp fishers, their families, and organisations. (e.g., number of artisanal fishers, conditions of their families, women participation in the shrimp supply chain, use - dependency on the fishery´s resources, actual and past levels of organisation, interests and views to be organised as fishers for this activity). This will include engaging directly with Emberá-Wounaan shrimp fishers to understand and document their concerns and vision.			x																	
		Panama. Assess capacity needs of key artisanal shrimp fishers' organisations[43] to engage into participatory governance and fisheries co-management.					x															
		Panama. Prepare and implement workplan to support the development of governance and co-management skills of key artisanal shrimp fishers' organisations.						x	x	x	x											
		Panama. Build capacities and develop skills to enable effective engagement of key artisanal shrimp fishers' organisations in FIPs.						x	x	x	x											
		Panama. Affirmative action to support organisation process of Emberá-Wounaan artisanal fishers to have a voice and participate in the governance platform						x	x	x	x											
		Panama. Annual meetings of key artisanal shrimp fishers' organisations to analyse the condition of the fishery and exchange lessons.								x			x				x					
		Panama. Annual review of progress in the development of governance and co-management skills key artisanal shrimp fishers' organisations								x			x				x					
		Panama. Identify opportunities for scale-up and long-term support to artisanal shrimp fishers' organisations.						x	x	x	x	x	x	x								
		Senegal. Support strengthening of the national CLPA network.																				
		Senegal. Assessment of the characteristics of operation of the CLPAs and the CLPA network.				x																

[43] Including inactive organisations of Emberá-Wounaan fishers, if pertinent.

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Senegal. Prepare and implement a workplan to strengthen the CLPA coordination network.				x	x	x	x	x	x	x	x	x								
		Senegal. Develop and implement an online platform to facilitate storing and exchanging key information (e.g., acts) among CLPAs					x	x	x	x	x	x	x	x	x	x	x	x				
		Senegal. Seek partnerships for long-term hosting and operation of the CLPAs online information platform.					x	x	x	x												
		Senegal. Prepare and implement a strategy to operationalise the Support Fund for the Operation of CLPAs.					x	x	x	x	x	x	x	x	x	x	x	x				
		Senegal. Strengthen the Joal CLPA.																				
		Senegal. Assessment of capacity needs of the Joal CLPA.				x																
		Senegal. Prepare and implement a workplan to support the development of governance, co-management and administrative skills of the Joal CLPA.					x	x	x	x	x	x	x	x								
		Senegal. Prepare a resource mobilisation strategy for the Joal CLPA.					x															
		Senegal. Seek allies for long-term support of the resource mobilisation strategy.						x	x	x	x	x	x	x								
		Senegal. Semestral review of progress in the capacities of the Joal CLPA.						x		x		x		x								
		Senegal. Empowerment of women processors of the Joal area.																				
		Senegal. Assessment of social, economic, labour and working conditions of women that process small pelagic fish in the Joal area.				x																
		Senegal. Prepare workplan to empower women processors.				x																
		Senegal. Foster collaboration and trust among women processors to have a voice in fisheries governance and value chain improvement.					x	x	x	x	x	x	x	x								
		Senegal. Support improvements in fish processing facilities and processes.					x	x	x	x	x	x	x	x								
		Senegal. Support the development of capacities of women processors to build alliances to sustain long-term support to their work.					x	x	x													
Outcome 2.2. Increased supply of seafood products that demonstrate improved	2.2.1. Two sets of guidelines to mainstream social responsibility into fisheries governance and seafood supply chains.	Prepare a review document with current status, trends, tools and initiatives to integrate social responsibility into fisheries governance and supply chains.		x	x																	
		Prepare evaluation tool and guidelines to integrate social responsibility into fisheries governance processes.				x																
		Disseminate and provide support to key actors of the target fisheries on the use of the self-evaluation tool and guidelines				x	x	x	x	x	x											

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
social responsibility.		to integrate social responsibility into fisheries governance processes.																				
		Evaluate the performance of the self-evaluation tool and guidelines to integrate social responsibility into fisheries governance processes.										x										
		Prepare updated version and disseminate worldwide of the self-evaluation tool and guidelines to integrate social responsibility into fisheries governance processes.										x	x	x								
		Prepare self-evaluation tool and guidelines to integrate social responsibility into seafood supply chains.				x																
		Disseminate and provide support to key actors of the target fisheries on the use of the self-evaluation tool and guidelines to integrate social responsibility into seafood supply chains.				x	x	x	x	x	x											
		Evaluate the performance of the self-evaluation tool and guidelines to integrate social responsibility into seafood supply chains.										x										
		Prepare updated version and disseminate worldwide of the self-evaluation tool and guidelines to integrate social responsibility into seafood supply chains.										x	x	x								
	2.2.2. Nine fisheries management instruments that integrate social and economic objectives and targets.	*Global. Training on Regulatory Impact Assessment in fisheries.*																				
		Global. Prepare training course.				x																
		Global. Implement national training courses in Morocco, Mauritania, and Senegal.					x															
		Global. Implement national training courses in Guatemala, Panama, and Ecuador.					x															
		Global. Publish and disseminate guidelines to conduct RIA in fisheries.						x	x	x												
		Regional. South-South cooperation for the preparation and implementation of fisheries action plans (PACA).																				
		Systematise and distil the Ecuadorian experience with fisheries action plans.					x															
		Organise workshop on preparation and implementation of fisheries action plans.					x	x														
		Foster a community of practice to support the preparation and implementation of fisheries action plans in Ecuador, Guatemala, and Panama.						x	x	x	x	x	x	x	x	x	x	x	x	x		
		Document and disseminate experience and lessons.												x						x		
		Regional. Learning exchange on management plans for small pelagic fish and octopus (CCLME).																				
		Systematise and distil the national experience on formulation and implementation of management plans for small pelagic fish and octopus in Morocco, Mauritania, and Senegal.					x	x														

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Organise workshop to exchange experience and lessons.						x	x													
		Foster a community of practice to address the challenges in implementing management plans for small pelagic fish and octopus in Morocco, Mauritania, and Senegal.							x	x	x	x	x	x	x	x	x	x	x	x		
		Document and disseminate experience and lessons.												x						x		
		[1] Ecuador. Update the PAN pomada 2028 - 2034																				
		Ecuador. Test Regulatory Impact Assessment in the pomada fisheries management framework					x	x														
		Ecuador. Apply social responsibility risk assessment to the pomada governance process and supply chain.					x	x														
		Ecuador. Develop and test impact mitigation strategies to protect the most vulnerable groups (bolso fishers and women pomada peelers).						x	x													
		Ecuador. Assessment of labour and working conditions in pomada shrimp trawlers.					x															
		Ecuador. Prepare and implement an action plan to address labour and working condition gaps in the pomada shrimp trawlers applying regulatory impact assessment.						x	x	x	x											
		Ecuador. Investigate illegal fishing and catch laundering in the pomada value chain.					x															
		Ecuador. RIA of options to eliminate illegal fishing and catch laundering in the pomada value chain.						x	x													
		Ecuador. Prepare and implement a action plan to eliminate illegal fishing and catch laundering in the pomada value chain (based on the results of RIA).							x	x	x	x	x	x	x	x						
		Ecuador. Assessment of PAN pomada 2022 – 2027 iimplementation.																x				
		Ecuador. Participatory process to prepare the new PAN pomada 2028 – 2032.																	x	x		
		Ecuador. Prepare fisheries management plan for pomada (harvest strategy, reference points and harvest control rules).																	x	x		
		Ecuador. Adopt PAN pomada 2028 – 2032.																		x		
		[2] Ecuador. Prepare the PAN large pelagic fish.																				
		Ecuador. Assessment of labour and working conditions in longline vessels.				x																
		Ecuador. Integrate actions into PAN espada to address labour and working condition gaps in the longline vessels applying regulatory impact assessment.					x	x														
		Ecuador. Mid-term assessment of implementation of PAN espada and effectiveness of fishery regulation measures.													x							
		Ecuador. Prepare fisheries management plan for large pelagic fish based on Regulatory Impact Assessment. The management platform will decide on the scope of the PAN,														x	x					

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		to continue focusing only on espada or to integrate all large pelagic fish caught with espinel grueso																				
		Ecuador. Participatory process to prepare the PAN large pelagic fish. The management platform will decide on the scope of the PAN, to continue focusing only on espada or to integrate all large pelagic fish caught with espinel grueso														x	x	x				
		Ecuador. Adopt PAN large pelagic fish.							x													
		[3] Guatemala. Support implementation and update of PAN sharks 2021 – 2026.																				
		Guatemala. Assessment of implementation of PAN sharks.				x								x								
		Guatemala. Participatory process to update the PAN sharks.												x	x	x						
		Guatemala. Undertake Regulatory Impact Assessment of draft PAN sharks.													x	x						
		Guatemala. Adopt PAN sharks. 2027 – 2031.															x					
		Guatemala. Detailed analysis of the domestic consumption and value chain for shark meat, parts, and products and their contribution to food security, livelihoods, and income.			x	x																
		Guatemala. Facilitated intersectoral dialogue on implications of shark consumption on conservation and management measures (e.g., food security, employment).				x	x															
		Guatemala. Implement registry of shark fishers and traders in the main ports of the Pacific coast of Guatemala.				x	x	x	x													
		Guatemala. Prepare and adopt conservation and management measures for sharks caught on the Pacific coast of Guatemala.						x	x													
		Guatemala. Undertake Regulatory Impact Assessment of proposed conservation and management measures.						x	x													
		Guatemala. Evaluate effectiveness of conservation and management measures for sharks caught on the Pacific coast of Guatemala.											x						x			
		Guatemala. Adjust, as pertinent, the conservation and management measures for sharks caught on the Pacific coast of Guatemala.											x	x					x	x		
		Guatemala. Undertake Regulatory Impact Assessment of proposed measures.											x	x					x	x		
		[4] Guatemala. Prepare the action plan for the dorado and sharks fishery.																				
		Guatemala. Participatory process to prepare the action plan for the dorado and sharks fishery based on Regulatory Impact Assessment.							x	x	x											
		Guatemala. Adopt the action plan for the dorado and sharks fishery.									x											

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Guatemala. Mid-term assessment of implementation of the action plan for the dorado and sharks fishery.																	x			
		[5] Panama. Prepare the shrimp management plan.																				
		Panama. Apply Regulatory Impact Assessment to the current shrimp fisheries management framework.					x	x														
		Panama. Assessment of labour and working conditions in shrimp trawlers.				x																
		Panama. Participatory process[44] to prepare the shrimp management plan based on RIA.						x	x	x												
		Panama. Adopt the shrimp management plan.									x											
		Panama. Mid-term assessment of implementation of the shrimp management plan.																		x		
		[6] Panama. Prepare the large pelagic fish management plan.																				
		Panama. Assessment of labour and working conditions in industrial longliners.					x															
		Panama. Apply Regulatory Impact Assessment to the current longline large pelagic fisheries management framework					x	x														
		Panama. Participatory process to prepare the longline large pelagic fish management plan based on RIA.							x	x	x											
		Panama. Adopt the large pelagic fish management plan.										x										
		Panama. Mid-term assessment of implementation of the large pelagic fish management plan.																		x		
		[7] Senegal. Integrate Regulatory Impact Assessment into management framework of the fishery for small pelagic fish.																				
		Senegal. Apply Regulatory Impact Assessment to the management framework of the fishery for small pelagic fish.					x	x														
		Senegal. Social performance risk assessment of the small pelagic fish governance process and supply chain.					x	x														
		Senegal. Facilitated intersectoral dialogue to develop key measures to address the gaps identified in RIA and social responsibility analysis.						x	x	x	x											
		[8] Senegal. Update the octopus management plan.																				
		Senegal. Assessment of octopus management plan implementation.					x															
		Senegal. Participatory process to update the octopus management plan.						x	x													
		Senegal. Adopt updated octopus management plan.								x												
		Senegal. Moroccan technical assistance for the development of the octopus management plan (2016 memorandum of understanding)					x	x	x	x												
		[9] Mauritania. Update the octopus management plan																				

[44] The participatory process will ensure, as appropriate, the involvement of Emberá-Wounaan artisanal shrimp fishers.

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Mauritania. Apply Regulatory Impact Assessment to the current octopus fisheries management framework					x	x														
		Mauritania. Assessment of octopus management plan implementation.					x															
		Mauritania. Participatory process to update the octopus management plan.						x	x													
		Mauritania. Adopt updated octopus management plan.								x												
		[10] Mauritania. Support the implementation of the small pelagic fish management plan of 2022.																				
		Mauritania. Prepare a strategic plan to potentiate added value small pelagic fish products.																				
		Mauritania. Estimates of present and forecast employment and economic contribution of small pelagic fish value chains.				x																
		Mauritania. Study visits and knowledge exchange with Morocco on the production of small pelagic fish added value products and use of fish waste and residues to produce fish meal and oil and other products.					x	x														
		Mauritania. Participatory process to discuss and agree upon a strategic plan to develop the value chains for added value small pelagic fish.						x	x	x												
		Mauritania. Design a national programme to promote seafood consumption (mainly small pelagic fish).																				
		Mauritania. Study on the current national fish and seafood consumption and consumer habits.				x	x															
		Mauritania. Study visit to learn from a successful programme of seafood consumption promotion[45].					x															
		Mauritania. Participatory process to design a national programme to promote seafood consumption (emphasis on small pelagic fish).						x	x	x												
		Mauritania. Mid-term assessment of the PAP-PP.																				
		Mauritania. Mid-term external independent assessment of the implementation of the PAP-PP.											x									
		Regional. Integrate social considerations and targets in COREMAHI´s code of conduct.																				
		Motivate integration of Guatemalan and Panamanian producers and processors.		x	x	x	x	x	x	x												
		Develop social responsibility targets for COREMAHI´s code of conduct.				x																
		Update COREMAHI´s code of conduct to incorporate social responsibility targets and reporting.					x															

[45] The initial choice is the Peruvian national programme "A comer pescado" ("Let's eat fish") which includes the promotion of direct human consumption of the Peruvian anchovy (*Engraulis ringens*) (https://www.gob.pe/acomerpescado). However, the specific programme to visit will be selected during project implementation.

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Implement updated COREMAHI´s code of conduct (funded by the committee members).					x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		Annual self-assessment of the effectiveness of COREMAHI´s code of conduct.					x				x				x				x			
		External independent assessment of the performance and effectiveness of the social responsibility measures and targets of COREMAHI´s code of conduct.													x							
		Disseminate results of the effectiveness and performance of COREMAHI´s code of conduct (funded by COREMAHI).														x	x					
Outcome 2.3. Increased supply of seafood products that demonstrate reduced bycatch and environmental impact.	2.3.1. Three fisheries management instruments that integrate objectives and targets to reduce ecosystem impacts and bycatch.	*[1] Ecuador. Mainstream shark market considerations into PAT-Ec and PAN large pelagic fish.*																				
		Ecuador. Detailed analysis of the domestic consumption market for shark meat and parts (contribution to food security, income and livelihoods).				x																
		Ecuador. Facilitated intersectoral dialogue on implications for shark conservation and management measures.					x	x	x	x												
		Ecuador. Integrate measures and targets on shark bycatch into PAT-Ec, PAN large pelagic fish and pertinent regulations.							x	x	x	x	x	x	x	x	x	x	x	x		
		[2] Guatemala. Implement measures to reduce bycatch of sharks in longline fisheries.																				
		Guatemala. Prepare and adopt regulations to reduce bycatch of sharks in longline fisheries (based on lessons from FIP field tests).										x	x									
		Guatemala. Undertake Regulatory Impact Assessment of proposed measures.										x	x									
		Guatemala. Evaluate effectiveness of regulations to reduce bycatch of sharks in longline fisheries.														x			x			
		Guatemala. Adjust, as pertinent, the regulations to reduce bycatch of sharks in longline fisheries.																	x	x		
		Guatemala. Undertake Regulatory Impact Assessment of proposed measures.																	x	x		
		[3] Panama. Implement measures to reduce bycatch in longline fisheries.																				
		Panama. Prepare and adopt regulations to reduce bycatch in longline fisheries (based on lessons from FIP field tests).										x	x									
		Panama. Undertake Regulatory Impact Assessment of proposed measures to reduce bycatch in longline fisheries.										x	x									
		Panama. Evaluate effectiveness of regulations to reduce bycatch in longline fisheries.														x			x			
		Panama. Adjust, as pertinent, the regulations to reduce bycatch in longline fisheries.																	x	x		

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Panama. Undertake Regulatory Impact Assessment of proposed measures.																	x	x		
		[4] Regional. Strengthen capacities to prepare Non-Detriment Finding Reports for shark species.																				
		Regional meeting to identify barriers and challenges for assessing risks on transboundary shark species.					x															
		Intersectoral training workshops in Guatemala, Panama, and Ecuador to improve preparation of NDFs (emphasis on risk assessment).						x														
		Support to strengthen the national procedures to prepare NDFs for shark species in Guatemala, Panama, and Ecuador.							x	x												
		Bimonthly online regional coordination and experience exchange meetings among national teams in charge of NDFs for shark species.							x	x	x	x	x	x	x	x	x	x				
		In person regional meetings to exchange lessons and experience on the preparation of NDFs for shark species.										x				x						
		[5] Regional. Active role of COREMAHI in the reduction of environmental impact of the longline fishery.																				
		Active engagement of COREMAHI in IATTC SAC meetings and processes (e.g., conservation measures of dorado, sharks and ETP species, dorado scientific regional research plan).		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
		Issue position statements and technical documents to national authorities and IATTC (bycatch issues, conservation measures for dorado, sharks and ETP species).		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
		Annual self-assessment of the effectiveness of COREMAHI´s code of conduct.					x				x				x				x			
		External independent assessment of the performance and effectiveness of the bycatch reduction and ETP conservation measures and targets of COREMAHI´s code of conduct.									x								x			
		Disseminate results of the effectiveness and performance of COREMAHI´s code of conduct (funded by COREMAHI).										x	x							x	x	
		Update COREMAHI´s code of conduct to strengthen bycatch reduction and ETP conservation measures and targets and reporting.									x											
		Implement updated COREMAHI´s code of conduct (funded by the committee members).									x	x	x	x	x	x	x	x	x	x	x	x
	2.3.2. Four FIPs that implement actions to reduce ecosystem impacts and bycatch.	*[1] Ecuador. Incorporate and implement actions to reduce ecosystem impacts and bycatch into the ASOAMAN FIP (funded by the FIP).*				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
		[2] Guatemala. Incorporate and implement actions to reduce ecosystem impacts and bycatch into the dorado and sharks FIP (funded by the FIP).						x	x	x	x	x	x	x	x	x	x	x	x	x		
		[3] Panama. Large pelagic fish FIP.																				

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Panama. Field test of methods to reduce bycatch in the longlines of the large pelagic fish fishery.							x	x												
		Panama. Design and initial implementation of bycatch reduction measures in the longlines of the large pelagic fish fishery (funded by the FIP).									x	x	x	x	x	x						
		Panama. Document and systematise lessons from field test and deployment of bycatch reduction measures in the longlines of the large pelagic fish fishery (funded by the FIP).							x	x	x	x	x	x	x	x						
		[4] Mauritania. Octopus FIP.																				
		Mauritania. Improve monitoring of bycatch and incidental captures of ETP species[46].				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
		Mauritania. Root cause analysis of marine litter produced by plastic octopus pots.					x	x														
		Mauritania. Field test of measures to prevent marine litter from plastic octopus pots.							x	x	x	x	x									
		Mauritania. Publish and disseminate the results of the field test of methods to reduce marine litter caused by plastic octopus pots.												x								
		Mauritania. Scale-up most viable options to reduce marine litter in the fleet associated to the FIP (funded by the FIP).												x	x	x	x	x	x	x		
		Mauritania. Prepare, publish, and disseminate a technical document with the results and lessons of the application of the most viable options to reduce marine litter in the fleet associated to the FIP (funded by the FIP).																		x		
Outcome 3.1. Reliable and verifiable information of sustainability performance of target marine commodities is available to supply chain partners and the public to drive their	3.1.1. The sustainability assessment profiles of all project target fisheries are maintained in FishSource.	Initial training of project stakeholders on the use of FishSource and their indicators and scores.			x																	
		Repeat training as required				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
		Assess current status of the profiles of the target fisheries in FishSource.			x																	
		Update or develop full profiles in FishSource of project target fishery.			x	x	x															
		Update FishSource profiles of target fisheries.									x	x			x	x			x	x		
	3.1.2. The profiles and progress evaluations of all project related FIPs are publicly available.	Initial training of project stakeholders on the use of Fishery Progress and their indicators.			x																	
		Repeat training as required				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
		Review status of target FIP profiles and reports in FishSource and FisheryProgress.			x																	
		Update the profiles and rating of ongoing target FIPs in FishSource.			x	x																

[46] As part of improving the monitoring system of the three fleets, see 2.1.2 above.

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
purchasing decisions.		Facilitate that implementers of ongoing target FIPs have updated reports and information in FisheryProgress.			x	x																
		Develop profiles and ratings of new FIPs in FishSource.					x	x			x	x			x	x			x	x		
Outcome 3.2. Lessons about mainstreaming ecological and social sustainability into seafood supply chains are available worldwide.	3.2.1. Project lessons documented and disseminated.	Form communications working group with partners´ communication officers	x																			
		Prepare project´s communication strategy and multi-year action plan		x																		
		Implement project´s communication strategy			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
		Launch and maintain project website and social networking sites			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
		Prepare project´s knowledge transfer strategy			x																	
		Initiation workshop with national stakeholders on each country.			x																	
		Onsite meetings for self-assessment with key stakeholders on each country (midterm and final).									x									x		
		Prepare and distribute project´s learning documents																	x	x		
		Prepare and distribute project memoirs																	x	x		
		Closing workshop with national stakeholders on each country																		x		
		Participation in IWC2025 y 2027									x							x				
Outcome 4.1. Project-level monitoring and evaluation, in compliance with UNDP and mandatory GEF-specific monitoring and evaluation requirements	Output 4.1.1. Inception Workshop and Report.	Inception workshop		x																		
		Inception workshop report distributed		x																		
	Output 4.1.2. Annual GEF Project Implementation Review (PIR), reports of Board meetings, and monitoring of the indicators of the (i) project results framework, (ii) the GEF core indicators, (iii) the Gender Action Plan, (iv) the Stakeholder Engagement Plan, and (v) the ESMF.	Adjust monitoring and evaluation plan based on outcomes of inception workshop		x																		
		Project board meetings							x				x				x					x
		Prepare annual GEF PIR			x				x				x				x				x	
		Annual measurement of project indicators (project results framework, GEF core indicators, Gender Action Plan, Stakeholder Engagement Plan, ESMF).					x				x				x					x		
		Annual financial audits				x				x				x				x			x	
	Output 4.1.3. Independent Mid-Term Review.	Independent mid-term review										x										

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Outcome	Output	Activities	Y1				Y2				Y3				Y4				Y5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Output 4.1.4. Independent Terminal Evaluation.	Independent final assessment.																		x		
Project closure		Operational closure																		x		
		Prepare final project report																			x	x

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Annex 4: UNDP Social and Environmental Screening Procedure (SESP)

UNDP Social and Environmental Screening Template (v. July 2022)

Project Information

Project Information	
1. Project Title	**Mainstreaming Sustainable Marine Fisheries value chains into a Blue Economy for Targeted Large Marine Ecosystems**
2. Project Number (i.e. Quantum project ID, PIMS+)	6591
3. Location (Global/Region/Country)	Africa and Latin America: Canary Current Large Marine Ecosystem (Morocco, Mauritania, Senegal) and Pacific-Central America Coastal Large Marine Ecosystem (Guatemala, Panama, Ecuador).
4. Project stage (Design or Implementation)	PRODOC (Design)
5. Date	07/08/2023

Part A. Integrating Programming Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Programming Principles in Order to Strengthen Social and Environmental Sustainability?
Briefly describe in the space below how the project mainstreams the human rights-based approach
The project's objective is to mainstream ecological and social aspects of sustainability to foster sustainable fisheries production and improved wellbeing of coastal communities in support of emerging Blue Economies in target countries in Africa and Latin America. It will mainstream the human rights-based approach by: • Supporting actions to ensure sustainable consumption and efficient use of fisheries resources (consistent with the right to food). • Supporting inclusive dialogue and meaningful participation of key stakeholders in project design, implementation, monitoring, evaluation, and learning. Key elements will be the government-led co-management platforms, fisheries improvement projects (FIPs), capacity building activities and value chain roundtables. All this will be coordinated through the project`s Stakeholders Engagement Plan (consistent with participation and inclusion human rights principle). • Supporting the development, roll-out and use of a 'Socially responsible seafood standard' (building on the Monterey Framework for social responsibility), which will include criteria on the protection of human rights. The project will support international and domestic supply chain partners to integrate social responsibility requirements into their purchasing policies and commitments. • Mainstreaming into the fisheries governance platforms, the fisheries management instruments and FIPs the use of tools such as the 'Social Responsibility Assessment' and 'Regulatory Impact Assessment', which will include assessing and addressing any human rights issues. • Providing a grievance mechanism for stakeholders as part of the Stakeholders' Engagement Plan to raise and voice concerns, claims and/or grievances in cases where project interventions may adversely impact stakeholders (consistent with accountability and rule of law human rights principle).
Briefly describe in the space below how the project is likely to improve gender equality and women's empowerment

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Despite progress made in adhering to international agreements and strengthening national regulations on gender equality in the six participating countries, the social and cultural norms, segregation, and the discrepancy between legislation and reality, create obstacles for women to exercise their full rights in these countries, especially in Africa. Public policy instruments specifically related to the fishing sector (such as existing action or management plans for some fisheries) often lack gender considerations, and women participation in decision making in the fishery sector remains weak. Although women in Mauritania, Senegal and Morocco face greater gender and cultural barriers (e.g., participation, engagement) than those faced by women in the three Latin America countries, all six countries face issues related to women's rights to participation, access to resources and decision-making in the value chain of the target fisheries.

The project intends to address this situation during implementation, by providing responses to these limitations, precisely with the objective of improving women representation, participation, and engagement. A gender assessment was done through research and consultations during the development of the PRODOC, to better understand the gender specific conditions related to women barriers for participation in fisheries in each country, in order to mainstream gender considerations into project activities. As a result, the project has included as initial activities at the project start: (i) training in gender equality and women empowerment of the project partners, and the preparation of gender profiles of each target value chain.

Moreover, some specific activities have been included directly into the project design, such as assessing the integration (involvement and contributions) of women and gender considerations in existing fisheries governance platforms and management plans, or the conditions of women in targeted value chains, in order to propose actions to address gaps and supporting the mainstreaming of gender and participation/empowerment of women in the fisheries value chains.

Finally, a Gender Action Plan (GAP) has been prepared to mainstreaming gender and to address the identified barriers. The plan includes measurable indicators related to gender equality and women's empowerment and is adapted to the particular conditions on each country. Most of the measures have been included directly into project activities. As part of the Action Plan, the project will:

- Promote the integration of gender equality as a principle for socially responsible seafood standards, and buyers purchasing policies and commitments;
- Assess gender integration and women conditions in different fisheries;
- Integrate women participation, as much as possible, in the government-led co-management platforms, FIPs, capacity building actions, and fisheries governance processes; and
- Capture and share lessons and good practices about mainstreaming gender issues in fisheries governance and seafood supply chains.

Briefly describe in the space below how the project mainstreams sustainability and resilience

The project aims to integrate and mainstream ecological and social aspects of sustainability in support of emerging blue economies in Africa and Latin America. It will mainstream sustainability and resilience by:

- Increasing the demand for sustainable and socially responsible marine commodities. To increase the demand for sustainable seafood products in global and domestic markets the project will promote that the main buyers adopt social and environmental requirements and standards that contribute to greater social-ecological resilience. It will support improved seafood purchasing policies and target sustainability commitments (fisheries with reduced bycatch and ecosystem impacts) by major supply chain partners in international and domestic markets.
- Increasing the production and supply of sustainable marine commodities. This will be done by motivating resource users and processors in the producing countries to work with governments to develop and run public-private partnerships and initiatives (such as industry-led FIPs, government-led co-management platforms, and collaborative multi-actor research).
- Generating knowledge by developing integrated monitoring, evaluation, and learning systems to measure the effectiveness of the Global Marine Commodities model (GEF Project ID 5271) and to capture and disseminate lessons learned and good practices within and outside the target countries.

Briefly describe in the space below how the project strengthens accountability to stakeholders

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The project strongly supports and incorporates the meaningful participation and inclusion of stakeholders into its activities. Indeed, an output (2.1.1) of the project is focused on supporting the design, strengthening and implementation of national fisheries co-management platforms, roundtables and committees (seven in total) to improve fisheries governance and management. Activities are targeted at assessing the situation/actors in existing platforms, strengthening these or setting up new ones, designing their workplans and assessing their performance, with the goal of improving cooperation, governance and policy coherence. The activities related to the FIPs (output 2.1.2) also include scoping activities of stakeholders, with the goal of organising governance and implementation arrangements for FIP development.

In addition to setting up the fisheries co-management platforms, the project will specifically support artisanal and small-scale fishers and local supply chain partners to effectively engage into these platforms and FIP activities (output 2.1.3). This will include supporting the most vulnerable stakeholders of target supply chains, as well as assessing their social, economic, and labour conditions, assessing their capacity needs, preparing workplans to support their engagement into fisheries governance, building capacities and skills to engage into fisheries governance and the supply chains, and providing material support.

Under output 2.2.2 (i.e., fisheries management instruments that integrate social and economic objectives and targets), activities are included for each target fishery to design these management measures through a participatory process and the application of the Regulatory Impact Assessment tool to generate a whole-of-government response.

Finally, a Stakeholders Engagement Plan (SEP) was also developed to tackle potential limitations for participation, with their pertinent budget for implementation. This SEP also outlines a grievance redress mechanism (GRM) to facilitate that stakeholders and the general public raise concerns, claims and/or complaints in cases where project interventions may adversely impact them. In addition to the project-level GRM mentioned previously, the Social and Environmental Compliance Review Unit (SECU) and Stakeholder Response Mechanism (SRM remain available, and stakeholders will be informed of this option to file a complaint or submit a request.

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QUESTION 2: What are the Potential Social and Environmental Risks? *Note: Complete SESP Attachment 1 before responding to Question 2.*	**QUESTION 3: What is the level of significance of the potential social and environmental risks?** *Note: Respond to Questions 4 and 5below before proceeding to Question 5*			**QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High**
Risk Description (Broken down by event, cause, impact)	***Impact and Likelihood (1-5)***	***Significance (Low, Moderate Substantial, High)***	***Comments (optional)***	***Description of assessment and management measures for risks rated as Moderate, Substantial or High***
Risk 1: The project activities related to the design, reinforcement, support, and implementation of muti-stakeholder co-management platforms for each fishery and to the development of governance arrangements for FIPs, could inadvertently lead to the exclusion of certain stakeholders (in particular smaller scale operations and the most vulnerable, as identified in the SEP) from fully participating in decisions related to fisheries governance and fisheries improvement processes that may affect them.	I = 3 L =3	**Moderate**	The project includes several outputs and activities aimed at improving governance and coordination in fisheries decision making processes, through the design and implementation of a variety of multi-stakeholder and multi-level co-management platforms in Ecuador, Guatemala, Mauritania, Panama and Senegal. This activity could inadvertently exclude certain stakeholder groups (such as smaller fishing communities or operations), if specific measures are not taken to engage and integrate them to these processes. This could also affect the Emberá-Woonan indigenous peoples in Panama (see specific risk 6 on this below). In addition to the risk linked to the design of these platforms, there is a risk linked to their implementation: smaller and more vulnerable key stakeholders could face barriers to engage and participate (barriers such as technical, financial, cultural, gender), leading to unequal representation and unequal sharing of project benefits. Existing power imbalances could also have an effect, with certain groups having more influence than others (e.g., industrial fishers or large seafood processors), leading to decisions that prioritise the interests of more powerful groups.	• The project has already directly integrated many activities to ensure strong stakeholder participation, in particular the most vulnerable (as identified in the SEP). • Several project activities focus on ensuring that the most vulnerable actors in each fishery supply chain are properly engaged to participate (output 2.1.1). This includes assessing the situation/actors in existing platforms, strengthening these, or setting up new ones, designing their workplans and assessing their performance to improve fisheries governance and management. • The project will specifically support artisanal and small-scale fishers and local supply chain partners to effectively engage into these platforms (output 2.1.3) and FIP activities (output 2.1.2). This will include identifying these more vulnerable stakeholders in the supply chain, as well as assessing their social, economic, and labour conditions, assessing their capacity needs, preparing workplans to support their engagement, building capacities and skills to engage, and providing material support. • Several project activities require 'Social Responsibility Assessments'[47] which contains indicators on stakeholder participation and grievance reporting. This tool will apply to activities related to Fishery Improvement Projects (outputs 2.1.2 and 2.2.1) and the governance and supply chains or fisheries (output 2.2.2).

[47] https://media.riseseafood.org/resources/SRAT_20210317_FINAL.pdf

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			Moreover, the participating countries have quite diverse conditions regarding engagement and participation of stakeholders in fisheries decision making, which may in some cases create additional barriers to overcome when developing participatory fisheries co-management platforms, FIPs and buyer engagement programs. Fisheries authorities in Mauritania and Senegal for example have limited capacities to undertake and implement fisheries governance processes.	• The project also intends to develop guidelines to mainstream social responsibility into fisheries governance and seafood supply chain (output 2.2.1), which includes elements on stakeholder participation and grievance reporting. The project activities include disseminating information and providing support to key actors on this. • Activities related to increasing the demand for sustainable seafood (output 1.1.1) also consider scoping and identification of key stakeholders to better inform their engagement strategy. • The project activities (output 1.2.1) include the development of a 'Socially responsible seafood standard' (building on the Monterey Framework for social responsibility, which covers stakeholder participation and grievance reporting)[48], and supporting international and domestic supply chain partners to integrate the social responsibility requirements into their purchasing policies and commitments (outputs 1.2.2 and 1.2.3). Finally, the project also includes a Stakeholder Engagement Plan to foster the involvement of stakeholders' groups along seafood chains and ensure effective, and informed participation. The SEP has identified the most vulnerable stakeholders and integrates specific actions to support the identified vulnerable populations (output 2.1.3). It also includes targeted support to the Emberá-Woonan in Panama once their involvement in the project and details are confirmed by the initial diagnosis and assessment of their conditions (see ESMF risk 6).
Risk 2: The project activities aimed at supporting increased sustainability and social responsibility in target fisheries and supply chains could inadvertently exacerbate economic disparities and increased social inequalities among industry actors.	I= 3 L= 2	**Moderate**	The project aims to facilitate improved seafood purchasing policies and target sustainability commitments by major supply chain partners in international and domestic markets. By pushing for an increase in demand for sustainable seafood, the project could potentially exclude certain smaller/artisanal fishing operations or seafood producers from the market. Indeed, these may struggle to meet stricter criteria (e.g., bureaucracy, certification requirements, increased costs), therefore limiting their access to international markets. At the same time, these measures to increase sustainable	• Many mitigation measures are directly integrated into project activities. As mentioned under risk 1, the project has multiple activities supporting the integration, participation, and engagement of the most vulnerable key stakeholders. This includes the assessment of capacity needs, in order to adapt each action plan to particularities and needs of each actor. It also includes developing guidelines, training, and support. • The project also intends to develop guidelines to mainstream social responsibility into fisheries governance and seafood supply chains (output 2.2.1), which includes elements on 'equal opportunity to benefit'. These

[48] https://riseseafood.org/topics/actioning-the-monterey-framework/

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			seafood demand could favour larger, more financially capable and more technologically advanced fishing operations that have the capacity to adopt new fishing gear modifications or technology, to minimise bycatch for example. The promotion of social responsibility standards has the same risk. If meeting socially responsible standards requires significant investment or certification costs, it may favour larger players in the industry with more resources, potentially leading to market consolidation and reduced opportunities for smaller businesses. If no measures are taken, the project could therefore exacerbate economic disparities in the industry and reinforce existing social inequalities. This could lead to the marginalisation of certain vulnerable key stakeholders.	guidelines will be disseminated to key actors of target fisheries, and support will be provided on the use of these tools. • Multiple project activities, including the FIPs, require the use of the 'Social Responsibility Assessment', which includes criteria on 'equal opportunity to benefit'. This assessment will be applied to activities, and action plans/work plans developed to address identified issues and implement mitigation measures. • The development of the new socially responsible seafood standard (output 1.2.1) will include a phase of piloting, and phases to refine and adjust, which would allow to monitor this potential risk and adapt accordingly. • Finally, the fishery conservation and management measures to be decided during the implementation of the project will all undergo Regulatory Impact Assessment (RIA) (output 2.2.2), which include assessing probable impacts (social, economic, environmental), in order to facilitate choosing the better alternative and designing mitigation or compensation measures as needed.
Risk 3: The project support for improved fisheries conservation and management measures (to address overfishing or improve specific fisheries) may result in access restrictions to fishers, causing economic displacement, loss of jobs and loss of livelihoods to various actors of the target supply chains.	I = 4 L = 3	**Substantial**	The project activities aimed at supporting the development and implementation of new fisheries conservation and management measures (to address overfishing or improve the condition of specific fisheries), may have an impact on existing fishers and businesses practices. These measures may impose restrictions or changes to fishing practices, which could limit or reduce access to existing resources, ultimately leading to economic disruptions and loss of livelihoods for those who depend on it. For example, the pomada shrimp in Ecuador and the small pelagic fish in Mauritania and Senegal are overfished. Promoting management measures to recover the fisheries resources in these countries may entail limiting fishing operations. In Panama, this could potentially affect the Emberá-Woonan indigenous peoples if it is confirmed that they participate in the shrimp sector (see specific risk 6 on this below). Depending on the conservation and management measures adopted, some fishing communities, in particular the most vulnerable (as identified in the SEP)	• As the specific conservation and management measures that will be adopted and implemented by the pertinent national authorities are not yet known and will depend on decisions made during project implementation for each fishery, the project has included as activities the use of impact assessments (i.e., Regulatory Impact Assessment) to ensure these identify and address the relevant social, economic, and environmental risks of the proposed measures. This tool will be applied to each update/preparation of fishery management plans and regulations, and will be followed by the preparation of specific actions to address gaps and/or prevent, mitigate or compensate the impacts as a whole-of-government response. • Moreover, each fishery governance process and supply chain covered in the project will undergo a 'Social Responsibility Assessment', which includes criteria on 'livelihood opportunities secured or improved, including fair access to markets and capabilities to maintain income generation'. • Results from both of these assessments will be integrated

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			could lose their livelihoods through a restriction of fishing rights to a specific resource or area. Changes in fishing operations will also affect fishing-related businesses, potentially leading to job losses and economic disruption for workers in processing and transportation as well.	into the fishery governance or management plans or action plans. • In cases where the RIA identifies specific impacts such as economic displacement or loss of livelihoods that are unavoidable and cannot be compensated by the pertinent authorities as a whole-of-government response the project has included the design of Livelihood Action Plans. • Depending on the assessment of the Emberá-Woonan fishers to be done at the start of the project (see ESMF), this risk may also be addressed if the preparation of an IPP is confirmed.
Risk 4: The project activities focusing on fisheries governance and management may lead to tensions or conflicts among different stakeholders over resource allocation and access (among different fishing communities or supply chain partners, especially if their interests or priorities diverge).	I= 3 L= 3	**Moderate**	The project focus on governance and improved fisheries management will encourage multi-stakeholder participation and decision making. In turn, this could lead to increased tensions and conflicts between these stakeholders. - Conflicts over resource allocation: fisheries co-management platforms will involve decision-making on resource allocation or fishing rights, which can lead to disagreement and conflicts between different user groups, such as commercial fishers, artisanal fishers, recreational fishers, and conservationists, each advocating for their interests. - Conflicts over resource access: as international and domestic markets prioritise sustainably sourced seafood, competition for finite resources might increase, leading to conflicts among fishers and between different stakeholder groups.	• The project includes several activities which can help reduce this risk. The activities focused on creating or reinforcing multi-stakeholder co-management platforms (output 2.1.1) include prior activities targeted at analysing the situation of the existing fisheries governance and platforms (which will include specific conflict assessments, output 2.1.1), to inform the design of workplans to support the operation of the platform. It will help identify particular needs, which could include identifying potential tensions or conflictual issues to address through the support to strengthen the platform. • The project also intends to develop guidelines and support to mainstream social responsibility into fisheries governance and seafood supply chains (output 2.2.1), which includes elements on stakeholder participation and grievance reporting. • The project activities include the development of a 'socially responsible seafood standard' (output 1.2.1) (building on the Monterey Framework for social responsibility which covers stakeholder participation and grievance reporting)[49] The project Stakeholder Engagement Plan includes a grievance redress mechanism.
Risk 5: The project activities promoting and increasing demand for seafood from fisheries with reduced bycatch and ecosystem impacts may	I: 4 L: 2	**Moderate**	By improving fishing practices through demand for sustainable seafood and stricter management measures, there is a risk that some fishers or fishing operations would (willingly or unwillingly) decide, depending on the conditions of the local scenario (e.g., enforcement	• The project is not only focused on supporting the demand for sustainable marine commodities (component 1 activities), it also includes activities to increase the supply (component 2). By acting on both the demand (international and domestic buyers) and supply sides, the

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inadvertently increase incentives for illegal fishing activities in areas where such regulations are not adequately enforced.			capacity), to continue their existing practices. In this case, these would be become illegal fishing operations. This could happen due to the complexities and resources needed to meet sustainability requirements, pushing some operations to continue for economic and social reasons. This can be encouraged by the fact that as demand grows, the supply chain for sustainable marine commodities might become more complex, making it challenging to ensure transparency and traceability throughout the process. This complexity could increase the risk of illegal or unreported fishing practices.	project aims to address this type of risk by supporting the supply chain key stakeholders. • The project includes the development of a 'socially responsible seafood standard' (output 1.2.1) (building on the Monterey Framework for social responsibility, which covers food security)[50], and supporting international and domestic supply chain partners to integrate social responsibility requirements in their policies and commitments (which includes 'livelihood opportunities are secured or improved, including fair access to markets and capabilities to maintain income generation') • Moreover, each FIP and fishery governance process and supply chain covered in the project will undergo a 'Social Responsibility Assessment', which includes criteria on 'livelihood opportunities are secured or improved, including fair access to markets and capabilities to maintain income generation'. • Finally, the fishery management measures decided by the pertinent authorities during the implementation of the project will all undergo Regulatory Impact Assessment (RIA), which includes assessing probable impacts (social, economic, environmental), in order to facilitate choosing the better alternative and designing mitigation /compensation measures as a whole-of-government response
Risk 6: The project activities in Panama in the shrimp sector could potentially affect the Emberá-Wounaan people since some of them may be artisanal shrimp fishers. The main risks of the project activities to this community are related to exclusion from participation in fisheries governance and decision making processes and decision making and the risk of economic displacement if conservation and management	I: 4 L: 3	**Moderate**	In the case of Panama, although there are no indigenous territories (i.e., comarcas) related to the target fisheries, following the stakeholder analysis and assessments done during the PPG (please refer to the SEP for more detail), it was identified that there is a potential involvement of indigenous people in one of the target fisheries. It was identified that a group of individuals participating in artisanal shrimp fishing on the Pacific Coast may be members of the Emberá-Wounaan indigenous people. The competent fishing authority (ARAP) informed the project about the existence of these individuals, but no additional information was provided or able to be gathered during the PPG phase. Indeed, the project currently does not have	• Given the limitations encountered on this matter during the PPG phase, the project has included multiple activities in the PRODOC and SEP to clarify the situation early on, prior to the implementation of any interventions which could affect or impact any Emberá-Woonan arisanal shrimp fishers. This process will ensure to apply Free, Prior and Informed Consent (FPIC), as required by national legislation (Law 37 of 2016) and UNDP Standard 6 on Indigenous Peoples. Depending on the outcome of these assessments, an Indigenous Peoples Plan and Cultural Heritage Plan may need to be prepared. • The project activities and the SEP include several measures to address this risk. The SEP includes specific measures to:

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measures in the shrimp fishery lead to access restrictions.			information to confirm their involvement into the shrimp fishery, their recent or current involvement in artisanal shrimp fishing, or the conditions of these fishers (if confirmed that they participate in the shrimp fishery). There is currently insufficient information available about the number of Emberá-Wounaan artisanal shrimp fishers, their living conditions, their participation in the value chain and dependency of the resource, to be able to assess and address the impact of project activities on them.	○ Document and diagnose the situation of Emberá-Wounaan that may be involved in the artisanal shrimp fisherys on the Pacific coast. This will include identifying conditions (number or fishers, fishing gear, fishing areas, landing ports, catch composition, level of organisation) and the uses of the capture (shrimp and bycatch) (e.g., self-consumption, trade and related supply chain). Their fisheries-related cultural heritage will also be assessed. ○ If their involvement is confirmed through the initial assessment, the project will prepare an IPP (see ESMF), following the requirements from Standard 6 applying FPIC. If their involvement is confirmed, the project has included the following additional activities: ▪ Assess the interest and the capacity needs of the Emberá-Wounaan artisanal shrimp fishers to become organised (fishers' organization or other representative format) to engage with the national fishery governance platform. ▪ Prepare and implement a workplan to support the development of skills of Emberá-Wounaan artisanal shrimp fishers, if they decide so, to participate and engage in fishery governance. This will follow the requirements of the IPP and Standard 6. • Each fishery governance process and supply chain covered in the project will undergo a 'Social Responsibility Assessment', which includes criteria on 'rights and access to resources are respected and fairly allocated and respectful of collective and indigenous rights. • Moreover, as the specific management measures to be taken in the shrimp fishery in Panama are not yet known and will depend on decisions made by the pertinent authority during project implementation, the project has included as an activity the use of Regulatory Impact Assessment to ensure potential risks such as access restrictions and livelihood impacts are identified and

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				assessed. This will be followed by the preparation of specific actions or plans to address gaps and prevent, mitigate or compensate negative impacts as a whole-of-government response (see ESMF for more detail). • In cases where the RIA identifies specific impacts that are unavoidable such as economic displacement or loss of livelihoods, this risk would be addressed through the IPP.
Risk 7: Given the context around gender in the project countries and the fishery sector, there is a risk of exclusion of women from participating in the fisheries governance and fisheries improvement processes promoted by the project.	I: 3 L: 3	**Moderate**	Women's participation in decision-making in the fishery sector remains an issue in all countries, with cultural factors hindering representation in leadership positions and governing bodies. Women in Mauritania, Senegal and Morocco face greater gender and cultural barriers (e.g., participation, engagement) than those faced by women in the three Latin America countries. Women usually lack representation in fisheries associations and fisheries management bodies; thus, they are commonly excluded from decision-making, particularly for the types of decisions that directly affect the resource they depend on. Given this context and the existing barriers highlighted in the gender assessment prepared for the project, there is a risk of women remaining excluded from project activities if no specific measures are taken.	• Given the context around gender in the participating countries and in the fishery sector, the project has integrated specific activities to focus on gender issues in the target supply chains. The project has included as initial activities at the project start the training in gender equality and women empowerment of the project partners, and the preparation of gender profiles of each target value chain. • Moreover, some specific activities have been included directly into the project multi-year workplan, such as assessing the integration (involvement and contributions) of women and gender considerations in existing governance platforms and management plans, or the conditions of women in targeted value chains, in order to propose actions to address gaps and supporting the mainstreaming of gender and participation/empowerment of women in the fisheries value chains. • A Gender Action Plan (GAP) was also prepared for the project, to mainstreaming gender and to address identified barriers. The plan includes measurable indicators related to gender equality and women's empowerment and is adapted to the conditions on each country. •
Risk 8: The project activities focused on tightening market requirements and increasing demand for sustainable seafood could put pressure on the industry to meet the supply, which could potentially lead to labour exploitation and	I: 2 L: 2	**Low**	If not carefully monitored, the increased demand for sustainable seafood could put more pressure on local communities and workers, potentially leading to poor working conditions or labour issues. Moreover, while socially responsible standards aim to improve labour conditions in the seafood industry, there might be challenges in monitoring and enforcement,	• The project includes the development of a 'socially responsible seafood standard' (building on the Monterey Framework for social responsibility, which covers labour rights and conditions, including child and forced labour)[51], and supporting international and domestic supply chain partners to integrate social responsibility requirements in their policies and commitments (which includes indicators on labour). This standard will be piloted and undergo phases to refine, which would allow the opportunity to

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poor working conditions, especially in countries with weaker labour regulations.			especially in countries with weaker governance. There could still be instances of labour exploitation, human rights abuses, and poor working conditions, especially in regions with weak regulatory oversight.	adapt. • Project activities focused on improving participation of small-scale fishers and local supply chain partners in each country include an 'social, economic, labour and working conditions assessment of fisheries' (of women processors, of fishers, of shrimp trawlers, of longline vessels, industrial longliners), and an 'assessment of capacity needs of fisher organisations', with the aim of informing the workplan to support the fishery actors in engaging in the fisheries governance and FIPs. • The project activities related to FIPs and fishery governance will undergo a Social Responsibility Assessment[52] (building on the Monterey Framework for social responsibility) which includes indicators on labour (including child labour, forced labour). For each, this will result in the development and implementation of a workplan to address gaps and mitigate risks.
Risk 9: The project activities focused on increasing demand for sustainable seafood and improving fisheries management could indirectly affect food security of local populations in some countries of the project.	I: 4 L: 2	**Moderate**	While increasing demand for sustainable seafood and improving fisheries governance/management can lead to healthier fish stocks, it could also indirectly impact food security for local populations in countries where seafood is a primary food source like Senegal or the consumption of shark meat in Guatemala and Ecuador. This could impact individuals which are not direct stakeholders of the project and therefore not involved in project activities and decision making. Countries such as Senegal, Mauritania, and Guatemala have high index of moderate or severe food insecurity in the population, exceeding 45%. Senegal is one of the most vulnerable countries, as 30% of the workforce relies on the fishing sector, unlike Guatemala (with the highest food insecurity index), which has less dependence on fishing resources in the economy.	• The project is not only focused on supporting the demand for sustainable marine commodities (component 1 activities), it also includes activities to increase supply (component 2). By acting on both the demand (international and domestic buyers) and supply, the project will avoid creating an imbalance between creating a too strong demand for small supply. • For example, the project will facilitate intersectoral dialogue on implications of specific fishery domestic consumption and trade on conservation and management measures (e.g., food security, employment). The dialogue process will foster policy coherence and an agreed policy framework for conservation, trade, and management measures. It also includes assessments of domestic consumption and value chain for marine resources and the contribution to food security, livelihoods, and income. • The project includes the development of a 'socially responsible seafood standard' (building on the Monterey Framework for social responsibility, which covers food security)[53], integrating it into FishSource, and supporting international and domestic supply chain partners to

[52] https://media.riseseafood.org/resources/SRAT_20210317_FINAL.pdf
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				integrate social responsibility requirements in their policies and commitments (which includes indicators food security). • The project activities related to FIPs and fishery governance will undergo a Social Responsibility Assessment[54], which includes indicators on food security. For each, this will result in the development and implementation of a workplan to address gaps and mitigate risks.
Risk 10: The target fishery resources are affected by climate variability and climate change.	I: 3 L: 3	**Moderate**	Although not a risk induced by the project, it is important to note that the target fisheries in the CCLME and the PACA are affected by climate variability and climate change. In the CCLME, the Atlantic Multidecadal Oscillation (AMO) determine the abundance and migrations of small pelagic fish. Similarly, in PACA, the El Niño Southern Oscillation (ENSO) strongly affect the condition of the populations of shrimps, tunas, billfishes and coastal resources. The AMO and the ENSO affect global climate patterns and marine ecosystems. It is foreseen that AMO influence on global warming will increase during the second half of the twenty-first century and that climate change will generate stronger and more frequent ENSO events.	• The project focus on sustainable fisheries management has mainstreamed this risk and actions to address it. Indeed, by supporting the design and strengthening of fisheries platforms, the implementation of sustainable fishing standards, and the implementation of fishery management measures, the project activities aim to reduce the impacts of climate change on target fisheries.
Risk 11. The project will foster changes in fishing practices that could impact intangible cultural heritage of certain communities	I: 3 L: 2	**Moderate**	Fishing is a rich source of living heritage and seafaring and fishing practices and traditions, which can be considered cultural heritage.	• In order to best anticipate this risk, the project has included a Cultural Heritage Impact Assessment (CHIA), to be prepared at the start of the project (see ESMF). This will aim to identify and document any cultural heritage practices linked to the target fisheries and stakeholders. This will include the vulnerable groups identified in the SEP, and the Emberá-Woonan in Panama if their involvement is confirmed (see ESMF). • If risks to cultural heritage are confirmed during the assessment, a Cultural Heritage Management Plan will be prepared. • The project has included as an activity the use of impact assessments (Regulatory Impact Assessment) to ensure potential risks linked to the design of new fisheries management measures are addressed. This will be aligned with UNDP SES and therefore include risks to cultural heritage (see ESMF).

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	QUESTION 4: What is the overall project risk categorization?				
	Low Risk	☐			
	Moderate Risk	☐			
	Substantial Risk	X			
	High Risk	☐			
	QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are triggered? (check all that apply)				
	Question only required for Moderate, Substantial and High Risk projects				
	Is assessment required? (check if "yes")				***Status? (completed, planned)***
	if yes, indicate overall type and status		X	Targeted assessment(s)	Planned as part of project activities: - Indigenous Peoples Assessment (Emberá-Wounaan) - Assessments of social, economic, labour and working conditions
			X	ESIA (Environmental and Social Impact Assessment)	Scoped ESIA. The scoped ESIA will include four assessments: (i) cultural heritage impact assessment of the target fisheries, (ii) baseline analysis of Emberá-Wounaan artisanal shrimp fishers, (iii) identification of ethnic minorities linked to the target fisheries in Africa.
			☐	SESA (Strategic Environmental and Social Assessment)	
	Are management plans required? (check if "yes)				
	If yes, indicate overall type		X	Targeted management plans (e.g., Gender Action Plan, Emergency	- Gender Action Plan - Stakeholder Action Plan - Livelihood Action Framework - Planned if needed, Livelihood Action Plans, Indigenous

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				Response Plan, Waste Management Plan, others)	Peoples Plan, Cultural Heritage Management Plan

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			X	ESMP (Environmental and Social Management Plan which may include range of targeted plans)	- In response to results of the Scoped ESIA.
			X	ESMF (Environmental and Social Management Framework)	
	Based on identified risks, which Principles/Project-level Standards triggered?		**Comments (not required)**		
	Overarching Principle: Leave No One Behind				
	Human Rights	X			
	Gender Equality and Women's Empowerment	X			
	Accountability	X			
	1. Biodiversity Conservation and Sustainable Natural Resource Management	X			
	2. Climate Change and Disaster Risks	X			
	3. Community Health, Safety and Security	☐			
	4. Cultural Heritage	X			
	5. Displacement and Resettlement	X			
	6. Indigenous Peoples	X			
	7. Labour and Working Conditions	X			
	8. Pollution Prevention and Resource Efficiency	☐			

Final Sign Off

Final Screening at the design-stage is not complete until the following signatures are included

Signature	***Date***	***Description***
QA Assessor		UNDP staff member responsible for the project, typically a UNDP Programme Officer. Final signature confirms they have "checked" to ensure that the SESP is adequately conducted.
QA Approver		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.

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PAC Chair		UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

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Checklist Potential Social and Environmental Risks		
INSTRUCTIONS: The risk screening checklist will assist in answering Questions 2-6 of the Screening Template. Answers to the checklist questions help to (1) identify potential risks, (2) determine the overall risk categorization of the project, and (3) determine required level of assessment and management measures. Refer to the UNDP SES Toolkit for further guidance on addressing screening questions.		
Overarching Principle: Leave No One Behind **Human Rights**		**Answer (Yes/No)**
P.1	Have local communities or individuals raised human rights concerns regarding the project (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
P.2	Is there a risk that duty-bearers (e.g., government agencies) do not have the capacity to meet their obligations in the project?	Yes
P.3	Is there a risk that rights-holders (e.g., project-affected persons) do not have the capacity to claim their rights?	Yes
Would the project potentially involve or lead to:		
P.4	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	Yes
P.5	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups, including persons with disabilities? [16]	Yes
P.6	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalized individuals or groups, including persons with disabilities?	Yes
P.7	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Gender Equality and Women's Empowerment		
P.8	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
Would the project potentially involve or lead to:		
P.9	adverse impacts on gender equality and/or the situation of women and girls?	Yes
P.10	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	Yes
P.11	limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? *For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being*	No
P.12	exacerbation of risks of gender-based violence? *For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc*.	No

[16] Prohibited grounds of discrimination include race, ethnicity, sex, age, language, disability, sexual orientation, gender identity, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender and transsexual people.

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Sustainability and Resilience: Screening questions regarding risks associated with sustainability and resilience are encompassed by the Standard-specific questions below		
Accountability		
Would the project potentially involve or lead to:		
P.13	exclusion of any potentially affected stakeholders, in particular marginalized groups and excluded individuals (including persons with disabilities), from fully participating in decisions that may affect them?	Yes
P.14	grievances or objections from potentially affected stakeholders?	Yes
P.15	risks of retaliation or reprisals against stakeholders who express concerns or grievances, or who seek to participate in or to obtain information on the project?	No
Project-Level Standards		
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management		
Would the project potentially involve or lead to:		
1.1	adverse impacts to habitats (e.g., modified, natural, and critical habitats) and/or ecosystems and ecosystem services? *For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes*	No
1.2	activities within or adjacent to critical habitats and/or environmentally sensitive areas, including (but not limited to) legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	No
1.3	changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	Yes
1.4	risks to endangered species (e.g. reduction, encroachment on habitat)?	No
1.5	exacerbation of illegal wildlife trade?	No
1.6	introduction of invasive alien species?	No
1.7	adverse impacts on soils?	No
1.8	harvesting of natural forests, plantation development, or reforestation?	No
1.9	significant agricultural production?	No
1.10	animal husbandry or harvesting of fish populations or other aquatic species?	No
1.11	significant extraction, diversion or containment of surface or ground water? *For example, construction of dams, reservoirs, river basin developments, groundwater extraction*	No
1.12	handling or utilization of genetically modified organisms/living modified organisms?[17]	No
1.13	utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)[18]	No
1.14	adverse transboundary or global environmental concerns?	No
Standard 2: Climate Change and Disaster Risks		
Would the project potentially involve or lead to:		

[17] See the Convention on Biological Diversity and its Cartagena Protocol on Biosafety.

[18] See the Convention on Biological Diversity and its Nagoya Protocol on access and benefit sharing from use of genetic resources.

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2.1	areas subject to hazards such as earthquakes, floods, landslides, severe winds, storm surges, tsunami or volcanic eruptions?	No
2.2	outputs and outcomes sensitive or vulnerable to potential impacts of climate change or disasters? *For example, through increased precipitation, drought, temperature, salinity, extreme events, earthquakes*	Yes
2.3	increases in vulnerability to climate change impacts or disaster risks now or in the future (also known as maladaptive or negative coping practices)? *For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding*	No
2.4	increases of greenhouse gas emissions, black carbon emissions or other drivers of climate change?	No
Standard 3: Community Health, Safety and Security		
Would the project potentially involve or lead to:		
3.1	construction and/or infrastructure development (e.g. roads, buildings, dams)? (Note: the GEF does not finance projects that would involve the construction or rehabilitation of large or complex dams)	No
3.2	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	No
3.3	harm or losses due to failure of structural elements of the project (e.g. collapse of buildings or infrastructure)?	No
3.4	risks of water-borne or other vector-borne diseases (e.g. temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	No
3.5	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	No
3.6	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g. food, surface water purification, natural buffers from flooding)?	No
3.7	influx of project workers to project areas?	No
3.8	engagement of security personnel to protect facilities and property or to support project activities?	No
Standard 4: Cultural Heritage		
Would the project potentially involve or lead to:		
4.1	activities adjacent to or within a Cultural Heritage site?	No
4.2	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	No
4.3	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	Yes
4.4	alterations to landscapes and natural features with cultural significance?	No
4.5	utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	No
Standard 5: Displacement and Resettlement		
Would the project potentially involve or lead to:		
5.1	temporary or permanent and full or partial physical displacement (including people without legally recognizable claims to land)?	No

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5.2	economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	Yes
5.3	risk of forced evictions?[19]	No
5.4	impacts on or changes to land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No
Standard 6: Indigenous Peoples		
Would the project potentially involve or lead to:		
6.1	areas where indigenous peoples are present (including project area of influence)?	Yes
6.2	activities located on lands and territories claimed by indigenous peoples?	No
6.3	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? *If the answer to screening question 6.3 is "yes", then Standard 6 requirements apply, and the potential significance of risks related to impacts on indigenous peoples must be Moderate or above.* *	Yes
6.4	the absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources? *Consider, and where appropriate ensure, consistency with the answers under Standard 5 above*	No
6.7	adverse impacts on the development priorities of indigenous peoples as defined by them?	No
6.8	risks to the physical and cultural survival of indigenous peoples?	No
6.9	impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices? *Consider, and where appropriate ensure, consistency with the answers under Standard 4 above.*	No
Standard 7: Labour and Working Conditions		
Would the project potentially involve or lead to: (note: applies to project and contractor workers)		
7.1	working conditions that do not meet national labour laws and international commitments?	Yes
7.2	working conditions that may deny freedom of association and collective bargaining?	No
7.3	use of child labour?	No
7.4	use of forced labour?	No
7.5	discriminatory working conditions and/or lack of equal opportunity?	Yes
7.6	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	No

* Note: revised July 2022 modifying presumption of risk significance from Substantial or higher to Moderate or higher.

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[19] Forced eviction is defined here as the permanent or temporary removal against their will of individuals, families or communities from the homes and/or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection. Forced evictions constitute gross violations of a range of internationally recognized human rights.

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Standard 8: Pollution Prevention and Resource Efficiency		
Would the project potentially involve or lead to:		
8.1	the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No
8.2	the generation of waste (both hazardous and non-hazardous)?	No
8.3	the manufacture, trade, release, and/or use of hazardous materials and/or chemicals?	No
8.4	the use of chemicals or materials subject to international bans or phase-outs? *For example, DDT, PCBs and other chemicals listed in international conventions such as the Montreal Protocol, Minamata Convention, Basel Convention, Rotterdam Convention, Stockholm Convention*	No
8.5	the application of pesticides that may have a negative effect on the environment or human health?	No
8.6	significant consumption of raw materials, energy, and/or water?	No

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Annex 5: UNDP Risk Register

#	Event/ Description	Cause	Impact(s)	Risk Category and Sub-category	Impact, Likelihood & Risk Level	Risk Valid From/To	Risk Owner	Risk Treatment / Management Measures
1	Changes in government priorities.	General elections and political changes	Increased or decreased support to fisheries management and improvements of seafood supply chains	7. Strategic 7.5. Government commitment 7.7. Alignment with national priorities	Substantial Likelihood: highly likely (4) Impact: extensive (4)	2024-2030	UNDP country offices in Ecuador, Guatemala, Mauritania, Morocco and Senegal.	When the new authorities assume office the UNDP Country Office will make the necessary arrangements to present the project and to establish communication channels with the pertinent authorities.
2	Changes in political directions and priorities of fisheries authorities.	Frequent changes of fisheries and environmental authorities and key officers (e.g., ministers, undersecretaries, directors)	Increased or decreased support to fisheries management and improvements of seafood supply chains	7. Strategic 7.5. Government commitment 7.6. Change/turnover in government	Substantial Likelihood: highly likely (4) Impact: extensive (4)	2024-2030	UNDP country offices in Ecuador, Guatemala, Mauritania, Morocco and Senegal. Project Management Unit.	The Project Management Unit will maintain ongoing fluid communication with project partners and stakeholders. At any time that new authorities assume office, there will be a formal presentation of the project document, implementation progress, management arrangements and the roles and contributions of the entity.
3	Political instability and civil unrest.	Domestic tensions, protests[55].	Security risks and project delays.	8. Safety and Security 8.2. Political instability 8.5. Civil unrest	Substantial Likelihood: highly likely (4) Impact: extensive (4)	2024-2030	UNDP country offices in Ecuador, Guatemala, Mauritania, Morocco and Senegal. Project Management Unit.	The Project Management Unit will monitor security advice news from specialised portals and international platforms. UNDP Country Offices will advise on how to proceed under tense circumstances.
4	Illegal activities associated with fisheries.	Contamination of seafood supply chains by drug trafficking and related illegal activities (mainly in PACA countries)	Violence and insecurity in fishing communities and the development of related illicit activities (e.g., money laundering, human and wildlife trafficking).	8. Safety and Security 8.4. Crime	Substantial Likelihood: highly likely (4) Impact: extensive (4)	2024-2030	UNDP country offices in Ecuador, Guatemala, and Panama. Project Management Unit.	The Project Management Unit will monitor the conditions on the news and specialised portals (e.g., InSight Crime, UNODC) to avoid unnecessary risks and to adjust the project strategy and operational plans as pertinent. UNDP Country Offices will advise on how to proceed under tense circumstances. The PMU will motivate that the issues of drug-trafficking and related illicit activities is discussed in the fisheries co-management platforms, the FIPs and the fisheries management plans of the PACA countries.
5	Disinterest of key stakeholders in participating in co-management platforms and FIPs.	Previous bad experiences with participatory processes (e.g., exclusion from decision-making, perceived lack of	Weak co-management processes.	7. Strategic 7.3. Stakeholder relations and partnerships	Substantial Likelihood: Moderately (3) Impact: extensive (4)	2024-2030	Project Management Unit.	The fisheries officers of the PMU and the pertinent fisheries authorities will provide information and guidance to all stakeholders to motivate their

[55] During the project preparation phase there were incidents of civil unrest in Senegal and political instability in Ecuador. Currently (September 2023) there is tension in the Sahel after the recent coup in Niger and post-election political turmoil in Guatemala.

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#	Event/ Description	Cause	Impact(s)	Risk Category and Sub-category	Impact, Likelihood & Risk Level	Risk Valid From/To	Risk Owner	Risk Treatment / Management Measures
		legitimacy of management regimes), perverse incentives to race-to-fish, marked reluctance to adhere to regulations established by the state and to invest in fisheries and supply chain improvements.						engagement into the co-management platforms and FIPs.
6	Impacts of El Niño Southern Oscillation (ENSO) and Pacific Decadal Oscillation (PDO).	ENSO and PDO are natural climate fluctuations that generate major changes in conditions of the marine environment (e.g., habitats and marine food webs).	Drastic changes in abundance and price of target resources (e.g., dorado, shrimps, small pelagic fish). Reduced livelihoods and loss of assets of fishing communities (e.g., floods, road damages).	8. Safety and Security 8.6. Natural hazards	Substantial Likelihood: highly likely (4) Impact: extensive (4)	2024-2030	Project Management Unit.	During project implementation climate conditions and ENSO and PDO indexes will be monitored, mainly through NOAA climate prediction centre. Annual workplans will be adjusted, as needed, to cope with the impacts of ENSO and PDO events
7	Climate change	Global warming caused by human activities.	Climate change might result in stronger and more frequent climate fluctuations (e.g., stronger and more frequent ENSO events).	1.Social and Environmental 1.5. Climate change and disaster risks.	Substantial Likelihood: highly likely (4) Impact: extensive (4)	2024-2030	Project Management Unit.	During project implementation the potential impacts of climate change will be always considered into planning and decision making as well as proposed for discussion on the co-management platforms and the FIPs.
8	Major domestic buyers unwilling to mainstream sustainability considerations into their purchasing decisions	Target domestic markets not used to deal with and demand for sustainable seafood.	Domestic end buyers (e.g., wholesalers, retailers) reluctant to engage into dealing with sustainable seafood products.	7. Strategic 7.3. Stakeholder relations and partnerships Market conditions	Moderate Likelihood: highly likely (4) Impact: intermediate (3)	2024-2030	Project Management Unit.	During the implementation of the buyer engagement trials and pilot direct contact will be made with domestic buyers to identify those who are more sensible to these matters, probably for reputational reasons.

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Annex 6: Overview of Technical Consultancies/Subcontracts

Consultant	Time Input	Tasks, Inputs and Outputs
For Project Management		
Local / National contracting		
Project Coordinator Rate: USD6,000/month	60 months over 5 years	The Project Coordinator (also called project manager) heads the project management unit. This person will ensure adequate project implementation and the generation of the outputs and outcomes set in the project document. In addition, the Project Coordinator will ensure adequate administrative, logistic, and financial support for project execution. This person will be responsible for the day-to-day management of the project on behalf of the Implementing Partner. This includes guiding technical and strategic actions, the mobilisation of resources, contract management, budget management, bookkeeping, procurement and supervision of project staff, consultants, subcontractors, and responsible parties (in case these are designated during project execution). <u>Duties and Responsibilities</u> This person will be responsible for: 1. An adequate technical, administrative, and financial implementation of the project according to the approved annual work plan and the PRODOC. 2. Acting as the authorizing officer for the requirements to UNDP of disbursements of project funds. 3. Providing strategic guidance to the members of the project team and ensuring the logistic, administrative, and financial effectiveness of the project unit. 4. Providing operative, administrative, and financial direction and guidance to the members of the project unit. 5. Promoting the coordination and fluent communication among the partners of the project, key stakeholders, and project beneficiaries. As well as with other entities related to the project or which contribute to the project (e.g., civil society organizations, international organisations, other projects). 6. Receive and respond or solve the requests / claims / concerns submitted by stakeholders as part of the Grievance Mechanism in coordination with the Gender, Safeguards, and Participation Consultant. Those cases without a solution at this level should be brought to the attention of the Project Board. In addition, this person will coordinate the following: 1. Preparation of technical, administrative and financial reports, work plans, budget, and accounting records. 2. Preparation of terms of reference, specifications and other documents required for hiring personnel, goods, and services. 3. Identification and selection of consultants and supervision of consultancies and other goods and services providers. 4. Supervision of project tasks, to be accomplished on time and efficiently. 5. Organisation of events, workshops and other activities indicated in the PRODOC. Specific responsibilities of the Project Coordinator include: 1. Manage the technical, administrative and financial aspects of the project. 2. Plan the technical, administrative and financial activities of the project and monitor progress against the project results framework and the approved annual workplan. 3. Provide technical, administrative, and financial direction and guidance to the project team. 4. Liaise with the Project Board to assure the overall direction and integrity of the project. 5. Monitor events as determined in the project monitoring plan, and update the plan as required. 6. Provide support for completion of assessments required by UNDP, spot checks and audits. 7. Monitor project progress, identify plan deviations, and make course corrections when needed within project board-agreed tolerances to achieve results. 8. Ensure that changes are controlled, and technical problems addressed. 9. Perform regular progress reporting to the project board as agreed with the board, including measures to address challenges and opportunities. 10. Manage and monitor the project risks – including social and environmental risks - initially identified and submit new risks to the project board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log.

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Consultant	Time Input	Tasks, Inputs and Outputs
		11. Oversee that project lessons are documented during implementation. 12. With support of the administrative assistant, keep records of project funds and expenditures and ensure all project-related financial documentation are well maintained and readily available. 13. With support of the administrative assistant, review project expenditures and ensure that project funds are used in compliance with the project document and the pertinent financial rules and procedures. 14. Provide necessary financial information as and when required for project management decisions. 15. Provide necessary financial information during project audits. 16. With support of the administrative assistant, consolidate financial progress reports submitted by the responsible parties for implementation of project activities. 17. Execute activities by managing personnel, goods and services, training, and low-value grants (if applicable), including drafting terms of reference and work specifications, and overseeing all contractors' work. 18. Identify and obtain any support and advice required for the management, planning and control of the project. 19. Provide support for completion of assessments required by UNDP, spot checks and audits. 20. Manage requests for the provision of UNDP financial resources through funding advances, direct payments or reimbursement using the Funding Authorization and Certificate of Expenditures (FACE) form. 21. Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports. 22. Monitor progress watch for plan deviations and make course corrections when needed within project board-agreed tolerances to achieve results. 23. Prepare and submit financial reports to UNDP on a quarterly basis. 24. Ensure that changes are controlled, and administrative and financial problems addressed. 25. Perform regular administrative and financial progress reporting to the project board as agreed with the board, including measures to address challenges and opportunities. 26. Prepare revisions to the multi-year workplan, as needed, as well as annual and quarterly plans if required. 27. Prepare the GEF PIR with support of the project team. 28. Based on the GEF PIR, prepare the annual workplan for the following year. 29. Prepare the inception report no later than one month after the inception workshop. 30. Implement the necessary administrative and financial processes to ensure that the indicators included in the project results framework are monitored annually in advance of the GEF PIR submission deadline so that progress can be reported in the GEF PIR. 31. Assess major and minor amendments to the project within the parameters set by UNDP-GEF. 32. Execute the necessary technical, administrative and financial processes to ensure that the gender action plan, stakeholder engagement plan, monitoring and evaluation plan and any environmental and social management plans are implemented. 33. Ensure that the midterm review process is undertaken as per the UNDP guidance and submit the final MTR report (including the corresponding management response and follow-up actions) to the project board. Ensure that administrative and financial MTR recommendations are properly reflected in the subsequent Annual Work Plan and budget. 34. Ensure that the terminal evaluation process is undertaken as per the UNDP guidance and submit the final TE report (including the management response) to the project board.
Administrative assistant Rate: USD3,100/month	60 months over 5 years	This person will keep the necessary records, prepare financial and operative information, consolidate accounting information, and provide administrative, logistic and financial support to all activities carried out in the six countries. Under the guidance and supervision of the Project Coordinator, this person will carry out the following tasks: 1. Keep records of project funds and expenditures and ensure all project-related financial documentation are well maintained and readily available when required by the project coordinator. 2. Review project expenditures and ensure that project funds are used in compliance with the project document and the pertinent financial rules and procedures. 3. Provide necessary financial information as and when required for project management decisions.

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Consultant	Time Input	Tasks, Inputs and Outputs
		4. Provide necessary financial information during project audits. 5. Review annual budgets and project expenditure reports and notify the project coordinator if there are any discrepancies or issues. 6. Consolidate financial progress reports submitted by the responsible parties for implementation of project activities.
For Technical Assistance		
Outcomes 1.1 to 3.2		
Local / National contracting		
Fisheries Officer CCLME Rate: USD5,000/month	60 months / over 5 years	This person will be responsible for ensuring that national governance platforms and fisheries management plans are adequately supported in the three participating countries that are part of the Canary Current Large Marine Ecosystem. This person must ensure the generation of the outputs and outcomes specified in the PRODOC (mainly outcomes 2.1, 2.2 and 2.3), according to the required quality standards, and within time and costs restrictions. This person will be responsible for: 1. Ensuring fluid communication with project partners, responsible parties (if pertinent), and key stakeholders. 2. The development of the fisheries management platforms (2.1.1) and the capacity development activities (2.1.3) in the CCLME countries. Support the collaborative work between Morocco and Mauritania for the management of small pelagic fish, including the preparation of the joint research plan (2.1.1). 3. Support the development of the FIPs in the CCLME countries (2.1.2). 4. Support the implementation or preparation of fisheries management plans and the application of Regulatory Impact Assessment in the CCLME countries (2.2.1). Ensuring that the management plans integrate social, economic, and by-catch | ecosystem impact reduction objectives and targets. 5. Organise the learning exchange on management plans for small pelagic fish and octopus (2.2.2). 6. Work with SFP FishSource specialists to develop the fisheries profiles for the CCLME fisheries. 7. Support the development of the socially responsible seafood standards and the application of the reduced by-catch and ecosystem impacts standard to the project target fisheries. 8. Ensuring a prompt delivery of outputs and the generation of project outcomes. 9. Keeping an adequate and fluent communication and collaboration with project key stakeholders and partners. 10. Keeping an adequate and fluent communication and collaboration with the rest of the members of the project unit. 11. Preparing the draft annual work plan with the corresponding budget for the pertinent project outcomes. 12. Support the implementation of the ESMF management measures in close coordination with the Gender, Safeguards, and Participation Consultant. 13. Receive and respond or solve the requests / claims / concerns submitted by stakeholders as part of the Grievance Mechanism in coordination with the Gender, Safeguards, and Participation Consultant and the Project Coordinator. 14. Promoting communication and sharing experiences among project partners, stakeholders, and direct beneficiaries from the countries. 15. Contributing to the monitoring of project indicators, providing inputs in order that these subjects be analysed and included in the PIR, MTR and terminal evaluation. 16. Providing information and support for the preparation of quarterly progress reports, annual project implementation reports, the mid-term review, and the terminal evaluation.
Fisheries Officer PACA Rate: USD5,000/month	60 months / over 5 years	This person will be responsible for ensuring that national governance platforms and fisheries management plans are adequately supported in the three participating countries that are part of the Pacific Central American Coastal Large Marine Ecosystem. This person must ensure the generation of the outputs and outcomes specified in the PRODOC (mainly outcomes 2.1, 2.2 and 2.3), according to the required quality standards, and within time and costs restrictions. This person will be responsible for: 1. Ensuring fluid communication with project partners, responsible parties (if pertinent), and key stakeholders.

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Consultant	Time Input	Tasks, Inputs and Outputs
		2. The development of the fisheries management platforms (2.1.1) and the capacity development activities (2.1.3) in the PACA countries. Organise the south-south cooperation on fisheries action plans among Ecuador, Guatemala, and Panama (2.2.2) and the regional work with COREMAHI (2.2.2, 2.3.1). 3. Support the development of the FIPs in the PACA countries (2.1.2). 4. Support the implementation or preparation of fisheries management plans and the application of Regulatory Impact Assessment in the PACA countries (2.2.1). Ensuring that the management plans integrate social, economic, and by-catch | ecosystem impact reduction objectives and targets. 5. Work with SFP FishSource specialists to develop the fisheries profiles for the PACA fisheries. 6. Support the development of the socially responsible seafood standards and the application of the reduced by-catch and ecosystem impacts standard to the project target fisheries. 7. Ensuring a prompt delivery of outputs and the generation of project outcomes. 8. Keeping an adequate and fluent communication and collaboration with project key stakeholders and partners. 9. Keeping an adequate and fluent communication and collaboration with the rest of the members of the project unit. 10. Preparing the draft annual work plan with the corresponding budget for the pertinent project outcomes. 11. Support the implementation of the ESMF management measures in close coordination with the Gender, Safeguards, And Participation Consultant. 12. Receive and respond or solve the requests / claims / concerns submitted by stakeholders as part of the Grievance Mechanism in coordination with the Gender, Safeguards, and Participation Consultant and the Project Coordinator. 13. Promoting communication and sharing experiences among project partners, stakeholders, and direct beneficiaries from the countries. 14. Contributing to the monitoring of project indicators, providing inputs in order that these subjects be analysed and included in the PIR, MTR and terminal evaluation. 15. Providing information and support for the preparation of quarterly progress reports, annual project implementation reports, the mid-term review, and the terminal evaluation.
Market Development consultant Rate: USD5,000/month	54 months / over 5 years	This person will be responsible for ensuring that buyers incorporate considerations about social responsibility and reduced bycatch or environmental impact into their purchasing policies and sustainability commitments. This person will provide a market perspective to all the project and will closely collaborate with SFP´s seafood market specialists. The Market Development consultant must ensure the generation of the outputs and outcomes specified in the PRODOC (mainly outcomes 1.1., 1.2 and 1.3), according to the required quality standards, and within time and costs restrictions. This person will be responsible for: 1. Ensuring fluid communication with project partners, responsible parties (if pertinent), and key stakeholders. 2. The design and implementation of buyer engagement activities at the international and domestic level, the development of the responsible seafood standard and indicator set and the application of the reduced by-catch standard and ecosystem impact standard. 3. Promoting linkages among FIP implementers and pertinent buyers. 4. Providing guidance for the development of the management platforms, fisheries management plans and FIPs. 5. Ensuring a prompt delivery of outputs and the generation of project outcomes. 6. Keeping an adequate and fluent communication and collaboration with project key stakeholders and partners. 7. Keeping an adequate and fluent communication and collaboration with the rest of the members of the project unit. 8. Preparing the draft annual work plan with the corresponding budget for the pertinent project outcomes. 9. Support the implementation of the ESMF management measures in close coordination with the Gender, Safeguards, and Participation Consultant. 10. Promoting communication and sharing experiences among project partners, stakeholders, and direct beneficiaries from the countries. 11. Contributing to the monitoring of project indicators, providing inputs in order that these subjects be analysed and included in the PIR, MTR and terminal evaluation.

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Consultant	Time Input	Tasks, Inputs and Outputs
		12. Providing information and support for the preparation of quarterly progress reports, annual project implementation reports, the mid-term review, and the terminal evaluation.
FIPs consultant Rate: USD5,000/month	54 months / over 5 years	This person will be responsible for ensuring that the FIPs are adequately supported ensuring that the producers and processors lead these processes. This person must ensure the generation of the outputs and outcomes specified in the PRODOC (mainly outcomes 2.1, 2.2 and 2.3), according to the required quality standards, and within time and costs restrictions. This person will be responsible for: 1. Ensuring fluid communication with project partners, responsible parties (if pertinent), and key stakeholders. 2. Ensuring the development of the project´s target FIPs (outputs 2.1.2 and 2.3.2) and adapting the FIPs´ world-class learning to develop a supply chain improvement project in Senegal. 3. Supporting the work on fisheries management platforms (2.1.1), the capacity development activities (2.1.3), and the implementation or preparation of fisheries management plans (2.2.1). 4. Work with SFP FishSource specialists to develop the pertinent FIP profiles. 5. Ensuring a prompt delivery of outputs and the generation of project outcomes. 6. Keeping an adequate and fluent communication and collaboration with project key stakeholders and partners. 7. Keeping an adequate and fluent communication and collaboration with the rest of the members of the project unit. 8. Preparing the draft annual work plan with the corresponding budget for the pertinent project outcomes. 9. Support the implementation of the ESMF management measures in close coordination with the Gender, Safeguards, and Participation Consultant. 10. Promoting communication and sharing experiences among project partners, stakeholders, and direct beneficiaries from the countries. 11. Contributing to the monitoring of project indicators, providing inputs in order that these subjects be analysed and included in the PIR, MTR and terminal evaluation. 12. Providing information and support for the preparation of quarterly progress reports, annual project implementation reports, the mid-term review, and the terminal evaluation.
Gender, Safeguards, and Participation Consultant Rate: USD5,000/month	30 months / over 5 years	This person will have three basic functions: 1. To guarantee the integration of social and gender perspectives in the implementation of the project. 2. To ensure effective engagement and participation of the key stakeholders and direct beneficiaries of the project. 3. To ensure that GEF and UNDP safeguards are complied, monitored, and reported. This person will be responsible for: 1. At the beginning of the project organise the introductory training for the project personnel and partners (including members of the Project Board and the Technical Advisory Group) in gender issues, cultural sensitivity, and use of inclusive language. Subsequently, provide induction in these areas to new people who join the work team. 2. Coordinating the implementation of the gender action plan (Annex 9 of the PRODOC), the stakeholder engagement plan (Annex 7 of the PRODOC) and the environmental and social management framework (Annex 8 of the PRODOC). 3. Guiding the project team on: ▪ Development and implementation of participatory processes and multi-level dialogue among key stakeholders. ▪ Culture-sensitive practices, social inclusion, and gender mainstreaming. ▪ Use of inclusive and gender-inclusive language. ▪ Application of the UNDP's Social and Environmental Screening Procedure (SESP) for screening, identification and management of social and environmental risks that may arise during project implementation. 4. Ensuring that all project actions properly engage key stakeholders and include gender and intergenerational considerations. 5. Ensuring that the Grievance Mechanism is being applied, as well as receive and respond or solve the request/claims/concern submitted by stakeholder in coordination with the Project Coordinator.

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Consultant	Time Input	Tasks, Inputs and Outputs
		6. Ensuring that the project´s experience notes, results notes, and learning systematization documents address gender, intergenerational and social matters. 7. Guaranteeing the application of the following policies, strategies, and guidelines: ▪ GEF policy on public involvement and the corresponding guidelines. ▪ GEF policy on gender equality and the corresponding guidelines. ▪ GEF policy on stakeholder engagement. ▪ GEF principles and guidelines for engagement with Indigenous peoples. ▪ UNDP gender equality strategy 2018-2021. ▪ Guide to gender mainstreaming in UNDP supported GEF financed projects. ▪ UNDP information disclosure policy. ▪ Stakeholder response mechanism which is part of the UNDP´s accountability mechanism. 8. Ensuring a prompt delivery of outputs and the generation of project outcomes. 9. Preparing the draft annual work plan with the corresponding budget for the gender action plan, the stakeholder engagement plan and the environmental and social management plan. 10. Keeping an adequate and fluent communication and collaboration with project key stakeholders and partners. 11. Keeping an adequate and fluent communication and collaboration with the rest of the members of the project unit. 12. Promoting communication and sharing experiences among project partners, stakeholders, and direct beneficiaries from the countries. 13. Contributing to the monitoring of indicators, related to gender and engagement of key stakeholders and beneficiaries, providing inputs in order that these subjects be analysed and included in the PIR, MTR and terminal evaluation. 14. Providing information and support for the preparation of quarterly progress reports, annual project implementation reports, the mid-term review, and the terminal evaluation.
Communications Consultant Rate: USD5,000/month	30 months / over 5 years	This person will be responsible for ensuring that key stakeholders receive vital information about the purpose and the progress of the project. Also, this person will closely collaborate with the Gender, Safeguards, and Participation Consultant to ensure the prompt implementation of the project´s communication strategy and that all communications use inclusive, gender-sensitive and culturally sensitive language. The Communications Consultant will be responsible for: 1. Preparing and implementing the project´s communication strategy and their corresponding multi-year workplans. This strategy will focus on clearly identified target audiences and will be aligned with the project´s gender action plan and stakeholder engagement plan. 2. Establishing a workgroup with the communication officers of the project partners. Facilitate the operation of the workgroup and maintain fluent communication with the project partner communicators. Together establish joint annual work plans, regular coordination meetings, and protocols for the dissemination of news and information. 3. Ensuring, with the support of the project team and the communicators of the project partners, the implementation of the communication strategy. 4. Based on international best practices and relevant national policies, prepare guidelines for: ▪ Organising sustainable[56], inclusive and gender-sensitive events (meetings, training sessions). ▪ Using inclusive, culturally sensitive and gender-inclusive language in all project activities, materials, and communications. 5. Guiding the project team on sound internal and external communication practices. 6. Developing and maintaining the project web site, coordinated with the web sites of the project partners, of UNDP and IW: LEARN. Ensure that key gender-related project instruments and lessons are posted in IW: LEARN Gender Hub. 7. Preparing press material and news for the project web site, and dissemination through the channels and social networks of the project partners (e.g., YouTube, Instagram, Twitter).

[56] UNEP. 2012. Sustainable Events Guide. Give your large event a small footprint. United Nations Environment Programme (UNEP), 104 pp.
UNEP. 2009. Green Meeting Guide 2009. roll out the Green Carpet for your Participants. United Nations Environment Programme (UNEP), 68 pp.

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Consultant	Time Input	Tasks, Inputs and Outputs
		8. Communicating project events (e.g., meetings, workshops, trainings). 9. Guaranteeing that all communication actions are in line with the following policies and strategies: ▪ GEF policy on public involvement and the corresponding guidelines. ▪ GEF policy on gender equality and the corresponding guidelines. ▪ GEF policy on stakeholder engagement. ▪ GEF principles and guidelines for engagement with indigenous peoples. ▪ UNDP information disclosure policy. ▪ Stakeholder response mechanism which is part of the UNDP´s accountability mechanism. 10. Ensuring that the project´s experience notes, results notes, and learning systematization documents use inclusive, intercultural-sensitive and gender-inclusive language. 11. Ensuring a prompt delivery of outputs and the generation of project outcomes. 12. Keeping an adequate and fluent communication and collaboration with project key stakeholders and partners. 13. Keeping an adequate and fluent communication and collaboration with the rest of the members of the project unit. 14. Preparing the draft annual communication work plan with its corresponding budget. 15. Promoting communication among project partners, stakeholders, and direct beneficiaries from the participating countries. 16. Contributing to the preparation of project´s experience notes, results notes, and learning systematization documents. Along with the Gender, Safeguards, and Participation Consultant will prepare the project lessons about gender and youth participation and representation challenges. 17. Contributing to the monitoring of indicators. 18. Providing information and support for the preparation of quarterly progress reports, annual project implementation reports, the mid-term review, and the terminal evaluation.
Outcomes 3.1 and 3.2.		
Monitoring, Evaluation, and Knowledge Consultant Rate: USD5,000/month	30 months / over 5 years	This person will have two basic functions: 1. To ensure that project lessons are identified, documented, and disseminated (output 3.2.1). 2. To guarantee that project activities are meticulously monitored and assessed (output 3.2.2). The Monitoring, Evaluation, and Knowledge Consultant will be responsible for: 1. Preparing and implementing the project´s knowledge transfer strategy. 2. Ensuring the implementation of the project´s monitoring and evaluation plan. 3. Guaranteeing the application of the GEF monitoring and evaluation policy, and UNDP monitoring and evaluation policies, 4. Guiding the project team in the execution of actions to document, monitor and evaluate the project. 5. Compiling and systematizing the information of the project indicators. Ensuring that GEF core indicators are monitored. 6. Monitoring and documenting the development of the activities of the various components of the project. Ensuring that all actions are thoroughly monitored and assessed. 7. Monitoring the implementation of the gender action plan and the stakeholder engagement plan. Ensuring the monitoring of indicators related to (i) gender, (ii) the involvement of key stakeholders and beneficiaries, and (iii) the ESMF management measures and that these subjects be analysed and included in the PIRs, the MTR and the terminal evaluation. 8. Ensuring that project learning is thoroughly documented. 9. Promoting the use of collaborative online tools among the project team and the project partners. 10. Organising in-person and virtual meetings (including guided visits) to enable networking and sharing experiences among project participants. 11. Verifying that the activities are being implemented according to the annual work plan and budget. 12. Organising and supporting the project´s mid-term review and terminal evaluation. Ensure that these evaluations are executed according to the corresponding UNDP guidelines for conducting midterm reviews and terminal evaluation of UNDP-supported GEF-financed projects. 13. Contributing to establish methods and procedures to systematically document the project experience and lessons and to prepare project experience notes, results notes, and learning systematization documents.

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Consultant	Time Input	Tasks, Inputs and Outputs
		14. Encouraging that the target groups and key stakeholders of the project, including the GEF operational focal point in each country, get involved as much as possible in the project's monitoring and evaluation actions. 15. Preparing semestral reports, with recommendations to optimize the project execution. 16. Keeping an adequate and fluent communication and collaboration with project key stakeholders and partners. 17. Keeping an adequate and fluent communication and collaboration with the rest of the members of the project unit. 18. Preparing the draft annual work plan with the corresponding budget for project monitoring and evaluation tasks. 19. Supporting the systematic documentation of project experiences and the preparation of the project experience notes, results notes and learning systematization documents. 20. Providing information and support for the preparation of quarterly progress reports and annual project implementation reports.

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Annex 7: Stakeholder Engagement Plan

Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems (GMC2)

GEF Project ID 11011

Project Preparation Grant Phase (PPG)

Aracely Pazmiño Montero
Stakeholders' and indigenous peoples´ specialist
August 10, 2023 / Rev September 18, 2023.

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Introduction

UNDP and GEF stakeholders' engagement policies are committed to a meaningful, effective, and informed participation of stakeholders[57] in the design and implementation of all their projects. Then the effective engagement and participation of all parties improves the acceptance and ownership of the project and strengthens the social and environmental sustainability and the benefits of supported interventions. As such, it should focus on differentiated measures allowing for inclusion of a wide variety of groups of interest at various scales, including under-represented and vulnerable groups.

For UNDP is crucial that stakeholders' involvement begins early in planning, including identification of priorities issues and design. For this purpose, this document has been developed to establish a strategy for the adequate participation of key stakeholders in the formulation of the project Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems (Global Marine Commodities 2) (hereafter called GMC2).

The present stakeholder analysis and the subsequent development of the engagement plan (hereafter SEP) has been carried out to support the development and implementation of the UNDP/GEF project "Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems (GMC2) (GEF ID 11011).

2. The GMC2 project and the targeted fisheries in Africa and Latin-America

The GMC2 project falls under the GEF International Waters Focal Area (IW) and will be developed to mainstream ecological and social aspects of sustainability to foster sustainable fisheries production and improve well-being of coastal communities in support of emerging Blue Economies in the Canary Current (CCLME) in Morocco, Senegal and Mauritania, and the Pacific Central American Coastal Large Marine Ecosystems (PACA) in Guatemala, Panama, and Ecuador.

As such, the project will be implemented in very different contexts and it will have many direct and indirect stakeholders that covers linguistic, political, and culturally diverse regions, with a formal mandate for their involvement and engagement.

The GMC2 Project comprises the following three technical components:

- Component 1: Increase demand for sustainable seafood products from CCLME and PACA
- Component 2: Increase the supply of sustainable seafood products from CCLME and PACA
- Component 3: Knowledge management to support the transformation of the seafood market.

The project intervention will focus on five target value chains. In the PACA ecosystem the target fisheries will be:

(1) longline artisanal fisheries for large pelagic fish (tuna, billfishes, sharks) in Guatemala, Panama, and Ecuador,
(2) artisanal and industrial fisheries for white shrimp in Panama, and
(3) industrial and artisanal fisheries for titi shrimp in Ecuador.

In the CCLME ecosystem the target fisheries will be:

(1) industrial and artisanal fisheries for small pelagic fish in Mauritania and Senegal, and
(2) octopus' fisheries in Mauritania and Senegal.

[57] Stakeholders according to the UNDP Social and Environmental Standards refers to individuals or groups or organizations representing them who (a) are affected by the project and (b) may have an interest in the project.

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In this diverse context, the importance of identifying and implementing forms of engagement for each segment of stakeholders of the targeted fisheries value chains should be anticipated. Specific attention should be paid to populations potentially disturbed by actions that may affect-impact their economies, access to resources, and the sustainability of livelihoods. In this sense, the Stakeholder analysis and engagement process is planned to be carried out in a gender sensitive, culturally sensitive, non-discriminatory, and inclusive manner, ensuring that vulnerable and marginalized groups likely to be affected are identified and given opportunities to participate.

As such, this Stakeholder Analysis and Engagement plan must be implemented and revised as the implementation of the project takes place and in association with the other management plans such as Gender Action Plan (Annex 9) and others that will be prepared as the project starts.

3. Regulations and Requirements

The Global Environment Facility (GEF) Policy on Stakeholders Engagement considers that effective stakeholder´s engagement improves transparency, accountability, integrity, effectiveness, and sustainability of GEF governance and operations. In addition, GEF policies highlights that effective stakeholder participation promotes the ownership of countries by fostering stronger partnerships, particularly with civil society, indigenous peoples, communities, and the private sector, and by leveraging the knowledge, experience, and capacities of affected and interested individuals and groups.

All GEF funded projects are required to meet best international practice and specifically the requirements for stakeholder engagement and public consultations, as specified in the GEF Policy on Public Involvement in GEF Projects. The project stakeholder engagement activities should be robust and enough disclosure on information should be made to promote better awareness and understanding of its strategies, policies and operations. During these disclosures, the project requires to:

- Identify people or communities that are or could be affected by the project as well as other interested parties.
- Ensure that such stakeholders are appropriately engaged on environmental and social issues that could potentially affect them, through a process of information disclosure and meaningful consultation; and
- Maintain a constructive relationship with stakeholders on an on-going basis through meaningful engagement during project implementation.

The stakeholder consultations are an on-going process taking place during the project life and during this process it is necessary to ensure that stakeholders are informed about environmental and social consequences of the project implementation and ensure the opportunity for feedback (GEF, 2018).

According to the UNDP policy for stakeholder's participation, "effective stakeholder engagement is a cornerstone to achieving sustainable development. Civil society actors and organizations, indigenous peoples, local communities, and other key stakeholders are crucial partners for advancing human rights-based development" (UNDP, 2017). This approach aligns with the Sustainable Development Goals[58](SDGs) where the principle of "leaving no one behind" is basic in combatting inequality and ensuring equity and non-discrimination across all programming areas (UNDP, 2021). UNDP's commitment to stakeholder engagement arises from internal policies, procedures, and strategy documents as well as key international human rights instruments, principles, and numerous decisions of international bodies, particularly as they relate to the protection of citizens' rights related to freedom of expression and participation (UNDP, 2022).

[58] Access: https://www.un.org/sustainabledevelopment/es/objetivos-de-desarrollo-sostenible/

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4. Stakeholder involvement supporting the development of GMC2

The institutional guidelines for UNDP social and environmental safeguards (SES) regarding Stakeholder engagement ensure the development of adequate processes for the participation of the relevant parties in the preparation stage of the PPG document (Stakeholder Engagement Guidance Note). Following these principles, during PPG Phase, a participation and engagement strategy has been designed to provide meaningful access to dialogue into GMC2 PPG design, as well as to identify stakeholders' priorities and then to better tailor the project activities and benefits.

The PPG Phase was conducted in full consultation and with the close engagement of governments, inter-governmental organizations, private institutions, and other relevant stakeholders – in particular those who will be directly involved in the implementation of the project activities, those who may be impacted (positively or negatively) by the project.

This strategy looks to tackle the actual limitations of the development of the PPG phase in two distant regions of the World. Likewise, the results of this process will support the information provided for the construction of the ProDoc and will account for the work carried out by the PPG team during this phase.

The strategy for consultation and stakeholders' involvement for the PPG was developed in three levels:
- Institutional meetings with focal points and institutions that are GMC2 project partners (virtual workshops and meetings).
- Consultation workshops with key stakeholders in each country *(hereinafter consultation workshops*).
- Meetings with local stakeholders and other parties involved in the project held by the PPG team (virtual and in-person meetings).

A detailed documentation of the PPG stakeholder participation and engagement activities are contained in the Annex 19 Participation and engagement strategy of the project preparation phase of the GMC2 Project.

The process was developed as follows:

Level 1. Institutional level with focal points and partner institutions

PPG virtual workshops with the designated focal points of each participating countries and the implementing agency were held to involve in the development of the design of the ProDoc as they have roles and responsibilities in the implementation of the future project. To make these consultations, technical contributions, information provision and the correspondent clearance of the ProDoc design, four workshops were developed:

4. The initiation workshop was held on November 2, 2022, to analyse the key elements of the project concept (PIF) and to agree on the roadmap, as well as the arrangements required for the PPG phase.
5. A situation review workshop was held on May 4, 2023, aimed to inform about the status of the implementation of the PPG and to agree on an updated roadmap of the implementation of the PPG phase and to determine further milestones.
6. An update roadmap and new milestones for the PPG workshop was held on May 30, 2023, aimed to review the critical roadmap due to the GEF non-acceptance of the time extension and adequation of timeline to deliver the ProDoc.
7. A Complete ProDoc review workshop to provide final inputs was held on August 16, 2023.

Level 2. Consultations workshops with country key stakeholders

With the aim to receive technical advice and specific insights from key actors at the national level and to support the preparation of the project in each country, five national consultation workshops were developed between July 24 and August 2, 2023. These consultation workshops were developed in a half day of work with the participation of around 15 - 20 persons and implemented with the support of UNPD offices and project´s focal points.

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The participants that were summoned were strategic actors to provide technical contributions to the design of the project and the activities that will be carried out in each country, the results framework, and the budget. These meetings were not a wide public gathering, by contrary, they were focused on the scope that the project will address during implementation. These key actors were identified by the project partners and the focal points of each country, as well as by the project stakeholders mapping.

Level 3. Local stakeholders and other bilateral consultations

During the development of the PPG phase, a very substantive number of bilateral consultations were conducted with country representatives, project partners, key stakeholders, representatives from other relevant projects (both GEF and non-GEF), initiatives and organizations. These meetings aimed to gather information for the project baseline, potential synergies, and complementarities, needs for coordination and opportunities for collaboration, information for the avoidance of duplication of efforts, and to identify potential intervention sites and activities. The PPG team recorded each meeting through a memory format and in total, there were 79 meetings, held with representatives from approximately 95 different organizations.

Table 1 provides a summary of the engagement activities organized during the PPG phase along with the number of participating countries and organizations.

Table 1: Summary of results of strategy for participation and engagement during the PPG phase

Stakeholder Engagement Activity	Number of meetings	Number of organizations /institutions
1. Institutional level with focal points and partner institutions	4 virtual meetings	113 participants in total (28 aprox. each meeting)
2. National workshops with country key stakeholders	5 in-person national workshops and 1 bilateral consultation[59]	107 participants
3. Local stakeholders and other actors' bilateral consultations	79 interviews (virtual and in presence)	95 persons

5. Stakeholder Analysis

5.1 Methodological Approach of Stakeholder Analysis

For the purposes of analysing and determining the different levels of engagement needed for different stakeholder groups during the implementation of GMC2 Project, the BiodivERsA[60] methodology was used. The objective is to plot stakeholders influence against interest and then assign a category to their likely contribution and interest in the project. Based on this methodology, four levels of stakeholder engagement (Figure 1) are proposed:

- At the highest level, **"Collaboration"** is used where stakeholders have an active commitment in the project and where actors are considered as partners, providing technical and/or other kinds of support.
- At the lowest level, **"Information"** is used for passive actors with whom information about the project or the delivery of the results should be shared. For this category, information is a one-way flow, but it should be included as a form of project engagement tailored to the actor or stakeholder.

[59] Due to time constraints the workshop in Mauritania was developed through bilateral consultations with key stakeholders and written comments were provided.

[60] *The BiodivERsA* it is a network of national funding organizations promoting an-European research that offers innovative opportunities for the conservation and sustainable management of biodiversity and ecosystem services.

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- Intermediate levels of participation are designed to meet the needs of stakeholders who are **"Consulted"** (e.g., asked for opinions or information); and those with whom **"Involvement"** occurs (e.g., more committed and can also provide resources or data).

It is highlighted in the methodology that most projects require at least the first level of participation, i.e., "inform", but different levels are likely to be appropriate for different projects and situations. Many projects will include a combination of the four levels of commitment.

In the case of this analysis, high, medium, and low levels were identified for both Influence and Interest and subsequently placed within the four categories: Involvement, Collaboration, Information and Consultation. These were placed in the quadrants as described in Table 2.

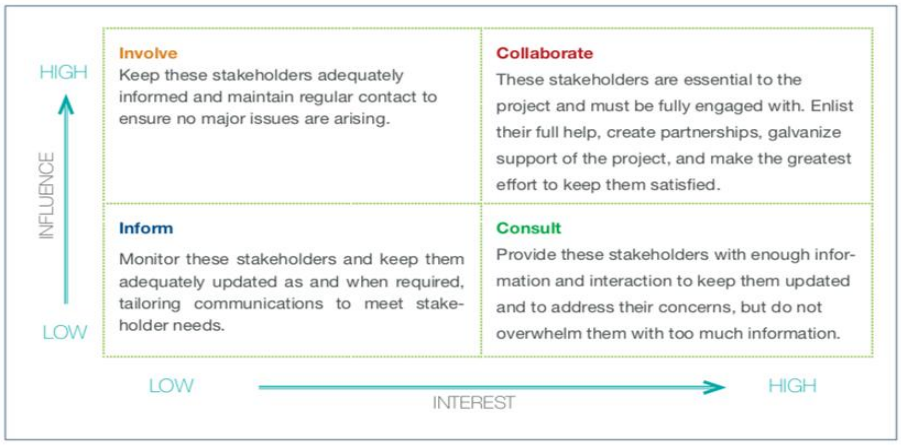


Figure1: Levels of stakeholder involvement

Table 2: Stakeholders levels of involvement in the GMC2 Project

Level of influence	Level of interest	Level of involvement
High	High	Collaborate
High	Low	Involve
Low	High	Consult
Low	Low	Inform
Medium	Medium	Involve & Consult
Medium	High	Involve & Consult
Medium	Low	Involve & Consult

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5.2. Stakeholder categorization (groups and types)

Given the geographic scope of the GMC2 Project, the project activities and outcomes will integrate a wide diversity of stakeholders that will influence and/or be interested in the project activities, outputs, and outcomes. This situation that may vary depending on the country and the target fishery value chain and will result on a very large number of stakeholders that will need to be engaged, in a variety of ways, in different moments and with varied levels of intensity, in or through the project activities to ensure the successful implementation of the project.

Table 3 provides a list of the categories of stakeholders that have been identified to be involved in the project and a description of the potential roles that is expected that may developed. Along with a short description of the type of actors as direct or indirect beneficiary of the project activities, this description may be helpful in prioritizing stakeholder engagement and communication efforts and engagement.

Table 3: Project Stakeholder typology, description of potential role and type of beneficiary

Stakeholder Type	Brief Description
Public Institutions	Active agents - Direct beneficiaries Institutional bodies that serve a public interest function assigned within the structures of the national states. The active participation of and coordination across all relevant national government stakeholders is essential to develop and implement the GMC2 Project. The governmental entities may be engaged as responsible and leading parties in the project activities. Examples: ministries for environment, fisheries authorities, meteorological services, cost guards' institutions.
NGO	Active agents, direct and indirect beneficiaries Non-governmental organizations are institutions that are independent from the public administration. For many of the activities of the project implementation civil society organizations and/or access to information will be key, as members of civil society located within the geographic reach of project activities/outputs will in many cases be directly involved by these activities. Examples: NGOs working at local, national, and international level.
International Cooperation	Active agents International financial and technical support institutions to provide bilateral or multilateral support for development and conservation. Many of these organizations have parallel activities in the region which contribute to the GMC2 outcomes and can be allies in its implementation. Examples: UNDP, FAO, USAID
Regional organizations	Active agents & indirect beneficiaries Organizations whose main function is political or / and economic integration or fisheries management between two or more countries. Examples: International Transport workers
Private institutions	Active agents, direct beneficiaries Private companies of diverse productive sectors that are involved in fisheries activities. Examples: Export fishing institutions, Fishery production companies, Processors companies.
Private Initiatives	Active agents, direct beneficiaries Organizations for the articulation and association of a private nature. These integrate second-level social organizations. Examples: fisheries chambers, associations, cooperatives.
Research institutions	Passive and active agents Academic institutions dedicated to research and knowledge generation. The participation of researchers and academic/research institutions and science-based initiatives is critical for the generation of updated information to address fisheries knowledge. Examples: National Centers for Fisheries studies, research national institutions.
Public- private Initiatives	Passive and active agents, direct beneficiaries Initiatives that are conformed by public and private actors with common interests. Examples: CLPA
Social Organizations	Passive and active agents, direct beneficiaries Institutions- bodies formed for organizational purposes and for the exercise of rights and established based on common interests, and for the articulation and association of a private nature. For many of the activities and outputs of the GMC2 Project, the role of these organizations is key to the sustainability and success. In many cases, these organizations will be directly influenced by the project activities and central to the project objective. Examples: Fisheries Unions, women organizations.

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5.3. GMC2 Project stakeholders

This analysis has been carried out based on information from the stakeholders scoping identified to date. The stakeholder from each value chain in each target fishery have been identified for each participating country. In addition to identifying each typology, organizations that could be allies on gender equality issues have also been identified.

It is important to highlight that this section is referential and does not prove an exhaustive analysis and is a non-exhaustive list of potential project stakeholders. As mentioned before, these actors will be the key stakeholders and partners of the project and they will be involved in different GMC2 Project Outputs with which this document must be updated when starting the implementation of the Project.

The general analysis concludes:

- There are 146 stakeholders that have been listed from the PPG phase and they are considered as relevant actors and a baseline for further actions.
- Of the 146 stakeholders, there are 86 that have a national scope of action. At the local level there are only 7, 39 and 14 at regional and international scopes of action.
- Based on the types of actors, from the 146, 37 institutions come from governments, followed by 36 private institutions, 12 from research institutions, 32 from social organizations and 9 private initiatives. Institutions with much less in terms of representation 8 NGOs, 3 public-private initiatives, and 2 regional organizations. This high composition of public institutions poses a challenge for a greater integration from diverse stakeholders from the other sectors and develop the enabling conditions for participation and good governance.
- There are only 15 organizations registered as working with gender aspects. This highlights the need to develop greater efforts to identify, strengthen and support the development of specific organizations that gender-related issues.
- From the 146 actors identified in the project stakeholders mapping, there are 90 with a high interest and high influence, they should be involved as key stakeholders and provide strategic actions for collaboration.
- Then, 53 actors have a medium interest and influence, and they must be part of consultation and involvement processes. There were identified only 3 actors with low interest and influence, and they must only be informed about the advances of the project.

Section 5.5 of this document provides details the results of analysis for high influence and interest and looked at the expected level of involvement for each actor, as indicated above, using the *BiodivERsA* Methodology.

5.4. Additional considerations

a) Vulnerable populations

The project proposes a series of activities to influence in the management of the target fisheries. However, these activities may generate changes in the conditions of use, access, management, and control of related populations making them dependent and potentially, vulnerable[61].

These populations mainly use the target fisheries resources for: a) consumption-subsistence (food) or b) sale (processing-transformation, marketing, export). By making any change in the supply chain, derivative actions in the use, access, management of fishing resources (e.g., temporary season closure, prohibition of capture, processing or

[61] Vulnerable groups refer to people who, by virtue of their gender identity, ethnicity, age, disability, economic disadvantage, or social condition, may be more affected than others by the impacts of the project and who may be limited in their ability to claim or take advantage of the benefits of the project. Vulnerable individuals and/or groups may also include people living below the poverty line, the landless, the elderly, female- and child-headed households, refugees, internally displaced persons, ethnic minorities, communities dependent on natural resources or other displaced persons who may not be protected by national and/or international law" (European Bank, 2016).

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commercialization of a certain species, limitation of the number of boats or fishermen, reduction of fishing effort, others), may "affect" the related populations in the face of a change in the situation, regardless of whether the project seeks to improve the availability or management of the resource or its sustainability in the future.

To determine who are the vulnerable stakeholders that may be affected by the project activities, a methodology with questions and categories of vulnerability from each link of the value chain were developed. The methodology applied the following steps:

- Step 1. Identification: through mapping each part of the links of the seafood supply chains the actors of the supply chain were identified.
- Step 2. Determination of the effect or impact derived from the project: In this step it was determined what potential change could be generated by the project activities. It looked at changes in the conditions of use, access, management, present or future decisions of the fisheries and how might they be affected by the change.
- Step 3. Description of the vulnerability: after screening the populations related to each link in the seafood supply chain, the vulnerable populations were identified as vulnerable, and were assigned to four types of vulnerability: economic dependence, poverty conditions, household headed by women and indigenous ethnic minorities. Table 4 describes the methodology, the steps, questions and provides some examples.

Table 4. Methodology for identification of vulnerable populations

		link of the supply chain				
Steps	Questions	1) Production and capture	2) Collection from 1st producer point	3) Preparation of value-added products	4)Distribution/ logistics	5)Sales
Step 1. Identification	Who are the actors in the supply chain?	Examples: 1. Artisanal fishermen of legal bag 2. Fishermen of trawlers 3. Owners 4. Illegal fishermen (bag and "changa")	Examples: Merchants-traders	Examples: 1. Formal peelers 2. Informal peelers, 3. Informal women peelers groups. 4. Packing companies	Examples: Traders, wholesalers, merchants	Examples: Retailers, consumers
Step 2. Effect or Impact derived from the project	What change could be generated because of the project?	Examples: The project will support the development of the FIP and as a result there will be a restriction the illegal activities of this fishery.				
	How might they be affected by the change?	Examples: Illegal bag fishermen will not have the income derived from this fishing. They can potentially switch to another illegal activity	Examples: Merchants-traders will not have products to trade. They can potentially switch to another illegal activity	Examples: Informal peelers will not have an income.		
Step 3. Description of the vulnerability	Who are the vulnerable or are in a vulnerable situation? (after stakeholders screening, who are in vulnerable situations?)	Examples: 1. Artisanal fishermen with legal bags 2. Fishermen from trawlers 3. Illegal fishermen (bag and changa)		Examples 2. Informal peelers 3. informal female peelers.		
	Why are they vulnerable? A) they use the resource for family consumption B) direct sale / economic dependence on the resource C) they come from other conditions of vulnerability (people living below the poverty line, ethnic minorities dependent on resources, households headed by women)	Examples: 1. Artisanal fishermen of illegal bags are populations that use the resource for family consumption and direct sale, therefore they have (b) direct economic dependence on the resource.		Examples: 1. informal women peelers: they have economic dependence on the resource since it is the only economic alternative for making their living.		

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	Types of Vulnerability: 1) Economic dependence 2) Poverty conditions 3) Household headed by women - only economic activity 4) Indigenous - ethnic minorities.					

Based on this methodology, the project has identified a group of potential vulnerable groups that are related to the target fisheries. The Table 5 makes a summary of the results of the identification made during the PPG phase.

Table 5. Vulnerable populations related to the target fisheries of the GMC2 Project

Country	Value Chain	Vulnerable populations	Vulnerability description
Senegal	Small pelagic	Small pelagic artisanal fishers	Economic dependence and Poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
		Small pelagic women processors	Economic dependence and Female-headed households. Women informal activity, high dependence as it is the only productive alternative for making their living.
		Small pelagic fish middlemen	Economic dependence and Poverty conditions. Intermediaries who help to transport fish to markets and processing plants.
	Octopus	Octopus artisanal fishers	Economic dependence and Poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
		Octopus middlemen	Economic dependence and Poverty conditions. Intermediaries who help to transport octopus to markets and processing plants.
		Octopus Women potters	Economic dependence and Female-headed households. Additional economic alternative and dependence on the pot-production.
Mauritania	Octopus	Artisanal octopus fishers.	Economic dependence and Poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
	Small pelagic	Small pelagic artisanal fishers	Economic dependence and Poverty conditions. Fishers with limited empowerment and lack of negotiation capacities. High dependence on the resources of this fishery.
		Small pelagic fish middlemen	Economic dependence and Poverty conditions. Intermediaries who help to transport fish to processing plants.
Ecuador	Pomada	Pomada women processors	Economic dependence and Female-headed households. Economic dependence as a productive alternative for making their living.
		Pomada bolso fishers	Economic dependence and Poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
	Large Pelagic	Longline fishers	Economic dependence on the activity- poverty conditions. Fishers without a permanent activity and salary. They do not have adequate working conditions.
Guatemala	Large Pelagic	Dorado-shark artisanal fishers	Economic dependence and Poverty conditions. They are not organized and do not have adequate working conditions.
Panama	Shrimp	Artisanal shrimp fishers	Economic dependence and Poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
		Artisanal shrimp fishers - Individuals from the Emberá-Wounnan indigenous peoples.	Economic dependence. They are indigenous individuals whose living conditions, participation, and interests in relation to shrimp fishing are unknown and will need to be assessed at the start of the project.

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The project design has integrated actions to address the different stakeholders' conditions and the Stakeholder Engagement Plan (SEP) integrates specific actions to support the identified vulnerable populations.

b) Indigenous peoples

The GMC2 Project will be implemented in two distinct regions where Indigenous Peoples and ethnic groups should be addressed using a different lens. In the case of Latin America, there is a historical, political, legal, and social context where the rights of indigenous peoples have important and increasing recognition, as well as the rights to land and self-determination. These conditions differ fundamentally from the other region covered by GMC2 project, which is in West Africa, where, on the contrary, there is no legal recognition of indigenous peoples or ethnic groups. In this sense, the approach to indigenous peoples differs, legally, politically, and conceptually between the two regions where the GMC2 Project will be implemented.

Regarding the indigenous peoples in Africa, it can be concluded that the treatment of this issue is complex, involving a lack of official recognition, barriers due to the dynamics of political, ethnic, and religious conditions, and the lack of a context enabling conditions for indigenous peoples' self-determination. For these reasons, these groups have been considered as vulnerable populations in the context of the GMC2 project. For these ethnic groups and other local stakeholders related to the target fisheries that may be in potential conditions of vulnerability, a process of identification has been developed as described above. In this sense, processes of effective participation through the stakeholder engagement plan will address their involvement.

In the case of Latin America, the international and national legal context provides support for the recognition of indigenous peoples in the three participating countries. In Ecuador and Guatemala there are no indigenous territories linked to the value chains of the GMC2 Project.

In the case of Panama, there are no indigenous territories (Comarcas[62]) related to the project targeted fisheries. A review of available information was carried out and maps of artisanal shrimp production areas were reviewed, and it was evident that there were no indigenous territories. During one of the PPG work meetings with The Aquatic Resources Authority of Panama (ARAP) informed about the existence of some people that have been organized in a currently inactive artisanal fishing association (*Asociación de Pescadores Artesanales y Agroturística de Cucunatí -APAGROCU-* and *the Asociación de Pescadores Artesanales de Río Banana groves -APAGROCU*). These associations bring together several persons, including some from the Emberá-Wounnan people[63]. A process of monitoring this information was initiated with ARAP to clarify the information that came out of this meeting and formal and specific information was requested on the status of this group of artisanal shrimp fishermen. The information provided did not explain how many of these persons belong to the Emberá Wounaan peoples.

During the PPG it was not possible to confirm their ethnicity, their living conditions or their recent or current involvement in artisanal shrimp fishing. There is currently insufficient information available about the number of Emberá-Woonaan artisanal fishers, their living conditions, their participation in the value chain and dependency of the resource, to be able to assess and address the impact of project activities on them.

[62] The Political Constitution of Panama (last modified in 2004) in Art 5 and 127created the indigenous "Comarcas" as a category of special political-administrative regime that delimits the territorial jurisdictions to protect the territorial rights of indigenous peoples recognized by the state (being these Emberá-Wounaan, Ngabe, Buglé , Kuna, Naso and Bri-Bri).

[63] The Emberá of the Emberá Wounaan Comarca are part of the seven indigenous peoples of Panama which have been recognized by different laws that are based on the constitutional rights of indigenous peoples. The Emberá-Wounaan Comarca was recognized and created by the Panamanian State in 1983 from two enclaves located in the province of Darién, specifically the districts of Chepigana and Pinogana. Its main activity is agriculture, and its territory is inland. They mainly grow bananas, a product with which they trade; They plant corn, rice, tubers, and others. Other occupations are fishing in rivers, hunting, raising free-range animals, and collecting plants for their own consumption. Their Emberá language belongs to the independent Chocó family and is related to the Waunana language. Internally, Emberá has dialectal particularities, differences that lie in certain sounds, vocabulary, and grammatical constructions, but they are understood between one and the other. It does not have its own writing and its alphabet consists of oral vowels, nasals, and consonants.

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Given the limitations encountered on this matter during the PPG phase, the project has included multiple activities in the PRODOC, SEP and ESMF to clarify the situation early on, prior to the implementation of any interventions which could affect or impact the Emberá-Wounaan indigenous fishermen. This process will ensure to apply, if pertinent, Free, Prior and Informed Consent (FPIC), as required by national legislation (Law no.37 of 2016) and UNDP Standard 6 on Indigenous Peoples. Depending on the outcome of these assessments, an Indigenous Peoples Plan and Cultural Heritage Plan may need to be prepared. Further detail is provided in the ESMF.

Moreover, if the project confirms their involvement, activities have been integrated and budgeted to provide special attention (affirmative actions) to generate dialogues and if it is of interest, support this group of Emberá-Wounaan fishers to integrate in the process of participatory governance of the artisanal shrimp fishery.

c) Gender equality

It was found very limited information about women and about women organizations related to the target fisheries that can be integrated in the project implementation. Being this limitation a difficulty to access to specific information on the conditions of women in the topics addressed by the GMC2 project, it is a finding of the need to develop greater efforts to identify, strengthen and support the development of organizations that work on gender-related issues in the participating countries. To ensure that the project promotes gender equality and mainstreams gender across all its activities and engages with gender specific stakeholders and organizations, a comprehensive Gender Analysis and Action Plan has been developed for the GMC2 Project implementation (Annex 9 to the PRODOC).

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5.5. Key stakeholders mapping (interest and influence conditions)

A group of key stakeholders to the GMC2 Project is presented in the following tables[64] here below. This mapping and correspondent analysis should be further updated throughout the project implementation. Please refer to the BiodiVERsa methodology to understand types of involvement (5.1 Methodological Approach of Stakeholder Analysis)

[64] Screenshot from the mapping document

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Number	Actor/institution	Target fishery	Type of actor	Country relevant to C	Scope of action (local, national, regional)	Influence	Interest	Inform	Consult	Involve	Collaborate
1	Marpesca, S.A.	Large Pelagic Fish	Private institution	Panama	national	high	high				COL
2	Alfa Gamma Group	Large Pelagic Fish	Private institution	Ecuador/Panama	regional	high	high				COL
3	Beacon Fisheries	Large Pelagic Fish	Private institution	USA	regional	medium	medium		CON	INV	
4	Beaver Street Fisheries	Large Pelagic Fish	Private institution	USA	regional	medium	medium		CON	INV	
5	D&E Imports	Large Pelagic Fish	Private institution	USA	regional	medium	medium		CON	INV	
6	Fortune International	Large Pelagic Fish	Private institution	USA	regional	medium	medium		CON	INV	
7	Iberostar	Large Pelagic Fish	Private institution	Spain	regional	medium	medium		CON	INV	
8	Pacific Coral Seafood	Large Pelagic Fish	Private institution	USA	regional	medium	medium		CON	INV	
9	Quirch Foods	Large Pelagic Fish	Private institution	USA	regional	medium	medium		CON	INV	
10	Sea Delight	Large Pelagic Fish	Private institution	USA	regional	medium	medium		CON	INV	
11	The Fishin' Company	Large Pelagic Fish	Private institution	USA	regional	medium	medium		CON	INV	
12	US Foods	Large Pelagic Fish	Private institution	USA	regional	medium	medium		CON	INV	
13	Sustainable Fisheries Partnership (SFP)	All target fisheries	NGO	USA	International	high	high				COL
14	Regional Committee of Mahi Producers and Processors (COREMAHI)	Large Pelagic Fish	Private initiative	Latin America	Regional	high	high				COL
15	Centro de Estudios del Mar y Acuicultura	Large Pelagic Fish	Research institution	Guatemala	national	medium	high		CON	INV	
16	AGEXPORT	Large Pelagic Fish	Private initiative	Guatemala	national	medium	high		CON	INV	
17	Dirección de Normatividad de la Pesca y Acuicultura (DIPESCA)	Large Pelagic Fish	Public institution	Guatemala	national	high	medium		CON	INV	
18	Tunart	Large Pelagic Fish	Private initiative	Guatemala	national	low	high		CON		
19	Industria Pesquera Samaritana	Large Pelagic Fish	Private institution	Guatemala	national	low	high		CON		
20	Langosta Roja	Large Pelagic Fish	Private initiative	Guatemala	regional	low	high		CON		
21	Infopesca	Large Pelagic Fish	Regional organization	Guatemala	national	low	high		CON		
22	Ospesca	Large Pelagic Fish	Regional organization	El Salvador	regional	high	high		CON		COL
23	Fundaeco	Large Pelagic Fish	NGO	Guatemala	National	low	medium		CON	INV	
24	FENAPESCA	Large Pelagic Fish	Social organization	Guatemala	national	low	Low	INF			
25	Wildlife Conservation Society	Large Pelagic Fish	NGO	Guatemala	national	medium	high		CON	INV	

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Number	Actor/institution	Target fishery	Type of actor	Country relevant to C	Scope of action (local, national, regional)	Influence	Interest	Inform	Consult	Involve	Collaborate
26	Consejo Nacional de Areas Protegidas -CONAP-	Large Pelagic Fish	Public institution	Guatemala	national	high	high				COL
27	Industria atunera, S.A.	Large Pelagic Fish	Private institution	Guatemala	national	medium	high		CON	INV	
28	Carlos Gutierrez	Large Pelagic Fish	Private initiative	Guatemala	regional	low	medium		CON	INV	
29	Secretaría presidencial de la mujer (SEPREM)	Large Pelagic Fish	Public institution	Guatemala	national	high	medium		CON	INV	
30	Instituto Nacional de la Mujer (INAMU)	Large Pelagic Fish	Public institution	Panama	national	medium	medium		CON	INV	
31	Public Institute for Aquaculture and Fisheries (IPIAP)	Large Pelagic Fish	Public institution	Ecuador	national	high	high				COL
32	Undersecretary of Fishery Resourses	Large Pelagic Fish	Public institution	Ecuador	national	high	high				COL
33	WWF	Large Pelagic Fish	NGO	Ecuador	International	medium	high		CON	INV	
34	Autoridad de los Recursos Acuáticos de Panamá -ARAP-	Large Pelagic Fish	Public institution	Panama	national	high	high				COL
35	Panalang S.A.	Large Pelagic Fish	Private institution	Panama	national	high	high				COL
36	Martec S.A	Large Pelagic Fish	Private institution	Panama	national	high	high				COL
37	CeDePesca	Large Pelagic Fish	NGO	Panama	International	high	high				COL
38	Bay Hill Seafood	Large Pelagic Fish	Private initiative	Panama	International	high	high				COL
39	Tasty Seafood	Large Pelagic Fish	Private initiative	Panama	International	high	high				COL
40	Bajamar Seafood	Large Pelagic Fish	Private initiative	Panama	International	high	high				COL
41	Key Traceability Ltd,	Large Pelagic Fish	Private institution	Panama	International	high	high				COL
42	Autoridad Maritima de Panamá	Large Pelagic Fish	Public Institution	Panama	national	high	high				COL
43	Federacion Nacional de asociaciones de pesca artesanal de la República de Panamá	Large Pelagic Fish	Social organization	Panama	national	high	high				COL
44	National Marine Fisheries Service	Shrimp Pomada	Research institution	Panama	national	high	high				COL
45	Pescardeg	Shrimp Pomada	Private institution	Ecuador	International	high	high				COL
46	Natluk	Shrimp Pomada	Private institution	Ecuador	International	low	medium		CON	INV	
47	Delta Blue Seafood	Shrimp Pomada	Private institution	Ecuador	Regional	high	high				COL
48	Instituto Público de Investigación de Acuicultura y Pesca	Shrimp Pomada	Research institution	Ecuador	National	medium	High		CON	INV	
49	Federación de Pescadores Artesanales del Área de Influencia del Parque Nacional Coiba (FEPACOIBA)	Shrimp Pomada	Social organization	Panama	Local	medium	medium		CON	INV	
50	Asociación de Producción Pesquera de Armadores de Manta (ASOAMAN)	Large Pelagic Fish	Social organization	Ecuador	Local	high	high				

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Number	Actor/institution	Target fishery	Type of actor	Country relevant to C	Scope of action (local, national, regional)	Influence	Interest	Inform	Consult	Involve	Collaborate
51	The Nature Conservancy	Whiteleg Shrimp	NGO	Panama	International	medium	high		CON	INV	
52	Universidad Tecnológica de Panamá	Whiteleg Shrimp	Public Institution	Panama	national	high	high				COL
53	Autoridad Maritima de Panamá	Whiteleg Shrimp	Public Institution	Panama	national	high	high				COL
54	Diapal Ma Diap group (Women fishery organization).	Small Pelagic Fishery	Private institution	Senegal	Local	low	high		CON		
55	Senegalese Artisanal Fisheries Women's Network (REFEPAS)	Small Pelagic Fishery	Social organization	Senegal	National	high	high				COL
56	National Federation of Transforming Women of Senegal (FENETRANS)	Small Pelagic Fishery	NGO	Senegal	National	high	high				COL
57	Ministry of Women, Family and Protection of Children	Small Pelagic Fishery	Public institution	Senegal	National	medium	medium		CON	INV	
58	Belyounech Cooperative (women cooperative)	Small Pelagic Fishery	Private institution	Morocco	Local	low	high		CON		
59	Centre de Recherche Océanographique de Dakar-Thiaroye	Small Pelagic Fishery	Research institution	Senegal	National	medium	high		CON	INV	
60	Commission sous-régionale des pêches (CSRP)	Small Pelagic Fishery	International cooperation	Senegal	Regional	Low	high		CON		
61	Institut de Recherche pour le Développement (IRD)	Small Pelagic Fishery	Research institution	France	Regional	Low	high		CON		
62	Conseil National Interprofessionnel de la Pêche Artisanale au Sénégal (CONIPAS)	Small Pelagic Fishery	Public institution	Senegal	National	high	high				COL
63	Réseau des Conseil Local de Pêche Artisanale (CLPA)	Small Pelagic Fishery	Public- private Initiative	Senegal	local	high	high				COL
64	Confédération Africaine des Organisations de Pêche Artisanale (CAOPA)	Small Pelagic Fishery	Social organization	Senegal	Regional	high	high				COL
65	Association pour la Promotion et la Responsabilisation des Acteurs de la Pêche Artisanale Maritime (APRAPAM)	Small Pelagic Fishery	Social organization	Senegal	National	high	high				COL
66	Gestion concertée pour une pêche durable au Sénégal (COMFISH-USAID)	Small Pelagic Fishery	International cooperation	Senegal	National	high	high				COL
67	Partenariat Régional pour la Conservation de la zone côtière et Marine (PRCM)	Small Pelagic Fishery	Social organization	Senegal	Regional	high	high				COL
68	Fisheries Transparency Initiative (FITI) Africa Focal Point	Small Pelagic Fishery	NGO	International	Regional	high	high				COL
69	Commission Nationale de Gestion des Petits Pélagiques (CNGPP)	Small Pelagic Fishery	Public institution	Senegal	National	Low	Low	INF			
70	La Conférence Ministérielle sur la Coopération Halieutique entre les Etats Africains Riverains de l'Océan Atlantique (COMHAFAT)	Small Pelagic Fishery	International cooperation	Morocco	Regional	high	high				COL
71	Marine Fisheries Department	Small Pelagic Fishery	Public institution	Morocco	National	high	high				COL
72	National Fishing Office	Small Pelagic Fishery	Public institution	Morocco	National	high	high				COL
73	Marine Research National Institute	Small Pelagic Fishery	Research institution	Morocco	National	high	high				COL
74	Direction de l'Aménagement des Ressources et des Etudes (DARE)	Small Pelagic Fishery	Public institution	Mauritania	National	high	high				COL
75	Direction Générale d'Exploitation des Ressources Halieutiques (DGERH)	Small Pelagic Fishery	Public institution	Mauritania	National	high	high				COL

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Number	Actor/institution	Target fishery	Type of actor	Country relevant to C	Scope of action (local, national, regional)	Influence	Interest	Inform	Consult	Involve	Collaborate
76	Société Mauritanienne de Commercialisation des Poissons SMCP	Small Pelagic Fishery	Public institution	Mauritania	National	high	high				COL
77	Société Nationale de Distribution de Poisson (SNDP)	Small Pelagic Fishery	Public institution	Mauritania	National	high	medium		CON	INV	
78	Fédération Nationale des Pêches (FNP)	Small Pelagic Fishery	Social organization	Mauritania	National	high	medium		CON	INV	
79	Fédération Nationale de la Pêche Artisanale (FNPA)	Small Pelagic Fishery	Social organization	Mauritania	National	high	medium		CON	INV	
80	Fédération mauritanienne de Pêche des Mareyeurs Exportateurs Distributeurs et Collecteurs (FMPMEDC)	Small Pelagic Fishery	Social organization	Mauritania	National	high	high				COL
81	Angulas Aguinaga	Octopus	Private institution	Spain	Regional	medium	high		CON	INV	
82	Confremar Group	Octopus	Private institution	Spain	International	medium	high		CON	INV	
83	Merpacifico	Octopus	Private institution	Spain	International	medium	high		CON	INV	
84	Grupo Alfrio	Octopus	Private institution	Spain	Regional	high	high				COL
85	Grupo Profand	Octopus	Private institution	Spain	International	medium	high		CON	INV	
86	MarGalicia/D&E Imports	Octopus	Private institution	Spain	Regional	high	high				COL
87	Marpefish	Octopus	Private institution	Mauritania/Spain	Regional	high	high				COL
88	Union Martin	Octopus	Private institution	Spain	International	high	high				COL
89	Association of Mauritian octopus producers and exporters (AMPEP)	Octopus	Social organization	Mauritania	National	high	high				COL
90	Ministry of Women, Family and Protection of Children	Octopus	Public institution	Senegal	National	medium	medium		CON	INV	
91	Centre de Recherche Océanographique de Dakar-Thiaroye	Octopus	Research institution	Senegal	National	medium	high		CON	INV	
92	Commission sous-régionale des pêches (CSRP)	Octopus	International cooperation	Senegal	Regional	low	high		CON		
93	Institut de Recherche pour le Développement (IRD)	Octopus	Research institution	France	Regional	Low	high		CON		
94	Conseil National Interprofessionnel de la Pêche Artisanale au Sénégal (CONIPAS)	Octopus	Public institution	Senegal	National	high	high				COL
95	Conseil Local de Pêche Artisanale (CLPA)	Octopus	Public- private Initiative	Senegal	Local	high	high				COL
96	Confédération Africaine des Organisations de Pêche Artisanale (CAOPA)	Octopus	Social organization	Senegal	Regional	high	high				COL
97	Association pour la Promotion et la Responsabilisation des Acteurs de la Pêche Artisanale Maritime (APRAPAM)	Octopus	Social organization	Senegal	National	high	high				COL
98	Gestion concertée pour une pêche durable au Sénégal (COMFISH-USAID)	Octopus	International cooperation	Senegal	National	high	high				COL
99	Partenariat Régional pour la Conservation de la zone côtière et Marine (PRCM)	Octopus	Social organization	Senegal	Regional	high	high				COL
100	Fisheries Transparency Initiative (FITI) Africa Focal Point	Octopus	Public- private Initiative	International	Regional	high	high				COL

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Number	Actor/institution	Target fishery	Type of actor	Country relevant to C	Scope of action (local, national, regional)	Influence	Interest	Inform	Consult	Involve	Collaborate
101	Commission Nationale de Gestion des Petits Pélagiques (CNGPP)	Octopus	Public institution	Senegal	National	high	high				COL
102	Collectif National des Pêcheurs (artisans) du Sénégal (CNPS)	Octopus	Social organization	Senegal	National	high	high				COL
103	La Conférence Ministérielle sur la Coopération Halieutique entre les Etats Africains Riverains de l'Océan Atlantique (COMHAFAT)	Octopus	International cooperation	Morocco	Regional	high	high				COL
104	Marine Fisheries Department	Octopus	Public institution	Morocco	National	high	high				COL
105	National Fishing Office	Octopus	Public institution	Morocco	National	high	high				COL
106	Marine Research National Institute	Octopus	Research institution	Morocco	National	high	high				COL
107	Direction de l'Aménagement des Ressources et des Etudes (DARE)	Octopus	Public institution	Mauritania	National	high	high				COL
108	Direction Générale d'Exploitation des Ressources Halieutiques (DGERH)	Octopus	Public institution	Mauritania	National	high	high				COL
109	Institut Mauritanien des Recherches Océanographiques et des Pêches (IMROP)	Octopus	Research institution	Mauritania	National	high	high				COL
110	Société Mauritanienne de Commercialisation des Poissons SMCP	Octopus	Public institution	Mauritania	National	high	high				COL
111	Société Nationale de Distribution de Poisson (SNDP)	Octopus	Public institution	Mauritania	National	high	medium		CON	INV	
112	Fédération Nationale des Pêches (FNP)	Octopus	Social organization	Mauritania	National	high	medium		CON	INV	
113	Fédération Nationale de la Pêche Artisanale (FNPA)	Octopus	Social organization	Mauritania	National	high	medium		CON	INV	
114	Fédération mauritanienne de Pêche des Mareyeurs Exportateurs Distributeurs et Collecteurs (FMPMEDC)	Octopus	Social organization	Mauritania	National	high	high				COL
115	Greenpeace	Small Pelagic Fishery	Social organization	Senegal	Regional	high	high				COL
116	Partner Africa	Small Pelagic Fishery	Social organization	UK/Senegal	Regional	high	high				COL
117	Centre de Recherches Océanographiques de Dakar- Thiaroye (CRODT)	Small Pelagic Fishery	Research institution	Senegal	Regional	high	high				COL
118	Union nationale des GIE de mareyeurs du Sénégal (UNAGIEMS)	Small Pelagic Fishery	Social organization	Senegal	National	high	high				COL
119	Fédération nationale des mareyeurs du Sénégal (FENAMS)	Small Pelagic Fishery	Social organization	Senegal	National	high	high				COL
120	Groupement des Armateurs et Industriels de la Pêche maritime au Sénégal (GAIPES)	Small Pelagic Fishery	Social organization	Senegal	National	high	high				COL
121	Direction des Industries de Transformation de la Pêche (DITP)	Small Pelagic Fishery	Social organization	Senegal	National	high	high				COL
122	Agence nationale des affaires maritimes (ANAM)	Small Pelagic Fishery	Public institution	Senegal	National	high	high				COL
123	Direction de la Pêche continentale (DPCA)	Small Pelagic Fishery	Public institution	Senegal	National	high	high				COL
124	Direction de la Protection et de la Surveillance des Pêches (DPSP)	Small Pelagic Fishery	Public institution	Senegal	National	high	high				COL
125	Direction des pêches maritimes (DPM)	Small Pelagic Fishery	Public institution	Senegal	National	high	high				COL

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Number	Actor/institution	Target fishery	Type of actor	Country relevant to C	Scope of action (local, national, regional)	Influence	Interest	Inform	Consult	Involve	Collaborate
126	FENIP- Federation nationale des industrues de transformation et de valorisation des produits de la peche	Small Pelagic Fishery	Private initiative	Morocco	National	high	high				COL
127	MPEM	Small Pelagic Fishery	Public institution	Morocco	National	high	high				COL
128	SIPPO- SWISS IMPORT PROMOTION Program	Small Pelagic Fishery	International cooperation	Swisszertland-Moroc	Regional	low	medium		CON	INV	
129	Environmental Justice Foundation	Small Pelagic Fishery	Social organization	Ghana	Regional	high	high				COL
130	Marine Stewardship Council	Small Pelagic Fishery	Social organization	Spain	Regional	high	high				COL
131	FAO	Small Pelagic Fishery	Social organization	Spain	Regional	high	high				COL
132	Institut de Recherche pour le Développement (IRD)	Small Pelagic Fishery	Research institution	France	national	medium	Low		CON	INV	
133	Octopus FIP Mauritania	Octopus	Private institution	Mauritania	national	high	high				COL
134	CPAA	Octopus	Private institution	Mauritania	National	low	high		CON		
135	Dewla Fish (proveedor)	Octopus	Private institution	Mauritania	National	high	medium		CON	INV	
136	CPAA	Octopus	Private institution	Mauritania	National	high	high				COL
137	Dewla Fish (proveedor)	Octopus	Private institution	Mauritania	National	low	low	INF			
138	Union nationale des GIE de mareyeurs du Sénégal (UNAGIEMS)	Octopus	Social organization	Senegal	National	high	high				COL
139	Fédération nationale des mareyeurs du Sénégal (FENAMS)	Octopus	Social organization	Senegal	National	high	high				COL
140	Groupement des Armateurs et Industriels de la Pêche maritime au Sénégal (GAIPES)	Octopus	Social organization	Senegal	National	high	high				COL
141	Direction des Industries de Transformation de la Pêche (DITP)	Octopus	Social organization	Senegal	National	high	high				COL
142	Agence nationale des affaires maritimes (ANAM)	Octopus	Public institution	Senegal	National	high	high				COL
143	Direction de la Pêche continentale (DPCA)	Octopus	Public institution	Senegal	National	high	high				COL
144	Direction de la Protection et de la Surveillance des Pêches (DPSP)	Octopus	Public institution	Senegal	National	high	high				COL
145	Direction des pêches maritimes (DPM)	Octopus	Public institution	Senegal	National	high	high				COL
146	Senefand	Octopus	Private institution	Senegal	Local	high	high				COL

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6.Stakeholders Engagement Plan

6.1 Purpose of Stakeholder Engagement Plan

The present stakeholders' engagement plan has been developed as a tool to provide support to an adequate process of integration and full participation of stakeholders linked to the GMC2 Project. The Stakeholder Engagement Plan (SEP) builds on the results from the stakeholder analysis and provides a roadmap for those responsible for the implementation of the project as to when, how and with whom consultations and inclusive actions should be taken throughout the life of the project. This plan is therefore a framework document that will need to be updated in the inception phase of the project implementation and be adapted to the circumstances that occur at that time.

This plan integrates 15 comprehensive activities to be develop during project implementation (see below Stakeholders Engagement Plan Matrix) These activities will fall mainly within the responsibility of the Gender, safeguards, and participation consultant (GSPC) recruited for this purpose and that will be part of the Project Management Unit.

6.2. Principles guiding the Stakeholders Engagement Plan

The central approach underlying the objective of the project, which seeks to promote sustainable fishing production and improve coastal communities in the CCLME and PACA, is based on strengthening the governance and participation mechanisms of the supply chains associated with the targeted fisheries.

The design of the project has paid special attention to the **principle of integration** based on the participation of key stakeholders of the target fisheries and the related vulnerable populations, integrating them throughout the design of the project and supporting their involvement, participation, and commitment. Actions such as supporting or strengthening the management platforms and roundtable dialogues, ensuring permanent self-assessment and annual progress assessments, determining the capacities needs for having a voice in governance processes, evaluation of social, economic, and labour conditions to support the process of strengthening of fishers organizations, capacities development, pedagogical interpretation, translation into local languages, all these for supporting and facilitating **equality of participation**.

The project has included a diverse range of actions to facilitate the participation of all the relevant stakeholders as said above, but particular attention has been given to the **principle of inclusivity of vulnerable groups.** In the baseline analysis of the project, groups were identified that could potentially be in disadvantaged conditions to participate and that have a high dependence on the resources of the target fisheries, for which reason the project design integrated into its activities specific actions to attend to these groups, facilitate their participation and provide support when necessary. As mentioned before the vulnerable groups that will be participating as key stakeholders in the project were identified and are listed in Table 4.

In addition, special attention has been given to **diversity inclusion** towards the inclusion of indigenous persons in the artisanal shrimp fishermen, among whom there are some people who identify themselves from the Emberá-Wounaan Peoples. As there are limitations for information about their conditions the project has giving special attention to start with a baseline study about these populations and particularly to understand their interest in organizing to participate in the shrimp fishing governance platform.

Finally, the GMC2 project has integrated the **principle of equality** through a process of gender mainstreaming. The limitations to access specific information, as well as the lack of women's organizations related to the target fisheries in the participating countries have been a finding on the conditions of these women for the implementation of the project. In this way, this plan must be complemented with the affirmative actions designed for the integration of gender equality in the GMC2 project (Annex 9 to the PRODOC: Gender Action Plan).

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6.3. Stakeholders Engagement barriers identification and response measures

A series of existing barriers to the adequate participation of the key stakeholders related to the targeted value chains are listed as follows:

Table 5. Stakeholder engagement barriers and proposed mitigation actions

Barriers	Mitigation measures
Lack of political commitments could result in poor articulation between stakeholders in each participating country, leading to limited success of project results.	- Highlight the added value of strong coordination and collaboration at multiple levels will result in sustainable processes, greater impact, and improved governance of target fisheries.
Weak/inadequate engagement of diverse multi-stakeholders with a variety of interests leading to low participation in the project.	- Establish tools for stakeholder engagement early and throughout the project implementation, as well as measuring the level of participation and involvement in the governance processes of the target fisheries. - Develop a FPIC process if needed if Emberá-Woonan involvement/impact by project is confirmed. - Document project progress including progress reports and project updates using pedagogical tools and communication mechanisms. - Facilitate dissemination of information, using clear and cultural sensibility. - Use facilitators and effective communication mechanisms.
Conflicting interests can lead to stakeholder fatigue and limitations to sustained participation in project activities such as governance platforms and other activities.	- Hold respectful dialogues in conflict resolution. - Conduct targeted meetings with specific stakeholder groups. - Be flexible when addressing and trying to resolve concerns. - Avoid fragmentation, duplication, overlaps of activities. - Use facilitators and effective communication mechanisms.
Conditions of vulnerability of some groups do not allow them to participate and get involved adequately in project activities.	- Integrate activities oriented directly to involve the vulnerable groups that have been identified (Table 4). - If Emberá-Wounaan involvement/impact by project is confirmed, IPP to be developed and ensure full and effective participation of these fishermen, applying FPIC. - Monitor the adequate participation of the vulnerable identified groups in the designed activities. - Provide travel support (reimburse travel expenses) and provide board and lodging to stakeholders that need assistance.
Conflicting responsibilities and high workload, notably in public institutions may limit the time availability to have an active participation in the project.	- Ensure that all meetings / workshops are efficiently planned and managed, with a clear agenda and specific targets, considering the needs and time limitations of the participants.
In addition to the cost of time that each person dedicates to the activities and events of the project, there are other associated costs like travel expenses, food, and lodging. Some people will not have the means to cover these expenses.	- Provide travel support (reimburse travel expenses) and provide board and lodging to stakeholders that need assistance. - Give special attention to women participation and to vulnerable and poor stakeholders.
Some groups are in remote areas and have long journeys to make from their homes to participate in project activities (e.g., training, workshops, meetings).	- Take into consideration distance and travel time. When appropriate, allow people to arrive a day before and provide lodging.
Difficulties in understanding technical matters and complex concepts, language, difficulty expressing ideas (especially in public).	- Encourage the use of plain-inclusive language and graphic communication during trainings, meetings and for disclosing information. - Culturally appropriate and tailored to the language and accessibility preferences and decision-making processes of each identified stakeholder group. - If FPIC process are developed translation for the process should be considered to facilitate adequate communication. - Complement group meetings with in-person meetings.

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Barriers	Mitigation measures
	- Assure that facilitators and trainers can integrate all the participants' opinions. Need to consider that some people may not have formal training and may need special support to fully understand complex issues.
Existing inequalities of women derived from cultural perspectives and discrimination can limit their active involvement and participation in project activities	- Implement project´s gender-related indicators and actions determined in the Gender Action Plan (Annex 9) as part of implementing positive actions towards facilitating women participation and representation. - Use gender inclusive language in the project communication strategy. - Register and follow up sex-disaggregated information regarding participation in meetings and workshops.

6.4. Monitoring and evaluation of the Stakeholder Engagement Plan

The Project Management Unit will prepare and deliver Annual Work Plans that incorporate the activities and results of the project. Specific activities for the implementation of the Stakeholders Engagement Plan are to be embedded in this context.

The periodic evaluation of the Plan will be the responsibility of the PMU (see the task descriptions for each technical member of the project management unit). The Gender and Safeguard Consultant (GPSS) is responsible for the SEP implementation. Other activities are responsibility for the Monitoring, Evaluation and Knowledge Consultant, FIPs Consultant, and Communication Consultant (See Governance and Management Arrangements. Section 4). In the Stakeholders Engagement Plan Matrix is a detailed description of the responsible person in the Project Management Unit.

6.5 Project Grievance Redress Mechanism

In accordance with UNPD policies and Social and Environmental Safeguards (SES) and the Terms of Reference of Project-level Grievance Redress Mechanism (2022), the present mechanism has been developed to offer interested parties the option of presenting their complaints about possible claims that may arise during the execution of the GMC2 project.

In this context, any person or group of people who believe they are negatively affected by the project, or at risk of adverse impacts, may file a claim. It is not a substitute for proactive outreach to stakeholders to inform them about the Project, seek their input, and respond to their suggestions and concerns regarding social and environmental benefits, risks, and impacts.

This is a mechanism that integrates a procedure for complaints or disputes to be presented, heard, and resolved, and to prevent any potential impact that stakeholders identify during project execution.

However, if the grievance processes have taken place, following due process, and have not reached a solution after the process set out in this document, has reached the highest instance of the Project Board, the claimant may apply directly to the staff of UNDP Country Office Staff/ or UNDP Staff managers as follow[65]s:

- Project Web site: complaint portal to be developed in the 3rd trimester of Year 1[66].
- Sustainable Fisheries Partnership (SFP) Project Grievance Mechanism site: to be completed during the inception phase.

[65] If the complaints come from vulnerable people that may have difficulty attending the procedure, as a temporary measure, the complaint can be received directly through any of the emails and addresses established here.

[66] The Project Web site for receiving complaints will be ready after the 3rd trimester of Year 1, until then, the temporary grievances reception may directly be addressed to the Project Coordinator.

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- Project Coordinator information (to be fulfilled at inception phase: email, WhatsApp number, address, Office phone number, etc)
- UNDP Project Assurance function email, WhatsApp number, address, Office phone number, etc. (DRR or RR)
- UNDP Accountability Mechanism Web complaint portal (www.undp.org/secu-srm) or to the following emails: stakeholder.response@undp.org ; project.concerns@undp.org ; secuhotline@undp.org

The information about the GRM and the different channels to present claims should be disseminated by all project communication means so that the diverse stakeholders can know and access this tool for its proper use when they deem it necessary. They should be presented in English, Spanish and French.

Eligible complaints

To be eligible for a Project GRM response, the complaint must pertain to the GMC2 Project and its activities after signature of the Project Document and prior to Project closure.

In addition, the complaint must:
(a) Indicate how Project activity(ies) have caused or contributed, or may cause or contribute to social or environmental harm
(b) Be made by a person or people (directly or through an authorized representative) who could plausibly be affected by the harm(s) referenced in the complaint. Complainants may request and receive confidentiality, but the GRM cannot respond to anonymous grievances.

Who can submit a complaint?

A complaint can be submitted by any individual or group of individuals that believes it has been or will be harmed by the Project. If a complaint is to be lodged by a different individual or organization on behalf of those said to be affected, the Complainant must identify the person/people on behalf of who the complaint is submitted and provide written confirmation by the person/people represented that they are giving the Complainant the authority to present the complaint on their behalf. The GRM will take reasonable steps to verify this authority.

What information should be included in a complaint?

(a) the name(s) of the person/people submitting the complaint ("the Complainant").
(b) a means for contacting the Complainant (email, phone, address, other).
(c) if the submission is on behalf of those alleging a potential or actual harm, the identity of those on whose behalf the complaint is made, and written confirmation by those represented of the Complainant's authority to lodge the complaint on their behalf.
(d) a description of the potential or actual harm.
(e) names of the individual(s) or institutions responsible for the risk/harm (if known), and the location(s) and date(s) of harmful activity (if Complainant states that harm has already occurred).
(f) what has been done by Complainant thus far to resolve the matter.
(g) whether the Complainant wishes for their identity to be kept confidential, and
(h) the specific response requested from the GRM.

Complainants are not required to provide all the information listed above. Initially, the Complainant need only provide enough information to determine eligibility. If insufficient information is provided, the GRM has an obligation to make a substantial, good faith effort to contact the Complainant to request whatever additional information is needed to determine eligibility, and if eligible, to develop a proposed response.

Grievance files and tracking

After the receipt of a grievance, the GRM should be registered in a file and assigned a tracking number.
Each Grievance file will contain, at a minimum:

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- the date of the request as received.
- the date the written acknowledgment was sent (and oral acknowledgment if also done);
- the dates and nature of all other communications or meetings with the Complainant and other relevant Stakeholders.
- specific concerns raised by the complaint, and additional information regarding those concerns provided.
- the eligibility determination and rationale.
- any requests, offers of, or engagements of a mediator or facilitator.
- the dates of discussions between the Complainant, GSPC, Project Coordinator and/or Project Assurance staff, and any other relevant parties related to the proposed resolution/way forward, and the main substantive points from each discussion.
- the Complainant's acceptance or objections to proposed resolutions, and the responses of other relevant parties to proposed resolutions.
- the proposed next steps if objections arose.
- the alternative resolution if renewed dialogues were pursued.
- notes regarding implementation of any agreed resolution.
- any conclusions and recommendations arising from monitoring and follow up.

GRM at project Management level

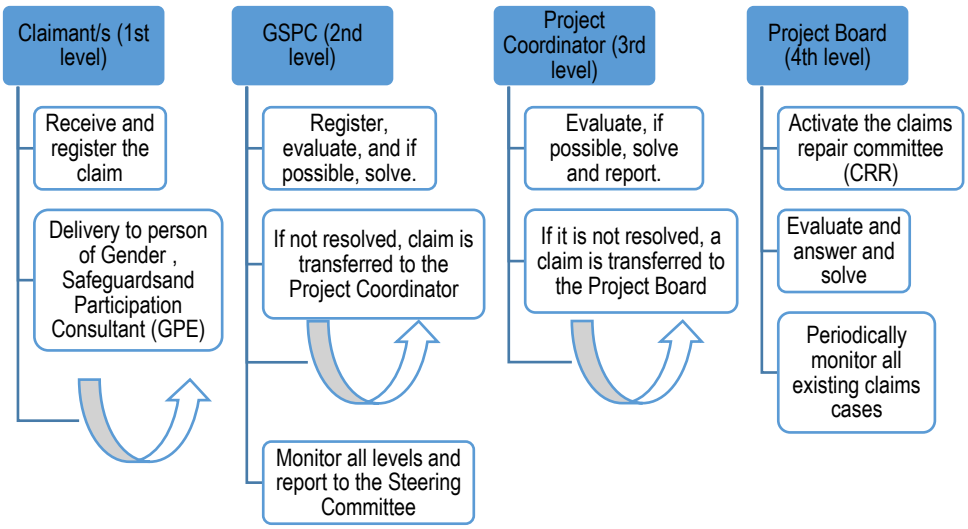
The complaints for the GMC2 project should follow the next procedure to present their claim. The procedure for the presentation and resolution of claims has several levels as described below:

Levels of reception and claim reparation procedure

The procedure to submit a claim consists of four levels (see Figure 2), which has been designed to reach a solution of the submitted claim. The GRM will maintain a flexible approach with respect to receiving complaints considering known local constraints with respect to communications and access to resources for some stakeholders. A complaint can be transmitted by any means available (e.g., by email, letter, phone call, meeting, SMS, etc.).

Based on the difficulty or complexity of its resolution or reparation, the process starts with the GSPC, and escalates to the next level of decision making until the Project Board is reached.

Figure 2. Levels of reception and claim reparation procedure.



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The procedure is as follows:

1st level Reception: Claims must be presented to Gender, Safeguards and Participation Consultant (GSPC):

- The GSPC, acting as a key contact, receives the concerns and / or claims regarding the project. A form for submission of claims should be available since the beginning of the implementation and should be easily accessible in the web page of the project and/or other means of communications that will be used.
- Claims must be made in writing, signed, and dated by the persons/ communities/institutions affected by the project intervention.
- If there are claims verbally presented, they must be documented, verified, and signed by the persons/ communities/institutions affected by the project, so that it can be given a due process.
- The GSPC will keep a record of all claims received specifying names, dates of reception, reason for the claim and resolution process that took place.

2nd level Seek a solution: The GSPC after receiving the claims starts the following process:

- An immediate evaluation of the claim must take place.
- The first action to start the procedure, is to provide a written acknowledgment of receipt with a tracking number and record the main points electronically in a GRM database file that is shared with the Project Assurance function and to the Project Board. Oral acknowledgments can be used for expediency (and recorded) but must be followed by a written acknowledgment.
- An answer to the complainant will be sent within 5 business days after receiving the request and indicate the review procedure that will take place within the next 15 business days after the reception of the claim. An answer will be sent to respond to all claims, whether they are eligible.
- If the application form is incomplete or information is missing to understand the claim, it must be returned to the claimant within a maximum of 3 business days, with a clearly specified request for the missing information.
- The GSPC, after receiving the complete information of the complaint, will immediately seek a solution, especially when they are minor.
- In all cases, the GSPC must monitor said action later, and report periodically to the Project Board.

In case of not being able to provide an appropriate solution, the claim must be escalated to the next level of decision making.

3rd level A major claim to the Project Coordination: The Project Coordinator receives the claims presented through the GSPC which were not solved in the first instance.

- The Project Coordination after receiving the complete information of the complaint, will immediately seek a solution.

4th level: Project Board and Claims Reparation Committee (CRR): The Project Board receives the complaints that the project personnel have not been able to solve or manage since they were received.

- As a maximum decision-making instance, a Claims Reparation Committee will be activated to be able to give a definitive solution. It is not a permanent committee, but it is activated once claims are received at this level and involve risks to the beneficiaries and their rights or they can represent potential significant risks for the execution of the project.
- The project's board calls for the activation of the CRR, which will be chaired by the Project Technical Coordinator. It will be formed by representatives of the Project Board and Technical Committee.
- The CRR members must be chosen at the beginning of the execution of the project so that when it is needed the process is expedited.
- The CRR will be responsible for receiving and resolving, in a fair, objective, and constructive way, complaints raised by the people/communities/institutions affected by the project.

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- The Project Board will track the GRM database file to monitoring and evaluating compliance with the agreements reached through the mechanism for repairing claims and as part of their functions are to disclose the claims management procedures. They will as well, be informed about minor claim cases that have been solved.
- When a resolution is not reached at the CRR level, or if the affected persons/ communities/institutions do not receive a response or are not satisfied with the result within the agreed time, they can appeal to the Project Board to ask for further action that satisfy all the parties.

6.2. Description of the Stakeholder Engagement activities

The actions of the plan are described below. They are detailed in stakeholders' engagement plan matrix in the following section.

Project Objective (Indicator 1 and 2)

The project will have 17.267 direct beneficiaries that will receive targeted support from the project until year 5. The Monitoring, evaluation and Knowledge Consultant will monitor that this target was achieved at the end of the project. In the same way, it is proposed that there will be 373.883 indirect beneficiaries derived from the global project results.

Project Outcomes

Outcome 1.1. The project will work to increase the market demand for sustainable marine commodities in relevant international and domestic markets.

(Output 1.1.2) There will be four improved seafood purchasing policies and targeted sustainability commitments by key players in domestic markets. There will be three process to develop domestic buyers' engagement trials in Guatemala, Senegal, and Ecuador, and one, to develop an engagement pilot in Morocco. The domestic engagement trials are small learning exercises that could then be scaled up to a full-scale stakeholder engagement programme. Morocco's engagement pilot takes advantage of the fact that the country has a high per capita consumption of seafood and has two mature FIPs. After the pilot it could be scaled up to a national program. In both cases they will be developed with strong stakeholders' participation, particularly integrating vulnerable stakeholders.

Outcome 2.1. The project will focus on increasing the supply of seafood products that demonstrate improved fisheries governance and stock health.

(Output 2.1.1) There will be seven government led national co-management platforms that will improve fisheries governance and stock health in Ecuador, Guatemala, Panama, Mauritania, and Senegal[67]. In these seven processes, the levels of participation will be effectively measured with the average of a weighed sample of the results of the application of a questionnaire to measure: (i) representation, (ii) participation and equity, and (iii) accountability and transparency. Activities related to the support and development and operation of the dialogues roundtables or co-management platforms will be accompanied by travel support and materials to promote an adequate participation as well as to assess the progress of governance based on a self-assessment and reflection of the members. In the case of Ecuador, Guatemala, Panama, and Senegal specific attention will be given to women processors and youth. Additionally, in the case of the Panama management platform for the shrimp fisheries there will be a specific support to characterize a group of fishers from the Emberá- Wounaan to support their organization.

[67] [1] Ecuador support the development and operation of the Dialogue Roundtable and Technical Committee of the pomada fishery; ([2] Ecuador) develop the management platform for the dorado and sharks' fishery; [3] Guatemala develop the management platform for the dorado and sharks fishery; [4] Panama develop the management platform for the shrimp fisheries of the Pacific coast; [5] Panama develop the management platform for the longline fishery for large pelagic fish of the Pacific coast; [6] Senegal support the operation of the governance framework for the small pelagic fish fishery; [7] Mauritania support the management framework of the fishery for small pelagic fish.

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(Output 2.1.2). The project will implement six industry-led verifiable Fishery Improvement Projects (FIP) that contribute to improve fisheries governance and stock health. The support and implementation of these FIPS will depend on the stage of development of each FIP[68]. As part of the support given for engagement and participation the FIPs will implement a social workplan (SWP) that will be completed and implemented after the preparation of a social performance risk assessment (SPRA). In the case of Guatemala, the SWP and SPRA will integrate training in social issues such as gender, child labour, decent work, human rights, as well as social audit tools, social performance, fisheries governance). In the case of Senegal, the project will convene key actors and to support the organization of the governance and funding arrangements for a supply chain improvement project with the fishers, the Joal CLPA members and with women processors.

(Output 2.1.3) There will several efforts oriented to support that artisanal and small-scale fishers and local supply chain partners to effectively engage into fisheries improvement projects and co-management platforms**.** In Ecuador, Guatemala, Panama and Senegal, there will be sustained capacity development processes for fostering adequate participation to have a voice and to strengthen their organizations. These actions will be based on evaluations of organization capacities to engage in participatory governance and co-management. In the case of Ecuador, Guatemala and Senegal specific attention will be given to women and youth participation.

Within the evaluation of social, economic, and labour conditions of Panamanian artisanal shrimp fishers, there will be special attention given to a particular baseline study of the Emberá - Wounaan artisanal fishers conditions (number of artisanal fishers, fishermen's families conditions, women participation in the value chain, use - dependency of the fishery´s resources, actual -past levels of organization, interests to organize around this activity).

As the limited information of the conditions of these persons is available, as well as their interest in being part of the shrimp fishing organization, the project has included an affirmative action to support their organization process to have a voice and to participate in equal conditions in the governance platform. It is expected that ≥80% of the governance meetings to be held will have an active participation of Emberá-Wounaan participants. Specific attention will be given to roles of women and young persons in the fishing activities.

Outcome 2.2. Increased supply of seafood products that demonstrate improved social responsibility.

(Output 2.2.2) there will be seven fisheries management instruments[69] that integrate social and economic objectives and targets (two (2) in Ecuador, one (1) in Guatemala, two (2) in Panama, one (1) in Senegal and (1) in Mauritania).

These activities will include to apply a Regulatory Impact Assessment in the fisheries management framework, and to develop a social responsibility assessment to all the governance process and supply chain. The Regulatory Impact Assessment (RIA) is a tool that contributes to strengthening the effectiveness of institutions and policy coherence. The RIA is an evidence-based tool to support public decision-making. It is a systematic assessment of how a proposed regulation is likely to affect certain categories of stakeholders and a variety of outcomes[70].

[68] Support: ([1] Ecuador. Implementation of the pomada FIP; [4] Panama. Development of a FIP for the shrimp fisheries; [5] Panama. Implementation of the large pelagic fish longline FIP; [8] Mauritania. Implementation of the small pelagic fish purse seine FIP; [9] Mauritania. Implementation of the octopus FIP. To Launch: 2] Ecuador. ASOAMAN large pelagic fish FIP; [3] Guatemala. Dorado and sharks FIP; [6] Senegal. Small pelagic fish supply chain improvement project in the Joal CLPA; and [7] Senegal. Octopus FIP.

[69] [1] Ecuador. Update the PAN pomada 2028 – 2034; [2] Ecuador. Prepare the PAN large pelagic fish; [4] Guatemala. Prepare the action plan for the dorado and sharks' fishery; [5] Panama. Prepare the shrimp management plan; [6] Panama. Prepare the large pelagic fish management plan; [8] Senegal. Integrate Regulatory Impact Assessment into management framework of the fishery for small pelagic fish; [10] Mauritania. Support the implementation of the small pelagic fish management plan or 2022.

[70] The project will facilitate for the relevant authorities to test the use of the RIA in the regulations of target fisheries. This will allow: [1] Identify and assess the possible impacts of the proposed measures (e.g., loss of sources of income or livelihoods) and design mitigation and compensation measures as necessary. [2] Address the social and environmental safeguards of the GEF.

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Outcome 3.2. Lessons about mainstreaming ecological and social sustainability into seafood supply chains are available worldwide.

(**Output 3.2.1)** The project lessons will be documented and disseminated. There will be onsite self-assessment meetings with key stakeholders on each country in year 3 and 5 to learn from the implementation of activities but particularly to assess the level of progress of governance processes in each country. Support will be given to participants from distant rural areas (if necessary) and particular attention will be given to ensure participation of representatives of women and youth groups, as pertinent.

At the end of the project, eight learning documents will be produced to capture the main learning from the countries and the regional activities. There will be project memoires to be accessible to the public (visually appealing, plain language) with key stories and testimonies and a concise summary of the project results and lessons. There will be also, eight short videos that summarise the project achievements and lessons, including testimonies of key stakeholders and beneficiaries (one video per country and two videos for regional views (i.e., PACA and CCLME). The videos will be in the local language (four videos in French and four videos in Spanish) with subtitles in English. The short videos will be made available through IW: LEARN and other pertinent channels of the project partners. Finally, there will be the support that at least one person per country can represent the project in IWC2026 y IC2028.

Project Implementation

For the implementation of the Project, some activities have been determined where actions are specified for an adequate involvement and engagement of key stakeholders. Considering that this **SEP** is a management document that provides a framework of action for the Project, this will be updated during the project inception phase. Thus, an adequate start-up process will also be carried out where the involvement of the national key stakeholders must be started through an **inception workshop**. This same process should also be carried out as part of the closure of the implementation and the compliance of reporting through **closing workshops** with national key stakeholders.

At the project start, it will be conformed **a communication group** with partners communications officers to achieve the greatest communicational effects of the project at all levels and with its main means of communication. **An inclusive project communication strategy** will be designed to include the diverse key actors, with an appropriate cultural approach, as well as with the respective languages; particular attention may be given to vulnerable populations related to the target fisheries. There will be specifics actions that will ensure mainstreaming stakeholders' inclusiveness, participation, and cultural appropriate concepts to the contents of training activities (including pictures, case studies, examples, intercultural appropriate concepts)

The project will ensure that all the documents, information and material of the project are translated (when necessary, e.g., Wolof in Senegal) for diverse receptors and integrating pedagogical interpretation of materials (e.g., local vulnerable fishers). Then the level of technical detail, local languages and dialects, levels of literacy, persons with disabilities, roles of women and men, and local methods of disseminating information will be considered in devising appropriate forms of disclosure. The project will also ensure that appropriate communication methods are devised to reach potentially marginalized and disadvantaged groups and These approaches will be expressed in all documents and communications.

Project team.

The project team will have Gender, safeguards, and participation consultant (GSPC) which will give advisory for technical support for stakeholders' engagement action plan and adequate related actions.

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6.7. Stakeholders Engagement Matrix

Project Beneficiaries

Project Objective: To mainstream ecological and social aspects of sustainability to foster sustainable fisheries production and improved wellbeing of coastal communities in support of emerging Blue Economies in the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems.					
Stakeholder engagement activity	Indicator	End of project Target	Budget USD	Timeline	Responsibility
Estimate of number of persons that will receive targeted support from the project	Number of direct project beneficiaries disaggregated by sex (individual people) (GEF Core Indicator 11)	Total: 17.267 Men: 14.105 Women: 3.162	all project budget	Year 5	Monitoring, evaluation, and knowledge consultant
	Number of indirect project beneficiaries	Total: 373.883	all project budget	Year 5	Monitoring, evaluation, and knowledge consultant

Project Outcomes/Outputs

Component 1. Increase demand for sustainable seafood products from CLME&PACA

Outcome 1.1. Increased market demand for sustainable marine commodities in relevant international and domestic markets.

Output	Indicator	End of project Target	Budget USD	Timeline[71]	Responsibility
1.1.2. Four improved seafood purchasing policies and targeted sustainability commitments by key players in domestic markets.	Number of reports from domestic buyers' engagement trial (Guatemala, Senegal, Ecuador) and engagement pilot (Morocco) with strong stakeholders' participation.	Three (3) engagement trials One (1) engagement pilot	249.000,00	Years 1 to 4	Market development consultant

Component 2. Increase supply of sustainable seafood products from CCLME and PACA

Outcome 2.1. Increased supply of seafood products that demonstrate improved fisheries governance and stock health.

[71] The timeline shows the year when the associated budget is executed.

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Output	Indicator	End of project Target	Activity	Budget USD	Timeline	Responsibility
2.1.1. Seven government led national co-management platforms that improve fisheries governance and stock health.	Level of effective participation in the national co-management platforms in the report from annual performance assessments of the target platforms[72]	LPF Ecuador: ≥4 LPF Guatemala: ≥4 LPF Panama: ≥4 Pomada Ecuador: ≥4 Shrimp Panama: ≥4 SPF Mauritania: ≥4 SPF Senegal: ≥4 The level of participation is measured in a five-point scale: 5. Very good, 4. Good, 3. Fair, 2. Poor, 1. Very poor.	[1] Ecuador. Support the development and operation of the Dialogue Roundtable and Technical Committee of the pomada fishery.	74.000,00	Years 1 to 4	GSPC
			2] Ecuador. Develop the management platform for the longline large pelagic fish fishery.	79.000,00	Years 1 to 4	GSPC
			[3] Guatemala. Develop the management platform for the dorado and shark's fishery.	103.000,00	Years 2 to5	GSPC
			[4] Panama. Develop the management platform for the shrimp fisheries of the Pacific coast.	135.000,00	Years 1 to 5	GSPC
			[5] Panama. Develop the management platform for the longline fishery for large pelagic fish of the Pacific coast.	119.000,00	Years 2 to 5	GSPC
			[6] Senegal. Support the operation of the governance framework for the small pelagic fish fishery.	103.600,00	Years 1 to 4	GSPC
			[7] Mauritania. Support the management framework of the fishery for small pelagic fish.	39.500,00	Years 1 to 4	GSPC
2.1.2. Six industry-led verifiable Fishery Improvement Projects that contribute to improved fisheries governance and stock health.	Percentage of Implementation of Social workplan (SWP)	Pomada FIP SWP in progress ≥80% LPF FIP Ecuador FIP SWP in progress ≥80% Dorado and sharks FIP SWP in progress ≥80% SPF FIP Mauritania SWP in progress ≥80%	[1] Ecuador. Support the implementation of the pomada FIP	40.000,00	Years 2 and 4	FIP Consultant
			2] Ecuador. Launch the ASOAMAN large pelagic fish FIP.	30.000,00	Years 1 and 4	FIP Consultant
			[3] Guatemala. Launch the dorado and sharks FIP.	32.750,00	Year 2	FIP Consultant

[72] Note: The level of participation is measured as the average of a weighed sample of the results of the application of a questionnaire to measure: (i) representation, (ii) participation and equity, and (iii) accountability and transparency. Please refer to Methodology notes on this indicator in Monitoring and Evaluation (M&E) Plan.

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		Octopus FIP Mauritania SWP in progress ≥80% Shrimp FIP SWP in progress ≥80% LPF FIP Panama SWP in progress ≥80% Octopus FIP SWP in progress ≥80% Joal CLPA supply chain improvement project action in progress ≥80%[73]	[4] Panama. Support the development of a FIP for the shrimp fisheries.	37.750,00	Year 2	FIP Consultant
			[5] Panama. Support the implementation of the large pelagic fish longline FIP	15.000,00	Year 2	FIP Consultant
			[6] Senegal. Launch a small pelagic fish supply chain improvement project in the Joal CLPA.	75.400,00	Years 1 to 4	FIP Consultant
			[7] Senegal. Launch octopus FIP.	10.000,00	Year 2	FIP Consultant
			[8] Mauritania. Support the implementation of the small pelagic fish purse seine FIP.	10.000,00	Year 1	FIP Consultant
			[9] Mauritania. Support the implementation of the octopus FIP	10.000,00	Year 1	FIP Consultant
2.1.3. Artisanal and small-scale fishers and local supply chain partners effectively engage into fisheries improvement projects and co-management platforms.	Number of persons participating in capacity development processes	Ecuador bolso fishers >50 persons Guatemala artisanal fishers >50 Panama shrimp fishes >50 Senegal CLPA Network >20 Senegal Joal CLPA >60	Ecuador. Development of participatory governance and fisheries co-management skills of pomada bolso fishers' organisations.	113.300,00	Years 1 to 4	FIP Consultant
			Guatemala. Development of participatory governance and fisheries co-management skills of artisanal fishers.	131.300,00	Years 1 to 4	FIP Consultant
			Panama. Development of participatory governance and fisheries co-management skills of artisanal shrimp fishers' organisations of the Pacific coast.	101.200,00	Years 1 to 4	FIP Consultant
			Senegal. Support strengthening of the national CLPA network.	10.000,00	Years 1 to 4	FIP Consultant
			Senegal. Strengthen the Joal CLPA.	14.000,00	Years 1 to 4	FIP Consultant

[73] Support to convene key actors and organise the governance and funding arrangements for a supply chain improvement project with the fishers, CLPAs members, and women processors.

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	Percentage of shrimp governance meetings with Emberá-Wounaan artisanal fishers' participants[74]	≥80% of meetings with Emberá-Wounaan participants	Panama. Development of participatory governance and fisheries co-management skills of artisanal fishers. Specific measures for Emberá-Wounaan through IPP if their involvement is confirmed.	13.000,00	Years 1 and 2	FIP Consultant /GSPC

Outcome 2.2. Increased supply of seafood products that demonstrate improved social responsibility.

Output	Indicator	End of project Target	Activity	Budget USD	Timeline	Responsibility
2.2.2. Seven fisheries management instruments that integrate social and economic objectives and targets.	Number of fisheries management plans formally adopted by the pertinent authority, includes specific social and economic objectives and targets.	Seven (7) management plans.	[1] Ecuador. Update the PAN pomada 2028 - 2034	35.000,00	Year 2	Fisheries officer PACA
			[2] Ecuador. Prepare the PAN large pelagic fish.	43.000,00	Years 2 and 3	Fisheries officer PACA
			[4] Guatemala. Prepare the action plan for the dorado and sharks' fishery.	54.640,00	Years 1 and 2	Fisheries officer PACA
			[5] Panama. Prepare the shrimp management plan.	40.000,00	Years 1 and 2	Fisheries officer PACA
			[6] Panama. Prepare the large pelagic fish management plan.	49.000,00	Years 2 and 3	Fisheries officer PACA
			[8] Senegal. Integrate Regulatory Impact Assessment into management framework of the fishery for small pelagic fish.	45.000,00	Years 2 and 3	Fisheries officer CCLME
			[10] Mauritania. Support the implementation of the small pelagic fish management plan or 2022.	25.000,00	Year 2	Fisheries officer CCLME

Component 3. Knowledge management to support the transformation of the seafood market

[74] Note. Support for Baseline study of the Emberá - Wounaan artisanal fishers' conditions (number of artisanal fishers, fishermen's families' conditions, women participation in the value chain, use - dependency of the fishery´s resources, actual -past levels of organization, interests for future organization) and for support organization process of Emberá-Wounaan artisanal fishers to have a voice and participate in the governance platform.

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Outcome 3.2. Lessons about mainstreaming ecological and social sustainability into seafood supply chains are available worldwide.

Output	Stakeholder engagement activity	Indicator	End of project Target	Budget USD	Timeline	Responsibility
3.2.1. Project lessons documented and disseminated.	Support Self-assessment about project progress with key stakeholders on each country (midterm and final).	Number of self-assessment meetings with key stakeholders	Twelve (12) meetings	36.000,00	Years 3 and 5	Communications Consultant / GSPC
	Distribute project learning documents, memoires, and videos with testimonies of key stakeholders and beneficiaries in French, Spanish and English	Number of learning documents Number of project Memoires Number of videos	Eight learning documents	112.000,00	Year 5	Communications Consultant / GSPC
	Support stakeholders' participation and engagement in IWC2026 y 2028	Number of key stakeholders from GMC2 participating countries in the IWC 2026 and IWC 2028	At least one per county in each meeting (at least 12 participants)	67.200,00	Years 3 and 5	GSPC

Project implementation

Stakeholder engagement activity	Indicator	End of project Target	Budget USD	Timeline	Responsibility
Review and update stakeholders' analysis and engagement plan (SEP)	Number of updated SEP	One (1)	-	Initiation phase- Year 1	GSPC
Adequate provision of information in the inception workshop for project key stakeholders in each participating country.	Number of inception workshops with national key stakeholders	1 per country (06)	30.000,00	Initiation phase- Year 1	Communications Consultant / GSPC
Adequate process closing project activities through workshops with national stakeholders on each country (giving support for participants from distant areas, vulnerable groups, women, and youth groups, as pertinent).	Number closing workshops with national key stakeholders	1 per country (06)	30.000,00	Year 5	Communications Consultant / GSPC

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A communication strategy that includes diverse key actors with inclusive, cultural approach as well as appropriate language aspects; particular attention may be given to vulnerable populations related to the target fisheries.	Level of integration of inclusive and cultural appropriate approach in project communication strategy 1= Not integrated 2= Integrated through the design in the document strategy	2	-	Initiation phase – Year 1	Communications Consultant / GSPC
Establishment of a communications group to coordinate the dissemination of information on the project, ensuring the full implementation of the stakeholder engagement plan.	Level of development of operation of the Communications Group 1. Group established 2- Group has a work plan that includes actions for the implementation of the stakeholder engagement plan	2	(Portion of the salaries of the Communication Consultant)	Year 1	Communications Consultant / GSPC
Ensure mainstreaming stakeholders' inclusiveness, participation, and cultural appropriate concepts to the contents of training activities (including pictures, case studies, examples, intercultural appropriate concepts)	Level of integration of course-training curriculum & materials of selected includes gender and cultural appropriate concepts. 1= Not integrated 2= Integrated through the design in the document strategy	2	0	Throughout the project implementation	GSPC
Ensure that all the documents, information and material of the project are translated (when necessary, e.g., translation to Wolof language in Senegal) for diverse receptors and integrating pedagogical interpretation of materials (e.g., local vulnerable fishers), and others.	Number of documents translated for diverse stakeholders in local languages Number of documents that have been interpreted pedagogically to present complex information to stakeholders	At least 80% of all documents have been translated (when necessary) into local languages At least 80% of all documents have been interpreted pedagogically	30.000,00	Throughout the project implementation	Communications Consultant / GSPC

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Project Team

Stakeholder engagement activity	Indicator	End of project Target	Budget USD	Timeline	Responsibility
Integration of appropriate advice for project implementation through a person specialized in social integration, participation, and safeguards	Support from a dedicated social and safeguard consulttant	One person	33% of GSPC budget	Throughout the project implementation	Project Coordinator

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6.8. Budget for Stakeholder Engagement Plan

The costs for stakeholder engagement activities are part of the total project budget and is associated with the different activities planned under the project's outputs and embedded in their cost calculations. Activities relative to the implementation of the Stakeholders Engagement Plan are mainstreamed across the project's Multi-Year Work Plan (Annex 3 to the PRODOC).

An approximate estimation of the cost for each activity included in the Stakeholder Engagement Plan Matrix is provided in Table 6. Some of the SEP activities doesn't require budget to be implemented and some of them share budget with those detailed in the Gender Action Plan.

Table 6. Summary of SEP Budget

Outcome	Output	Budget USD
Outcome 1.1. Increased market demand for sustainable marine commodities in relevant international and domestic markets.	1.1.2. Four improved seafood purchasing policies and targeted sustainability commitments by key players in domestic markets.	249.000,00
Outcome 2.1. Increased supply of seafood products that demonstrate improved fisheries governance and stock health.	2.1.1. Seven government led national co-management platforms that improve fisheries governance and stock health.	653.100,00
	2.1.2. Six industry-led verifiable Fishery Improvement Projects that contribute to improved fisheries governance and stock health.	242.900,00
	2.1.3. Artisanal and small-scale fishers and local supply chain partners effectively engage into fisheries improvement projects and co-management platforms (including budget for baseline study and supporting Emberá Wounaan participation)	382.800,00
Outcome 2.2. Increased supply of seafood products that demonstrate improved social responsibility.	2.2.2. Seven fisheries management instruments that integrate social and economic objectives and targets.	291.640,00
Outcome 3.2. Lessons about mainstreaming ecological and social sustainability into seafood supply chains are available worldwide.	3.2.1. Project lessons documented and disseminated.	215.200,00
Project implementation	Adequate provision of information in the inception workshop for project key stakeholders in each participating country.	30.000,00

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	Adequate process closing project activities through workshops with national stakeholders on each country (giving support for participants from distant areas, vulnerable groups, women, and youth groups, as pertinent).	30.000,00
	Ensure that all the documents, information and material of the project are translated (when necessary, e.g., translation to Wolof language in Senegal) for diverse receptors and integrating pedagogical interpretation of materials (e.g., local vulnerable fishers), and others.	30.000,00
Project Team	Integration of appropriate advice for project implementation through a person specialized in social integration, participation, and safeguards	(33% of GSPC budget)
		2.142.640,00

7. References

Durham E., Baker H., Smith M., Moore E. & Morgan V. (2014). The BiodivERsA Stakeholder Engagement Hand- book. BiodivERsA, Paris (108 pp).

GEF. Guidelines on implementation of the Policy on Stakeholder Engagement. SD/GN/01. 2018.

UNDP Social and Environmental Standards (SES) *Stakeholder Engagement. 2021.*

UNDP (2022). Guidance Note UNDP Social and Environmental Standards (SES): Stakeholder Engagement. July 2022.

UNDP (2014). Stakeholder Response Mechanism: Overview and Guidance. 2014.

UNDP (2022). Terms of Reference Project-level Grievance Redress Mechanism.

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Annex 8: Environnemental Social Management Framework (ESMF)

Environmental and Social Management Framework (ESMF)

Project title: *Mainstreaming Sustainable Marine Fisheries value chains into a Blue Economy for Targeted Large Marine Ecosystems*
Country: Africa and Latin America: Canary Current Large Marine Ecosystem (Morocco, Mauritania, Senegal) and Pacific-Central America Coastal Large Marine Ecosystem (Guatemala, Panama, Ecuador).
UNDP Social and Environmental Screening Category: *Substantial Risk*

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November 2023

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List of Acronyms

CCLME	Canary Current Large Marine Ecosystem
CHIA	Cultural Heritage Impact Assessment
CHMP	Cultural Heritage Management Plan
CSO	Civil society organization
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMF	Environmental and Social Management Plan
FIP	Fishery improvement project
GAP	Gender Action Plan
GEF	Global Environment Facility
GRM	Grievance Redress Mechanism
LAF	Livelihood Action Framework
M&E	Monitoring and evaluation
MSC	Marine Stewardship Council
PACA	Pacific Central American Coastal Large Marine Ecosystem
PAN	National Action Plan
PIF	Project Identification Form
PIR	GEF Project Implementation Report
PMU	Project management unit
POPP	UNDP Programme and Operations Policies and Procedures
PPG	Project Preparation Grant
PRODOC	Project document
RFMO	Regional fisheries management organization
RIA	Regulatory Impact Assessment
SEP	Stakeholder Engagement Plan
SES	Social and Environmental Standards
SRM	Stakeholder Response Mechanism
SESP	Social and Environmental Screening Procedure
SRA	Social Responsibility Assessment
TE	Terminal evaluation
UNDP	United Nations Development Programme

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Executive Summary

This Environmental and Social Management Framework (ESMF) has been prepared for the UNDP-supported project *'Mainstreaming Sustainable Marine Fisheries value chains into a Blue Economy for Targeted Large Marine Ecosystems',* developed in 2023. The ESMF specifies the applicable social and environmental policies and requirements and how those requirements will be met throughout project implementation. This includes procedures for the screening, assessment, mitigation, monitoring and reporting of social and environmental risks and impacts associated with the activities to be supported.

As the project has directly integrated into its activities the use of impact assessment tools and the design of management/action plans, as well as designed a Stakeholder Engagement Plan (SEP) and Gender Action Plan (GAP), the ESMF will serve as a framework summarizing how the project will assess and manage/mitigate social and environmental risks. It will also serve as a guide for dealing specifically with social and environmental risks of measures which will be clarified during the project (in particular, the implementation of sustainable fisheries management measures), which are currently unknown and will be decided by relevant stakeholders and authorities during the implementation of the project.

Analysis and screening conducted during the project preparation phase and on the PRODOC via UNDP's Social and Environmental Screening Procedure (SESP) identified potential social and environmental risks associated with project activities. The screening procedure established that the project is overall rated as being of 'substantial' risk, and that most of the 'moderate' risks are manageable through activities already included in the project, the SEP and GAP, and are identified in the SESP. The project includes one 'substantial risk', as it might involve access restrictions leading to potential economic displacement and loss of livelihoods. As this risk is linked to potential fisheries conservation and management measures not yet known, to be decided during project implementation by the pertinent national authorities, additional assessment and safeguard management measures have been included in the project (in particular the application of the Regulatory Impact Assessment tool and process). The project has included the use of a Livelihood Action Framework to address this potential risk.

The main risks of the project include:

- Risk 1: The project activities related to the design, reinforcement, support and implementation of muti-stakeholder co-management platforms for each fishery and to the development of governance arrangements for FIPs, could inadvertently lead to the exclusion of certain stakeholders (in particular smaller scale operations) from fully participating in decisions related to fisheries governance and fisheries improvement processes that may affect them. (Moderate)
- Risk 2: The project activities aimed at supporting increased sustainability and social responsibility in the target fisheries and supply chains could inadvertently exacerbate economic disparities and increased social inequalities among industry actors. (Moderate)
- Risk 3: The project support for improved fisheries conservation and management measures (to address overfishing or improve specific fisheries) may result in access restrictions to fishers, causing economic displacement, loss of jobs and loss of livelihoods to various actors of the target supply chains. (Substantive)
- Risk 4: The project activities focusing on fisheries governance and management may lead to tensions or conflicts among different stakeholders over resource allocation and access (among different fishing communities or supply chain partners, especially if their interests or priorities diverge). (Moderate)
- Risk 5: The project activities promoting and increasing demand for seafood from fisheries with reduced bycatch and ecosystem impacts may inadvertently increase incentives for illegal fishing activities in areas where such regulations are not adequately enforced. (Moderate)
- Risk 6: The project activities in Panama in the shrimp sector could potentially affect the Emberá-Wounaan people since some of them may be artisanal shrimp fishers. The main risks of the project activities to this community are related to exclusion from participation in fisheries governance and decision-

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making processes and the risk of economic displacement if conservation and management measures in the shrimp fishery lead to access restrictions. (Moderate)

- Risk 7: Given the context around gender in the project countries and the fishery sector, there is a risk of exclusion of women from participating in the fisheries governance and fisheries improvement processes promoted by the project. (Moderate)
- Risk 8: The project activities focused on tightening market requirements and increasing demand for sustainable seafood could put pressure on the industry to meet the supply, which could potentially lead to labour exploitation and poor working conditions, especially in countries with weaker labour regulations. (Low)
- Risk 9: The project activities focused on increasing demand for sustainable seafood and improving fisheries management could affect food security of local populations in some countries of the project. (Moderate)
- Risk 10: The target fishery resources are affected by climate variability and climate change. (Moderate)
- Risk 11: The project will foster changes in fishing practices that could impact intangible cultural heritage of certain communities. (Moderate)

As noted above, a particularity of the project is that it has already included and mainstreamed activities which address most of the identified risks. The design of the project has paid special attention to the principle of integration and participation of key stakeholders of the target supply chains and the related vulnerable populations, integrating them throughout the design of the project and supporting their involvement, participation, and engagement. The project has also included particular attention and support to the most vulnerable stakeholders in the target fishery value chains and has developed a Stakeholder Engagement Plan (SEP) and Gender Action Plan (GAP).

In addition to this, the project has integrated the preparation of a scoped Environmental and Social Impact Assessment (ESIA) at the beginning of project implementation. The scoped ESIA will include four assessments: (i) cultural heritage impact assessment of the target fisheries, (ii) baseline analysis of Emberá-Wounaan artisanal shrimp fishers, and (iii) identification of ethnic minorities linked to the target fisheries in Africa. In addition, the project includes the use of Regulatory Impact Assessment (RIA) processes for the development of conservation and management measures and fisheries management plans (output 2.2.2). The objective of these is to ensure that fishery governance, the conservation and management measures, and the FIPs address potential social and environmental risks, through specific workplans and actions plans. In cases where these assessments identify specific risks of access restrictions leading to economic displacement and loss of livelihoods that are unavoidable and not addressed by the results of the RIA process, the project has integrated a Livelihood Action Framework. Regarding risks related to labour and working conditions, multiple fishery specific assessments are included as project activities (activities 2.1.3 and 2.2.2), and more generally any potential issues related to labour and working conditions will be monitored throughout project implementation.

The implementation of project activities will be done under the supervision of a Project Board. The Project Management Unit (PMU) will plan and oversee the execution of project activities, and evaluate and report on their progress to the board and other stakeholders, including on the ESMF, scoped ESIA/ESMP, SEP, GAP and grievance mechanism. A Gender, Safeguards, and Participation Consultant (GSS) in the PMU will be responsible for ensuring the proper implementation of the ESMF procedures and tools.

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1. Introduction

This Environmental and Social Management Framework (ESMF) has been prepared for the UNDP-supported project *'Mainstreaming Sustainable Marine Fisheries value chains into a Blue Economy for Targeted Large Marine Ecosystems',* developed in 2023.

The ESMF specifies the applicable social and environmental policies and requirements and how those requirements will be met throughout project implementation. This includes procedures for the screening, assessment, mitigation, monitoring and reporting of social and environmental risks and impacts associated with the activities to be supported. Although the project activities have been screened in the Social and Environmental Screening Procedure (SESP, annex 4 of PRODOC), the project contains several activities which cannot be fully assessed until their details have been defined, later during project implementation. The ESMF will ensures that these activities are screened and assessed and that appropriate management measures are in place prior to implementation.

The UNDP Social and Environmental Standards (UNDP SES) are the applicable standards for this management framework. Preliminary analysis and screening conducted during the project development phase via UNDP's SES and SESP identified potential social and environmental risks associated with project activities. The screening procedure established that the project is overall rated as being of 'substantial' risk, and that most of the 'moderate' risks are manageable through activities already included in the project, the Stakeholder Engagement Plan (SEP) and Gender Action Plan (GAP) and are identified in the SESP. The project includes one 'substantial risk', as it might involve access restrictions leading to potential economic displacement and loss of livelihoods. As this risk is linked to potential fisheries conservation and management measures not yet known, to be decided during project implementation, additional assessment and safeguard management measures have been included in the project. The project has included a Livelihood Action Framework..

2. Project description

The GMC2 project falls under the GEF International Waters Focal Area (IW) and aims to mainstream ecological and social aspects of sustainability to foster sustainable fisheries production and improve the well-being of coastal communities in support of emerging Blue Economies in the Canary Current Large Marine Ecosystem (CCLME) in Morocco, Senegal and Mauritania, and the Pacific Central American Coastal Large Marine Ecosystem (PACA) in Guatemala, Panama, and Ecuador.

As such, the project will be implemented in very different contexts and it will have many direct and indirect stakeholders that covers linguistic, political, and culturally diverse regions, with a formal mandate for their involvement and engagement.

The GMC model includes two approaches:

- A top-down market-driven approach to build demand in international markets to "pull" the supply of sustainable seafood products. This includes working with major traders and buyers to increase awareness, provide sound information, implement responsible purchasing policies, and facilitate constructive dialogue through supply chain roundtables.
- A bottom-up approach to build supply of sustainable seafood products. The core element is the sustainable marine commodity platform (a government-led fisheries co-management platform) to facilitate multi-level stakeholder dialogue and concrete action to improve fisheries management. Complementarily, industry led FIPs facilitate private sector engagement in practice.

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The GMC2 Project comprises the following four components:

- Component 1: Increase demand for sustainable seafood products from CCLME and PACA
- Component 2: Increase the supply of sustainable seafood products from CCLME and PACA
- Component 3: Knowledge management to support the transformation of the seafood market.
- Component 4: Monitoring and evaluation.

The project interventions focus on ten target supply chains (Table 4 of the PRODOC). In the PACA ecosystem the target fisheries are:

- Longline fisheries for large pelagic fish (tuna, billfishes, sharks) in Guatemala, Panama, and Ecuador.
- Artisanal and industrial fisheries for white shrimp in Panama.
- Industrial and artisanal fisheries for titi shrimp (pomada) in Ecuador.

In the CCLME ecosystem the target fisheries are:

- Industrial and artisanal fisheries for small pelagic fish in Mauritania, Morocco and Senegal,
- Octopus' fisheries in Mauritania and Senegal.

Given the scale of the project, it includes a large number of activities (Annex 3 of the PRODOC). A detailed list of these can be found in Annex 1 of this ESMF. The main outputs of the project have been listed below:

Table 18. GMC2Project Outcomes and Outputs.

Outcomes	Outputs
Component 1.	Increase demand for sustainable seafood products from CCLME and PACA.
Outcome 1.1. Increased market demand for sustainable marine commodities in relevant international and domestic markets.	1.1.1. 12 improved seafood purchasing policies and target sustainability commitments adopted by major supply chain partners in international markets sourcing export-oriented commodities. 1.1.2. Four improved seafood purchasing policies and targeted sustainability commitments adopted by key players in domestic markets.
Outcome 1.2. Increased market demand for socially responsible seafood commodities.	1.2.1. Socially responsible seafood standards integrated into the FishSource rating system and available to major supply chain partners worldwide. 1.2.2. Three major international supply chain partners integrate socially responsible seafood requirements in their policies and commitments. 1.2.3. Two key players in domestic supply chains integrate socially responsible seafood commitments in their policies and commitments.

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Outcome 1.3. Increased market demand for seafood commodities from fisheries with reduced bycatch and environmental impact.	1.3.1. Three major international supply chain partners take action to demand seafood sourced from fisheries with reduced bycatch and ecosystem impacts. 1.3.2. Two key players in domestic supply chains take action to demand seafood sourced from fisheries with reduced bycatch and ecosystem impacts.
Component 2.	Increase supply of sustainable seafood products from CCLME and PACA.
Outcome 2.1. Increased supply of seafood products that demonstrate improved fisheries governance and stock health.	2.1.1. Seven government led national co-management platforms that improve fisheries governance and stock health. 2.1.2. Eight industry-led verifiable Fishery Improvement Projects that contribute to improved fisheries governance and stock health. 2.1.3. Artisanal and small-scale fishers and local supply chain partners effectively engage into fisheries improvement projects and co-management platforms.
Outcome 2.2. Increased supply of seafood products that demonstrate improved social responsibility.	2.2.1. Two sets of guidelines to mainstream social responsibility into fisheries governance and seafood supply chains. 2.2.2. Nine fisheries management instruments that integrate social and economic objectives and targets.
Outcome 2.3. Increased supply of seafood products that demonstrate reduced bycatch and environmental impact.	2.3.1. Three fisheries management instruments that integrate objectives and targets to reduce ecosystem impacts and bycatch. 2.3.2. Four FIPs that implement actions to reduce ecosystem impacts and bycatch.
Component 3.	Knowledge management to support the transformation of the seafood market and project monitoring and evaluation.
Outcome 3.1. Reliable and verifiable information of sustainability performance of target marine commodities is available to supply chain partners and the public to drive their purchasing decisions.	3.1.1. The sustainability assessment profiles of all project target fisheries are maintained in FishSource. 3.1.2. The profiles and progress evaluations of all project related FIPs are publicly available.
Outcome 3.2. Lessons about mainstreaming ecological and social sustainability into seafood supply chains are available worldwide.	3.2.1. Project lessons documented and disseminated.
Component 4.	Monitoring and Evaluation
Outcome 4.1. Project-level monitoring and evaluation, in compliance with UNDP and mandatory GEF-specific monitoring and evaluation requirements	4.1.1. Inception Workshop and Report. 4.1.2. Annual GEF Project Implementation Review (PIR), reports of Board Meetings, and monitoring of GEF core Indicators, Gender Action Plan, Stakeholder Engagement Plan, and the ESMF. 4.1.3. Independent Mid-Term Review.

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	4.1.4. Independent Terminal Evaluation.

The project activities can be grouped into three main types:

- Design of studies, strategies, standards, reports, guidance materials.
- Promoting and facilitating engagement/participation of key stakeholders.
- Supporting the development and implementation of sustainable fisheries conservation and management measures and FIPs.

It is important to note for this ESMF that several activities of the project will likely lead to the design and implementation of fishery conservation and management measures which are currently undefined since they will result from the operation of the fisheries co-management platforms (outputs 2.1.1 and 2.2.2).

3. Purpose and Scope of this ESMF

This ESMF is a management tool to assist in managing potential adverse social and environmental impacts associated with activities of this UNDP-supported GEF funded project, in line with the requirements of the UNDP Social and Environmental Standards (SES). The implementing partners of the project and the relevant members of the Project Management Unit (PMU) will follow this ESMF from the start of the project implementation to ensure the environmental and social risks and impacts are fully assessed and management measures are in place prior to the implementation of the relevant project activities.

The ESMF has been developed on the basis of the project risk categorization and to outline the processes that will be undertaken during the project inception/implementation phases for the additional assessment of potential impacts, and identification and development of appropriate risk management measures. It contains measures and plans to avoid, and where avoidance is not possible, to reduce, mitigate and/or offset adverse risks and impacts.

As the project has directly integrated into its activities the use of impact assessment tools and the design of management/action plans, as well as designed a SEP and a GAP, the ESMF will serve as a framework summarizing how the project will assess and manage/mitigate social and environmental risks. It will also serve as a guide for dealing specifically with social and environmental risks of measures which will be clarified during the project (in particular, the implementation of sustainable fisheries conservation and management measures), which are currently unknown and will be decided by relevant stakeholders and authorities during the implementation of the project.

As such, this ESMF has been prepared to set out the principles, rules, guidelines, and procedures for screening, assessing, and managing the potential social and environmental impacts of the project as they are developed and designed. It is important to note many of these procedures (assessments and management plans) have been included directly as project activities, to ensure the measures designed during the project implementation avoid adverse environmental and social impacts.

This ESMF will be publicly disclosed in line with UNDP's Information Disclosure Policy and SES.

4. Overview of national legal and institutional frameworks

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Given the particularity of the project being implemented in six different countries (Ecuador, Guatemala, Panama, Morocco, Mauritania, and Senegal), this section provides a brief overview of these countries relevant institutional and legal framework. Further detail and information can be found in the Country Profiles (Annex 17 of the PRODOC), the profiles of the target fisheries (Annex 15 of the PRODOC), and Gender Action Plan (Annex 9 of the PRODOC). This initial identification will be completed during project implementation when targeted assessments (on indigenous peoples, on labour and working conditions and on cultural heritage) and impact assessments (RIA, SRA) are implemented and require in depth reviews.

As the overview covers six countries and looks at legislation related to specific fisheries, to the environment, to indigenous peoples and monitoring, to gender and to impact assessment, to avoid crowding the ESMF these tables have been included in Annex 2 of the present document.

It is important nevertheless to note that in some aspects UNDP SES might establish higher standards and imply additional requirements compared to what is compulsory under national legislation. To avoid confusion and a potential discrepancy between stringency levels, the project shall follow UNDP SES requirements as the basis for its implementation (unless an instance is encountered where national law presents more strict requirements).

5. Applicable UNDP Social and Environmental Standards

The project will comply with UNDP's Social and Environmental Standards (SES), which came into effect in January 2015 and were revised in 2020. The revised Social and Environmental Standards came into effect on 1 January 2021. UNDP Safeguards are measures to protect or to avoid risks (do no harm), while promoting benefits (do good). The current ESMF, which forms part of the UNDP safeguards requirements, provides guidance to assess and manage the risks linked to potential harm induced by project activities, while providing guidance to ensure that these activities will actually promote benefits to the beneficiaries with respect to its objectives. The SES underpins UNDP's commitment to mainstream social and environmental sustainability in its programmes and projects to support sustainable development and are an integral component of UNDP's quality assurance and risk-management approach to programming. Through the SES, UNDP meets the requirements of the GEF's Environmental and Social Safeguards Policy. The objectives of the standards are to:

- strengthen the quality of programming by ensuring a principled approach;
- maximize social and environmental opportunities and benefits;
- avoid adverse impacts to people and the environment;
- minimize, mitigate, and manage adverse impacts where avoidance is not possible;
- strengthen UNDP and partner capacities for managing social and environmental risks; and
- ensure full and effective stakeholder engagement, including through a mechanism to respond to complaints from project-affected people.

The SES, outlined in Table 2, is an integral component of UNDP's quality assurance and risk management approach to programming. This includes the Social and Environmental Screening Procedure (see the completed SESP for the project in Annex 4 of the PRODOC).

Table 19. Key Elements of 2021 UNDP's Social and Environmental Standards (SES).

PART A. Programming Principles	PART B: Project-Level Standards	PART C: Social and Environmental Management System

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Principle 1: Leave no one behind Principle 2: Human Rights Principle 3: Gender Equality and Women's Empowerment Principle 4: Sustainability and Resilience Principle 5: Accountability	**Standard 1:** Biodiversity Conservation and Sustainable Natural Resource Management **Standard 2:** Climate Change and Disaster Risks **Standard 3:** Community Health, Safety and Security **Standard 4:** Cultural Heritage **Standard 5:** Displacement and Resettlement **Standard 6:** Indigenous Peoples **Standard 7:** Labour and Working Conditions **Standard 8:** Pollution Prevention and Resource Efficiency	Quality Assurance and Risk Management **Screening and Categorization** **Assessment and Management** Stakeholder Engagement and Response Mechanism Access to Information Monitoring, Reporting, and Compliance

The Standards are underpinned by an Accountability Mechanism with two key functions:

- A Stakeholder Response Mechanism (SRM) that ensures individuals, peoples, and communities affected by UNDP projects have access to appropriate procedures for hearing and addressing project-related grievances; and
- A Compliance Review process to respond to claims that UNDP is not in compliance with UNDP's social and environmental policies.

In accordance with UNDP SES policy, the SESP was applied during the project development phase (both at PIF and PPG stages) and updated based on the PRODOC. In accordance with UNDP SES policy, a SES principle or standard is "triggered" when a potential risk is identified and assessed as having either a "moderate", "substantial" or "high" risk rating based on its probability of occurrence and extent of impact. Risks that are assessed as "low" do not trigger the related principle or standard.

It has been conceived according to the following principles:

- Do Not Assume Away Risks: Impact and probability have been rated as if mitigation measures will not be applied, thinking "*worst case scenario"*.
- Rate Risks Appropriately: Risk significance levels have not been under-estimated – to be accurate, the most likely risk levels have been identified.
- Categorize Based on Highest Risk: The overall categorization has been accurately assigned by using the highest individual risk rating.

The screenings conducted during project development indicate that up to three Principle and five Social and Environmental Standards have been triggered due to 'substantial' or 'moderate' risks. Table 3 shows the triggered principles and standards and the applicable requirements to comply with each of them.

Table 20. Requirements that apply to the project based on UNDP SES.

Principle / Standard	**Comments**
Principle1: Leave No One Behind	Leaving no one behind and reaching the furthest behind first is the central promise of the 2030 Agenda. As an overarching programming principle, leaving no one behind requires UNDP to prioritize its programmatic interventions to address the situation of those most marginalized, discriminated and excluded, and to empower them as active agents of the development process. All persons living in extreme poverty, in any form, are left behind, together with those enduring disadvantage(s) that deny

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Principle / Standard	Comments
	or limit their choices and opportunities relative to others in society. In identifying who is being left behind, UNDP considers five key factors: discrimination, geography, vulnerability to shocks, governance and socio-economic status. At the intersection of these factors, people face multiple reinforcing sources of deprivation and inequalities. Programming to leave no one behind should follow the rights-based approach to development, including the application of a gender perspective. Actions and decisions that improve the lives of poor, excluded and marginalized groups and that address inequalities and discrimination include advocacy, creating enabling environments, capacity development and support for civil society, community empowerment, and enhancing the quality and accessibility of services.
Principle 2: Human Rights	UNDP recognizes the centrality of human rights to sustainable development, poverty alleviation and ensuring fair distribution of development opportunities and benefits and is committed to supporting "universal respect for, and observance of, human rights and fundamental freedoms for all." UNDP adheres to the United Nations Development Group (UNDG) Statement of Common Understanding of the Human Rights-Based Approach to Development Cooperation and Programming (UN Common Understanding) which outlines that development programmes and policies should further the realization of human rights as laid down in the Universal Declaration of Human Rights and other human rights instruments. UNDP also recognizes the human rights-based approach as a key engagement principle in pursuing development outcomes. In furthering the realization of rights, UNDP shall both refrain from providing support for activities that may contribute to violations of a State's human rights obligations and the core international human rights treaties and seek to support the protection and fulfilment of human rights. In its Programmes and Projects, UNDP will uphold the principles of accountability and the rule of law, participation and inclusion, and equality and non-discrimination, noting that prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. UNDP will also ensure the meaningful, effective and informed participation of stakeholders in the formulation, implementation, monitoring and evaluation of Programmes and Projects. UNDP seeks to support State efforts to meet their human rights obligations as requested, however, UNDP does not have a monitoring role with respect to human rights. In the context of UNDP Programmes and Projects, UNDP's due diligence obligations require UNDP to monitor compliance with its policies.
Principle 3: Gender Equality & Women's Empowerment	Gender equality and the empowerment of women are central to the mandate of UNDP and intrinsic to its human rights-based approach to development programming. This effort includes advocating for women's and girls' human rights, combating discriminatory practices, and challenging the roles and stereotypes that create inequalities and exclusion. UNDP Programmes and Projects will be gender-responsive in their design and implementation. UNDP will seek to identify and integrate the different needs, constraints, contributions and priorities of women, men, girls and boys into its programming. UNDP Programmes and Projects will promote gender equality and the empowerment of women. UNDP will seek to reduce gender inequalities in access to and control over resources and the benefits of development. Programmes and Projects will ensure that both women and men are able to participate meaningfully and equitably, have equitable access to Programme and Project resources, and receive

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Principle / Standard	Comments
	comparable social and economic benefits. UNDP will ensure that its Programmes and Projects do not discriminate against women or girls or reinforce gender-based discrimination and/or inequalities.
Principle 4: Sustainability and Resilience	Sustainable management, protection, conservation, maintenance and rehabilitation of natural habitats and their associated biodiversity and ecosystem functions are fundamental to UNDP's efforts to develop and implement sustainable development pathways. UNDP seeks to address poverty and inequality while maintaining and enhancing natural capital. Sustainable management, protection, conservation, maintenance and rehabilitation of natural habitats and their associated biodiversity and ecosystem functions are fundamental to UNDP's efforts to develop and implement sustainable development pathways. UNDP seeks to address poverty and inequality while maintaining and enhancing natural capital. UNDP will ensure that environmental sustainability is systematically mainstreamed into its Programmes and Projects. In designing development cooperation activities, UNDP will seek to support Programme Countries and Implementing Partners to address the environmental dimensions (both opportunities and constraints) of major development issues and to strengthen environmental management and protection. UNDP uses and promotes a precautionary approach to natural resource conservation and reviews its development cooperation activities to ensure they do not cause negative environmental effects. UNDP requires the application of relevant social and environmental standards to avoid adverse environmental impacts, or where avoidance is not possible, to minimize, mitigate, and as a last resort, offset and compensate for potential residual adverse impacts. UNDP will assist Programme Countries and Implementing Partners to integrate low-emission, climate-resilient objectives into national and sectoral development plans and will ensure that supported Programmes and Projects enhance climate resiliency and avoid unwarranted increases in greenhouse gas (GHG) emissions, instead enhancing efficiency and reducing GHG intensity.
Principle 5: Accountability	UNDP does not support activities that do not comply with national law and obligations under international law, whichever is the higher standard (hereinafter "Applicable Law"). UNDP promotes accountability to programme and project stakeholders by (i) enabling active local community engagement and participation in decision-making, particularly those at risk of being left behind; (2) ensuring transparency of programming interventions through provision of timely, accessible and functional information regarding supported activities, including on potential environmental and social risks and impacts and management measures; (iii) ensuring stakeholders can communicate their concerns and have access to rights-compatible complaints redress processes and mechanisms; and (iv) ensuring effective monitoring—and where appropriate, participatory monitoring with stakeholders—and reporting on implementation of social and environmental risk management measures. UNDP's SES are underpinned by an Accountability Mechanism with two key components: (i) the Stakeholder Response Mechanism (SRM) that ensures individuals, peoples, and communities affected by projects have access to appropriate grievance resolution procedures for hearing and jointly addressing complaints and disputes related to the social and/or environmental impacts of UNDP-supported projects; and (ii) the Social and Environmental Compliance Unit (SECU) which investigates alleged non-

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Principle / Standard	Comments
	compliance with UNDP's Social and Environmental Standards and screening procedure from project-affected stakeholders and recommends measures to address findings of non-compliance.[75]
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management	Conserving biodiversity, mmaintaining ecosystem services, and sustainably managing natural resources are fundamental to sustainable development. UNDP seeks to maintain and enhance the goods and services provided by biodiversity and ecosystems in order to secure livelihoods, food, water and health, enhance resilience, conserve threatened species and their habitats, and increase carbon storage and sequestration. UNDP is committed to integrating biodiversity and ecosystem management into development planning and production sector activities, strengthening protected areas systems, and managing and rehabilitating ecosystems for adaptation to and mitigation of climate change. UNDP seeks to strengthen effective governance and decision-making systems affecting biodiversity and ecosystems, including strengthening the rights of affected populations including women, indigenous peoples and local communities to sustainable use of resources. This Standard reflects the objectives of the Convention on Biological Diversity, including the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the use of genetic resources. UNDP promotes an ecosystem approach to biodiversity conservation and sustainable management of natural resources
Standard 2: Climate Change Mitigation and Disaster risks	Climate change is a fundamental threat to sustainable development and the fight against poverty. It has the potential to stall and even reverse human development through its impacts on key development sectors and activities, including agriculture and food production, water, ecosystems and other natural resources, disaster risk management and health. Climate change may exacerbate extreme weather events, increasing the risk of high-impact disasters. Communities that are already subjected to impacts from climate change may experience an acceleration and/or intensification of impacts due to Project activities that do not integrate and anticipate climate change risks. UNDP supports countries to integrate low-emission, climate-resilient objectives into national and sectoral development plans, identify priority mitigation and adaptation measures, implement measures to reduce vulnerability and increase adaptive capacity and resilience. UNDP will ensure that its Projects are sensitive to climate change risks and do not contribute to increased vulnerability to climate change. UNDP mobilizes resources to support Programme countries to finance their national adaptation costs. UNDP strengthens the participation of women in decision-making processes on climate adaptation, mitigation and disaster risk reduction. UNDP supports countries to ensure that disaster risk reduction, climate mitigation and adaptation programmes specifically support women to strengthen their resilience, in part by securing rights and tenure to land, housing and other assets.
Standard 4: Cultural Heritage	UNDP recognizes the importance of Cultural Heritage for current and future generations and seeks to ensure that Cultural Heritage is protected in the course of development activities. UNDP seeks to ensure equal participation, access and contribution of women and men in protecting and sharing the benefits of Cultural Heritage. Cultural Heritage reflects and expresses people's constantly evolving

75 For further information, visit www.undp.org/secu-srm.

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Principle / Standard	Comments
	values, beliefs, knowledge, traditions and practices. Cultural Heritage also serves a crucial role within the sustainable development process through enhancing social cohesion, diversity, well-being and the quality of life; supporting cultural rights by protecting the heritage of minority and indigenous groups; fostering socio-economic regeneration; enhancing the appeal and creativity of cities and regions; boosting long-term tourism benefits; and enhancing sustainable practices. Cultural Heritage resources are often unique and irreplaceable, and may be particularly fragile due to neglect, exploitation, or even destruction given their symbolism. The term "Cultural Heritage" includes tangible and intangible heritage which may be recognized and valued at the local, regional, national, or global level,
Standard 5: Displacement and Resettlement	UNDP will seek to avoid physical and economic displacement in its Projects. Activities that involve physical and economic displacement, including through land acquisition or restrictions on land use or access to resources, pose impoverishment risks. Potential impacts may include loss of livelihoods, homelessness, food insecurity, and other adverse impacts. These impacts may lead to social unrest and political instability. The objective of Standard 5 outlines that all project-affected people impacted by physical or economic displacement are entitled to being considered in respective planning instruments (Livelihood Action Plans) regarding appropriate forms of compensation, including those without legally recognized tenure or claims. Economically displaced persons are entitled to compensation and assistance for the loss of their income or livelihood sources due to project-related restrictions on land use or access. They may face losses of revenue or wages, and/or loss of assets such as shops and vendor stalls, crops, irrigation facilities, trees, livestock pens, fences, among other things. Standard 5 requires that projects involving displacement seek to improve the standards of living and overall socioeconomic status of displaced poor and other groups.
Standard 6: Indigenous Peoples	Indigenous peoples, as distinct people, aree equal to all other peoples. Indigenous individuals and indigenous peoples or communities are entitled to enjoy and exercise their human rights without discrimination. Indigenous peoples possess collective human rights which are indispensable for their existence, well-being and development as peoples. The special relationship that indigenous peoples have with their lands, resources, and territories is integral to their physical, spiritual and cultural survival. The promotion and 368rotectionn of the rights of indigenous peoples, especially concerning their lands, territories, traditional livelihoods, cultures and resources, are necessary to achieve UNDP's goals of advancing human rights, respecting indigenous peoples identities and improving their well-being.
Standard 7: Labour and Working Conditions	The pursuit of inclusive and sustainable economic growth, full and productive employment and decent work for all requires the protection of workers' fundamental rights, their fair treatment, and the provision of safe and healthy working conditions. Project activities seek to enhance employment promotion benefits, development outcomes and sustainability by ensuring sound worker-management relationships and cooperation in their design and implementation. The SES requirements have been guided by a number of international conventions and instruments, including those of the International Labour Organization (ILO) and the United Nations (UN).

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A summary of the risk significance under each SES principle and standard, and the project-level safeguard standards triggered by each activity are shown in Table 4. Significance of risks was determined based on the impact and likelihood matrix presented in the UNDP 2021 SESP[76].

Table 21. Summary of safeguards triggered based on screening conducted on PRODOC.

Overarching Principle / Project-level Standard	**Rating**
Human Rights	Moderate
Gender Equality and Women's Empowerment	Moderate
Accountability	Moderate
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management	Moderate
Standard 2: Climate Change and Disaster Risks	Moderate
Standard 4: Cultural Heritage	Moderate
Standard 5: Displacement and Resettlement	Substantial
Standard 6: Indigenous Peoples	Moderate
Standard 7: Labour and working conditions	Low
Number of risks in each risk rating category	
High	0
Substantial	1
Moderate	9
Low	1
Total number of project risks	11
Overall Project Risk Categorization	Substantial

Based on the significance of these individual risks, the project has been allocated an overall risk categorization rating of 'substantial', the overall risk category being taken from the highest rating allocated. Indeed, the SESP identified multiple moderate risks and one risk as substantial, which involves potential risks of economic displacement and loss of livelihoods for measures which are yet to be defined and will be decided during project implementation.

As specified in the 2021 SESP guidelines, "Substantial Risk projects include individual risks rated as "Substantial" and may also include those with a varied range of risks rated as "Moderate" that require more extensive assessment and management measures". A project is considered to be 'substantial' risk when it includes activities with potential adverse social and environmental risks and impacts that are more varied or complex than those of Moderate Risk projects but remain limited in scale and are of lesser magnitude than those of High-Risk projects (e.g., reversible, predictable, smaller footprint, less risk of cumulative impacts).

As indicated in the SESP guidelines, the type of assessment methodology for substantial risk projects varies depending on the nature of the risks and type of project. Given that that the project has integrated specific impact assessment and management tools as activities and given that many of these will be applied to measures defined during project implementation, a scoped Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (ESMP) will be prepared to comply with UNDP SES requirements. Because each country represents a different context, yet to avoid developing a scoped ESIA/ESMP report for

[76] *For more information, see the Social and Environmental Screening Procedure (SESP)*

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each country, the project will develop a regional approach for the reporting of the risk assessment and management: one for Latin America (Ecuador, Panama, and Guatemala) and another for Northwest Africa (Senegal, Mauritania, and Morocco).

Instead, the ESMF has built on the SESP, SEP and GAP (respectively, annexes 4, 7 and 9 of the PRODOC) to outline how the substantial risk and moderate risks will be addressed by the project. The scoped ESIA/ESMP will integrate assessment and management tools mainly focused on social issues, including a Livelihood Action Framework (Annex 2), and Indigenous Peoples Plan (IPP) or Cultural Heritage Management Plan, as determined through the scoped ESIA.

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6. Potential Social and Environmental Risks of the project

The main social and environmental risks identified through the SESP are outlined in the table below, along with an explanation as well as how the project intends to address and manage the risks.

Table 22. Summary of main potential social and environmental risks according to the SESP

Risk Description and Significance	Comments	Management measures
Risk 1: The project activities related to the design, reinforcement, support, and implementation of muti-stakeholder co-management platforms for each fishery and to the development of governance arrangements for FIPs, could inadvertently lead to the exclusion of certain stakeholders (in particular smaller scale operations and the most vulnerable, as identified in the SEP) from fully participating in decisions related to fisheries governance and fisheries improvement processes that may affect them.	The project includes several outputs and activities aimed at improving governance and coordination in fisheries decision making processes, through the design and implementation of a variety of multi-stakeholder and multi-level co-management platforms in Ecuador, Guatemala, Mauritania, Panama and Senegal. This activity could inadvertently exclude certain stakeholder groups (such as smaller fishing communities or operations), if specific measures are not taken to engage and integrate them to these processes. This could also affect the Emberá-Woonan indigenous peoples in Panama (see specific risk 6 on this below). In addition to the risk linked to the design of these platforms, there is a risk linked to their implementation: smaller and more vulnerable key stakeholders could face barriers to engage and participate (barriers such as technical, financial, cultural, gender), leading to unequal representation and unequal sharing of project benefits. Existing power imbalances could also have an effect, with certain groups having more influence than others (e.g., industrial fishers or large seafood processors), leading to decisions that prioritise the interests of more powerful groups. Moreover, the participating countries have quite diverse conditions regarding engagement and participation of stakeholders in fisheries	• The project has already directly integrated many activities to ensure strong stakeholder participation, in particular the most vulnerable (as identified in the SEP). • Several project activities focus on ensuring that the most vulnerable actors in each fishery supply chain are properly engaged to participate (output 2.1.1). This includes assessing the situation/actors in existing platforms, strengthening these, or setting up new ones, designing their workplans and assessing their performance to improve fisheries governance and management. • The project will specifically support artisanal and small-scale fishers and local supply chain partners to effectively engage into these platforms (output 2.1.3) and FIP activities (output 2.1.2). This will include identifying these more vulnerable stakeholders in the supply chain, as well as assessing their social, economic, and labour conditions, assessing their capacity needs, preparing workplans to support their engagement, building capacities and skills to engage, and providing material support. • Several project activities require 'Social Responsibility Assessments'[77] which contains indicators on stakeholder participation and grievance reporting. This tool will apply to activities related to Fishery Improvement Projects (outputs 2.1.2 and 2.2.1) and the governance and supply chains or fisheries (output 2.2.2). • The project also intends to develop guidelines to mainstream social responsibility into fisheries governance and seafood supply chain (output 2.2.1), which includes elements on stakeholder participation

[77] https://media.riseseafood.org/resources/SRAT_20210317_FINAL.pdf

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Risk Description and Significance	Comments	Management measures
	decision making, which may in some cases create additional barriers to overcome when developing participatory fisheries co-management platforms, FIPs and buyer engagement programs. Fisheries authorities in Mauritania and Senegal for example have limited capacities to undertake and implement fisheries governance processes.	and grievance reporting. The project activities include disseminating information and providing support to key actors on this. • Activities related to increasing the demand for sustainable seafood (output 1.1.1) also consider scoping and identification of key stakeholders to better inform their engagement strategy. • The project activities (output 1.2.1) include the development of a 'Socially responsible seafood standard' (building on the Monterey Framework for social responsibility, which covers stakeholder participation and grievance reporting)[78], and supporting international and domestic supply chain partners to integrate the social responsibility requirements into their purchasing policies and commitments (outputs 1.2.2 and 1.2.3). • Finally, the project also includes a Stakeholder Engagement Plan to foster the involvement of stakeholders' groups along seafood chains and ensure effective, and informed participation. The SEP has identified the most vulnerable stakeholders and integrates specific actions to support the identified vulnerable populations (output 2.1.3). It also includes targeted support to the Emberá-Woonan in Panama once their involvement in the project and details are confirmed by the initial diagnosis and assessment of their conditions (see ESMF risk 6).
Risk 2: The project activities aimed at supporting increased sustainability and social responsibility in the target fisheries and supply chains could inadvertently exacerbate economic disparities and increased social inequalities among industry actors.	The project aims to facilitate improved seafood purchasing policies and target sustainability commitments by major supply chain partners in international and domestic markets. By pushing for an increase in demand for sustainable seafood, the project could potentially exclude certain smaller/artisanal fishing operations or seafood producers from the market. Indeed, these may struggle to meet stricter criteria (e.g., bureaucracy, certification requirements, increased costs), therefore limiting their access to international markets.	• Many mitigation measures are directly integrated into project activities. As mentioned under risk 1, the project has multiple activities supporting the integration, participation, and engagement of the most vulnerable key stakeholders. This includes the assessment of capacity needs, in order to adapt each action plan to particularities and needs of each actor. It also includes developing guidelines, training, and support. • The project also intends to develop guidelines to mainstream social responsibility into fisheries governance and seafood supply chains (output 2.2.1), which includes elements on 'equal

[78] https://riseseafood.org/topics/actioning-the-monterey-framework/

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Risk Description and Significance	Comments	Management measures
	At the same time, these measures to increase sustainable seafood demand could favour larger, more financially capable and more technologically advanced fishing operations that have the capacity to adopt new fishing gear modifications or technology, to minimise bycatch for example. The promotion of social responsibility standards has the same risk. If meeting socially responsible standards requires significant investment or certification costs, it may favour larger players in the industry with more resources, potentially leading to market consolidation and reduced opportunities for smaller businesses. If no measures are taken, the project could therefore exacerbate economic disparities in the industry and reinforce existing social inequalities. This could lead to the marginalisation of certain vulnerable key stakeholders.	opportunity to benefit'. These guidelines will be disseminated to key actors of target fisheries, and support will be provided on the use of these tools. • Multiple project activities, including the FIPs, require the use of the 'Social Responsibility Assessment', which includes criteria on 'equal opportunity to benefit'. This assessment will be applied to activities, and action plans/work plans developed to address identified issues and implement mitigation measures. • The development of the new socially responsible seafood standard (output 1.2.1) will include a phase of piloting, and phases to refine and adjust, which would allow to monitor this potential risk and adapt accordingly. • Finally, the fishery conservation and management measures to be decided during the implementation of the project will all undergo Regulatory Impact Assessment (RIA) (output 2.2.2), which include assessing probable impacts (social, economic, environmental), in order to facilitate choosing the better alternative and designing mitigation or compensation measures as needed.
Risk 3: The project support for improved fisheries conservation and management measures (to address overfishing or improve specific fisheries) may result in access restrictions to fishers, causing economic displacement, loss of jobs and loss of livelihoods to various actors of the target supply chains.	The project activities aimed at supporting the development and implementation of new fisheries conservation and management measures (to address overfishing or improve the condition of specific fisheries), may have an impact on existing fishers and businesses practices. These measures may impose restrictions or changes to fishing practices, which could limit or reduce access to existing resources, ultimately leading to economic disruptions and loss of livelihoods for those who depend on it. For example, the pomada shrimp in Ecuador and the small pelagic fish in Mauritania and Senegal are overfished. Promoting management measures to recover the fisheries resources in these countries may entail limiting fishing operations. In Panama, this could potentially affect the Emberá-	• As the specific conservation and management measures that will be adopted and implemented by the pertinent national authorities are not yet known and will depend on decisions made during project implementation for each fishery, the project has included as activities the use of impact assessments (i.e., Regulatory Impact Assessment) to ensure these identify and address the relevant social, economic, and environmental risks of the proposed measures. This tool will be applied to each update/preparation of fishery management plans and regulations, and will be followed by the preparation of specific actions to address gaps and/or prevent, mitigate or compensate the impacts as a whole-of-government response. • Moreover, each fishery governance process and supply chain covered in the project will undergo a

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Risk Description and Significance	Comments	Management measures
	Woonan indigenous peoples if it is confirmed that they participate in the shrimp sector (see specific risk 6 on this below). Depending on the conservation and management measures adopted, some fishing communities, in particular the most vulnerable (as identified in the SEP) could lose their livelihoods through a restriction of fishing rights to a specific resource or area. Changes in fishing operations will also affect fishing-related businesses, potentially leading to job losses and economic disruption for workers in processing and transportation as well.	'Social Responsibility Assessment', which includes criteria on 'livelihood opportunities secured or improved, including fair access to markets and capabilities to maintain income generation'. • Results from both of these assessments will be integrated into the fishery governance or management plans or action plans. • In cases where the RIA identifies specific impacts such as economic displacement or loss of livelihoods that are unavoidable and cannot be compensated by the pertinent authorities as a whole-of-government response the project has included the design of Livelihood Action Plans. • Depending on the assessment of the Emberá-Woonan fishers to be done at the start of the project (see ESMF), this risk may also be addressed if the preparation of an IPP is confirmed.
Risk 4: The project activities focusing on fisheries governance and management may lead to tensions or conflicts among different stakeholders over resource allocation and access (among different fishing communities or supply chain partners, especially if their interests or priorities diverge).	The project focus on governance and improved fisheries management will encourage multi-stakeholder participation and decision making. In turn, this could lead to increased tensions and conflicts between these stakeholders. - Conflicts over resource allocation: fisheries co-management platforms will involve decision-making on resource allocation or fishing rights, which can lead to disagreement and conflicts between different user groups, such as commercial fishers, artisanal fishers, recreational fishers, and conservationists, each advocating for their interests. - Conflicts over resource access: as international and domestic markets prioritise sustainably sourced seafood, competition for finite resources might increase, leading to conflicts among fishers and between different stakeholder groups.	• The project includes several activities which can help reduce this risk. The activities focused on creating or reinforcing multi-stakeholder co-management platforms (output 2.1.1) include prior activities targeted at analysing the situation of the existing fisheries governance and platforms (which will include specific conflict assessments, output 2.1.1), to inform the design of workplans to support the operation of the platform. It will help identify particular needs, which could include identifying potential tensions or conflictual issues to address through the support to strengthen the platform. • The project also intends to develop guidelines and support to mainstream social responsibility into fisheries governance and seafood supply chains (output 2.2.1), which includes elements on stakeholder participation and grievance reporting. • The project activities include the development of a 'socially responsible seafood standard' (output 1.2.1) (building on the Monterey Framework for social responsibility which covers stakeholder

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Risk Description and Significance	Comments	Management measures
		participation and grievance reporting)[79] • The project Stakeholder Engagement Plan includes a grievance redress mechanism.
Risk 5: The project activities promoting and increasing demand for seafood from fisheries with reduced bycatch and ecosystem impacts may inadvertently increase incentives for illegal fishing activities in areas where such regulations are not adequately enforced.	By improving fishing practices through demand for sustainable seafood and stricter management measures, there is a risk that some fishers or fishing operations would (willingly or unwillingly) decide, depending on the conditions of the local scenario (e.g., enforcement capacity), to continue their existing practices. In this case, these would be become illegal fishing operations. This could happen due to the complexities and resources needed to meet sustainability requirements, pushing some operations to continue for economic and social reasons. This can be encouraged by the fact that as demand grows, the supply chain for sustainable marine commodities might become more complex, making it challenging to ensure transparency and traceability throughout the process. This complexity could increase the risk of illegal or unreported fishing practices.	• The project is not only focused on supporting the demand for sustainable marine commodities (component 1 activities), it also includes activities to increase the supply (component 2). By acting on both the demand (international and domestic buyers) and supply sides, the project aims to address this type of risk by supporting the supply chain key stakeholders. • The project includes the development of a 'socially responsible seafood standard' (output 1.2.1) (building on the Monterey Framework for social responsibility, which covers food security)[80], and supporting international and domestic supply chain partners to integrate social responsibility requirements in their policies and commitments (which includes 'livelihood opportunities are secured or improved, including fair access to markets and capabilities to maintain income generation') • Moreover, each FIP and fishery governance process and supply chain covered in the project will undergo a 'Social Responsibility Assessment', which includes criteria on 'livelihood opportunities are secured or improved, including fair access to markets and capabilities to maintain income generation'. • Finally, the fishery management measures decided by the pertinent authorities during the implementation of the project will all undergo Regulatory Impact Assessment (RIA), which includes assessing probable impacts (social, economic, environmental), in order to facilitate choosing the better alternative and designing mitigation /compensation measures as a whole-of-government response

[79] https://riseseafood.org/topics/actioning-the-monterey-framework/
[80] https://riseseafood.org/topics/actioning-the-monterey-framework/

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Risk Description and Significance	Comments	Management measures
Risk 6: The project activities in Panama in the shrimp sector could potentially affect the Emberá-Wounaan people, since some of them may be artisanal shrimp fishers. The main risks of the project activities to this community are related to exclusion from participation in fisheries governance and decision-making processes and the risk of economic displacement if conservation and management measures in the shrimp fishery lead to access restrictions.	In the case of Panama, although there are no indigenous territories (i.e., comarcas) related to the target fisheries, following the stakeholder analysis and assessments done during the PPG (please refer to the SEP for more detail), it was identified that there is a potential involvement of indigenous people in one of the target fisheries. It was identified that a group of individuals participating in artisanal shrimp fishing on the Pacific Coast may be members of the Emberá-Wounaan indigenous people. The competent fishing authority (ARAP) informed the project about the existence of these individuals, but no additional information was provided or able to be gathered during the PPG phase. Indeed, the project currently does not have information to confirm their involvement into the shrimp fishery, their recent or current involvement in artisanal shrimp fishing, or the conditions of these fishers (if confirmed that they participate in the shrimp fishery). There is currently insufficient information available about the number of Emberá-Wounaan artisanal shrimp fishers, their living conditions, their participation in the value chain and dependency of the resource, to be able to assess and address the impact of project activities on them.	• Given the limitations encountered on this matter during the PPG phase, the project has included multiple activities in the PRODOC and SEP to clarify the situation early on, prior to the implementation of any interventions which could affect or impact any Emberá-Woonan arisanal shrimp fishers. This process will ensure to apply Free, Prior and Informed Consent (FPIC), as required by national legislation (Law 37 of 2016) and UNDP Standard 6 on Indigenous Peoples. Depending on the outcome of these assessments, an Indigenous Peoples Plan and Cultural Heritage Plan may need to be prepared. • The project activities and the SEP include several measures to address this risk. The SEP includes specific measures to: ○ Document and diagnose the situation of Emberá-Wounaan that may be involved in the artisanal shrimp fisherys on the Pacific coast. This will include identifying conditions (number or fishers, fishing gear, fishing areas, landing ports, catch composition, level of organisation) and the uses of the capture (shrimp and bycatch) (e.g., self-consumption, trade and related supply chain). Their fisheries-related cultural heritage will also be assessed. ○ If their involvement is confirmed through the initial assessment, the project will prepare an IPP (see ESMF), following the requirements from Standard 6 applying FPIC. If their involvement is confirmed, the project has included the following additional activities: ▪ Assess the interest and the capacity needs of the Emberá-Wounaan artisanal shrimp fishers to become organised (fishers' organization or other

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Risk Description and Significance	Comments	Management measures
		representative format) to engage with the national fishery governance platform. ▪ Prepare and implement a workplan to support the development of skills of Emberá-Wounaan artisanal shrimp fishers, if they decide so, to participate and engage in fishery governance. This will follow the requirements of the IPP and Standard 6. • Each fishery governance process and supply chain covered in the project will undergo a 'Social Responsibility Assessment', which includes criteria on 'rights and access to resources are respected and fairly allocated and respectful of collective and indigenous rights. • Moreover, as the specific management measures to be taken in the shrimp fishery in Panama are not yet known and will depend on decisions made by the pertinent authority during project implementation, the project has included as an activity the use of Regulatory Impact Assessment to ensure potential risks such as access restrictions and livelihood impacts are identified and assessed. This will be followed by the preparation of specific actions or plans to address gaps and prevent, mitigate or compensate negative impacts as a whole-of-government response (see ESMF for more detail). • In cases where the RIA identifies specific impacts that are unavoidable such as economic displacement or loss of livelihoods, this risk would be addressed through the IPP.
Risk 7: Given the context around gender in the project countries and the fishery sector, there is a risk of exclusion of women from participating in the fisheries	Women's participation in decision-making in the fishery sector remains an issue in all countries, with cultural factors hindering representation in leadership positions and governing bodies. Women in Mauritania,	• Given the context around gender in the participating countries and in the fishery sector, the project has integrated specific activities to focus on gender issues in the target supply chains. The project has included as initial activities at the

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Risk Description and Significance	Comments	Management measures
governance and fisheries improvement processes promoted by the project.	Senegal and Morocco face greater gender and cultural barriers (e.g., participation, engagement) than those faced by women in the three Latin America countries. Women usually lack representation in fisheries associations and fisheries management bodies; thus, they are commonly excluded from decision-making, particularly for the types of decisions that directly affect the resource they depend on. Given this context and the existing barriers highlighted in the gender assessment prepared for the project, there is a risk of women remaining excluded from project activities if no specific measures are taken.	project start the training in gender equality and women empowerment of the project partners, and the preparation of gender profiles of each target value chain. • Moreover, some specific activities have been included directly into the project multi-year workplan, such as assessing the integration (involvement and contributions) of women and gender considerations in existing governance platforms and management plans, or the conditions of women in targeted value chains, in order to propose actions to address gaps and supporting the mainstreaming of gender and participation/empowerment of women in the fisheries value chains. • A Gender Action Plan (GAP) was also prepared for the project, to mainstreaming gender and to address identified barriers. The plan includes measurable indicators related to gender equality and women's empowerment and is adapted to the conditions on each country.
Risk 8: The project activities focused on tightening market requirements and increasing demand for sustainable seafood could put pressure on the industry to meet the supply, which could potentially lead to labour exploitation and poor working conditions, especially in countries with weaker labour regulations.	If not carefully monitored, the increased demand for sustainable seafood could put more pressure on local communities and workers, potentially leading to poor working conditions or labour issues. Moreover, while socially responsible standards aim to improve labour conditions in the seafood industry, there might be challenges in monitoring and enforcement, especially in countries with weaker governance. There could still be instances of labour exploitation, human rights abuses, and poor working conditions, especially in regions with weak regulatory oversight.	• The project includes the development of a 'socially responsible seafood standard' (building on the Monterey Framework for social responsibility, which covers labour rights and conditions, including child and forced labour)[81], and supporting international and domestic supply chain partners to integrate social responsibility requirements in their policies and commitments (which includes indicators on labour). This standard will be piloted and undergo phases to refine, which would allow the opportunity to adapt. • Project activities focused on improving participation of small-scale fishers and local supply chain partners in each country include an 'social, economic, labour and working conditions assessment of fisheries' (of women processors, of fishers, of shrimp trawlers, of longline vessels, industrial longliners), and an 'assessment of

[81] https://riseseafood.org/topics/actioning-the-monterey-framework/

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Risk Description and Significance	Comments	Management measures
		capacity needs of fisher organisations', with the aim of informing the workplan to support the fishery actors in engaging in the fisheries governance and FIPs. • The project activities related to FIPs and fishery governance will undergo a Social Responsibility Assessment[82] (building on the Monterey Framework for social responsibility) which includes indicators on labour (including child labour, forced labour). For each, this will result in the development and implementation of a workplan to address gaps and mitigate risks.
Risk 9: The project activities focused on increasing demand for sustainable seafood and improving fisheries management could indirectly affect food security of local populations in some countries of the project.	While increasing demand for sustainable seafood and improving fisheries governance/management can lead to healthier fish stocks, it could also indirectly impact food security for local populations in countries where seafood is a primary food source like Senegal or the consumption of shark meat in Guatemala and Ecuador. This could impact individuals which are not direct stakeholders of the project and therefore not involved in project activities and decision making. Countries such as Senegal, Mauritania, and Guatemala have high index of moderate or severe food insecurity in the population, exceeding 45%. Senegal is one of the most vulnerable countries, as 30% of the workforce relies on the fishing sector, unlike Guatemala (with the highest food insecurity index), which has less dependence on fishing resources in the economy.	• The project is not only focused on supporting the demand for sustainable marine commodities (component 1 activities), it also includes activities to increase supply (component 2). By acting on both the demand (international and domestic buyers) and supply, the project will avoid creating an imbalance between creating a too strong demand for small supply. • For example, the project will facilitate intersectoral dialogue on implications of specific fishery domestic consumption and trade on conservation and management measures (e.g., food security, employment). The dialogue process will foster policy coherence and an agreed policy framework for conservation, trade, and management measures. It also includes assessments of domestic consumption and value chain for marine resources and the contribution to food security, livelihoods, and income. • The project includes the development of a 'socially responsible seafood standard' (building on the Monterey Framework for social responsibility, which covers food security)[83], integrating it into FishSource, and supporting international and domestic supply chain partners to integrate social responsibility requirements in their policies and

[82] https://media.riseseafood.org/resources/SRAT_20210317_FINAL.pdf
[83] https://riseseafood.org/topics/actioning-the-monterey-framework/

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Risk Description and Significance	Comments	Management measures
		commitments (which includes indicators food security). • The project activities related to FIPs and fishery governance will undergo a Social Responsibility Assessment[84], which includes indicators on food security. For each, this will result in the development and implementation of a workplan to address gaps and mitigate risks.
Risk 10: The target fishery resources are affected by climate variability and climate change.	Although not a risk induced by the project, it is important to note that the target fisheries in the CCLME and the PACA are affected by climate variability and climate change. In the CCLME, the Atlantic Multidecadal Oscillation (AMO) determine the abundance and migrations of small pelagic fish. Similarly, in PACA, the El Niño Southern Oscillation (ENSO) strongly affect the condition of the populations of shrimps, tunas, billfishes and coastal resources. The AMO and the ENSO affect global climate patterns and marine ecosystems. It is foreseen that AMO influence on global warming will increase during the second half of the twenty-first century and that climate change will generate stronger and more frequent ENSO events.	• The project focus on sustainable fisheries management has mainstreamed this risk and actions to address it. Indeed, by supporting the design and strengthening of fisheries platforms, the implementation of sustainable fishing standards, and the implementation of fishery management measures, the project activities aim to reduce the impacts of climate change on target fisheries.
Risk 11. The project will foster changes in fishing practices that could impact intangible cultural heritage of certain communities.	Fishing is a rich source of living heritage and seafaring and fishing practices and traditions, which can be considered cultural heritage..	• In order to best anticipate this risk, the project has included a Cultural Heritage Impact Assessment (CHIA), to be prepared at the start of the project (see ESMF). This will aim to identify and document any cultural heritage practices linked to the target fisheries and stakeholders. This will include the vulnerable groups identified in the SEP, and the Emberá-Woonan in Panama if their involvement is confirmed (see ESMF). • If risks to cultural heritage are confirmed during the assessment, a Cultural Heritage Management Plan will be prepared. • The project has included as an activity the use of impact assessments (Regulatory Impact Assessment) to ensure potential risks linked to the

[84] https://media.riseseafood.org/resources/SRAT_20210317_FINAL.pdf

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Risk Description and Significance	Comments	Management measures
		design of new fisheries management measures are addressed. This will be aligned with UNDP SES and therefore include risks to cultural heritage (see ESMF).

7. Affected stakeholders and populations

As noted in the previous section, the project proposes a series of activities which may generate changes in the conditions of use, access, management, and control of related populations making them dependent from these fishing resources.

Through a stakeholder analysis done during the project preparation phase (PPG), it was identified that these populations mainly use the target fisheries resources for consumption-subsistence (food) or sale (processing-transformation, marketing, export). By making changes in the supply chain, derivative actions in the use, access, management of fishing resources (e.g., temporary season closure, prohibition of capture, processing or commercialization of a certain species, limitation of the number of boats or fishermen, reduction of fishing effort, others), may "affect" the related populations in the face of a change in the situation, regardless of whether the project seeks to improve the availability or management of the resource or its sustainability in the future.

At this stage, the stakeholder analysis (see SEP for more details) concluded that apart from the probable Emberá-Wounaan indigenous peoples involvement in artisanal shrimp fishing in Panama (see following section), no other indigenous peoples would be impacted by the project. However, the project, as a priority activity, will further assess the potential presence of vulnerable minority groups in the target supply chains of the Northwest African countries participating in the project. Table 6 describes the vulnerable groups that have been identified, as presented in the SEP. Specific actions to support these vulnerable groups have already been integrated into the PRODOC and SEP to ensure their participation and address potential adverse impacts of project activities on them.

Table 23. Vulnerable groups related to the target supply chains of the GMC2 Project.

Country	Value Chain	Vulnerable groups	Vulnerability description
Senegal	Small pelagic	Small pelagic artisanal fishers	Economic dependence and Poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
		Small pelagic women processors	Economic dependence and Female-headed households. Women informal activity, high dependence as it is the only productive alternative for making their living.
		Small pelagic fish middlemen	Economic dependence and Poverty conditions. Intermediaries who help to transport fish to markets and processing plants.

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Country	Value Chain	Vulnerable groups	Vulnerability description
	Octopus	Octopus artisanal fishers	Economic dependence and Poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
		Octopus middlemen	Economic dependence and Poverty conditions. Intermediaries who help to transport octopus to markets and processing plants.
		Octopus Women potters	Economic dependence and Female-headed households. Additional economic alternative and dependence on the pot-production.
Mauritania	Octopus	Artisanal octopus fishers.	Economic dependence and Poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
	Small pelagic	Small pelagic artisanal fishers	Economic dependence and Poverty conditions. Fishers with limited empowerment and lack of negotiation capacities. High dependence on the resources of this fishery.
		Small pelagic fish middlemen	Economic dependence and Poverty conditions. Intermediaries who help to transport fish to processing plants.
Ecuador	Pomada	Pomada women processors	Economic dependence and Female-headed households. Economic dependence as a productive alternative for making their living.
		Pomada bolso fishers	Economic dependence and Poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
	Large Pelagic	Longline fishers	Economic dependence on the activity- poverty conditions. Fishers without a permanent activity and salary. They do not have adequate working conditions.
Guatemala	Large Pelagic	Dorado-shark artisanal fishers	Economic dependence and Poverty conditions. They are not organized and do not have adequate working conditions.
Panama	Shrimp	Artisanal shrimp fishers	Economic dependence and Poverty conditions. Fishers with limited empowerment and lack of negotiation capacities.
		Artisanal shrimp fishers - Individuals from the Emberá-Wounaan indigenous peoples.	Economic dependence. They are indigenous individuals whose living conditions, participation and interests in relation to shrimp fishing are unknown and need to be assessed at the start of the project.

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The project design has integrated actions to address the different stakeholders' conditions and the SEP, GAP and ESMF integrate specific actions to support the identified vulnerable populations. It has also included specific assessments during project implementation which will allow to best address the specificities of each country, fishery and stakeholders.

Indigenous peoples

Following the stakeholder analysis and assessments done during the PPG (please refer to the SEP for more detail), it was identified that, at this stage, only in Panama there is a probable involvement of an indigenous community in one of the target fisheries. Although there are no indigenous territories (i.e., comarcas) related to the target fisheries, it was identified that a group of individuals of the Emberá-Wounaan indigenous people may be participating in artisanal shrimp fishing on the Pacific Coast (outside of their indigenous territory, the comarca Emberá-Wounaan). The competent fishing authority (ARAP) informed the project about the existence of these individuals, but very limited information was possible to gather during the PPG phase. Indeed, the project currently does not have sufficient information to confirm that there are Emberá-Wounaan shrimp fishers, the conditions of these fishers (if any), or their recent or current involvement in artisanal shrimp fishing. There is currently insufficient information available about the number of Emberá-Wounaan artisanal shrimp fishers (if any), their living conditions, their participation in the supply chain and dependency of the resource, to be able to assess and address the impact of project activities on them.

Given the limitations encountered on this matter during the PPG phase, the project has included multiple activities in the PRODOC and SEP to clarify the situation early on, prior to the implementation of any interventions which could affect or impact the Emberá-Wounaan shrimp fishers. Depending on the outcome of these assessments, if their involvement into the shrimp fishery is confirmed, no project activities related to this supply chain will be implemented in Panama before the preparation of an Indigenous Peoples Plan (IPP) with the Emberá-Woonaan. This will be a priority in year 1 of the project and will aim to ensure there is sufficient time to engage potentially affected indigenous peoples in order to understand and incorporate their concerns and visions. This process will ensure to apply Free, Prior and Informed Consent (FPIC), as required by national legislation (Law 37 of 2016) and UNDP Standard 6 on Indigenous Peoples.

As a priority activity in the target supply chains of the Northwest African countries, the project will further assess the presence of vulnerable minority groups that fit the conditions/criteria indicated in the UNDP SES Guidance Note on Indigenous Peoples. This will be done through the scoped ESIA. If their presence in the target supply chains is confirmed, consultation with these communities, following FPIC, will be implemented, and no project activities will begin before the preparation of an Indigenous Peoples Plan (IPP).

Further information on the assessment and management of potential project impacts on indigenous peoples have been included in the following section 7 of the ESMF.

8. Procedures for screening, assessing and managing social and environmental impacts

As detailed earlier, the project underwent a risk screening during the concept stage which resulted in the project being categorized as 'substantial' risk, which requires a scoped Environmental and Social Impact Assessment (ESIA).

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It was also noted in Table 5 above that the project has included and mainstreamed activities which address some of the identified risks. Moreover, the project has also included the use of several impact assessment tools directly as project activities. This section of the ESMF provides an overview of these tools and explains how they will allow project implementers to assess and manage social and environmental risks.

In addition, the project has developed a Stakeholder Engagement Plan and a Gender Action Plan, based on focused assessments undertaken during the PPG phase. These plans establish measures to manage several of the risks identified.

Finally, for the undefined fishery conservation and management measures which could potentially lead to access restrictions and economic displacement and loss of livelihoods but will only be decided and implemented by the pertinent authorities during project implementation, the project has included a Livelihood Action Framework (LAF).

As such, this ESMF has been developed to serve as a framework that summarizes all the tools and processes which will ensure social and environmental risks are assessed and managed during project implementation. It will ensure that appropriate management measures that comply with the SES are adopted prior to implementation of the relevant forthcoming activities.

8.1 Guiding Principles

The project will follow UNDP's requirements and procedures for screening, assessment, and management according to its substantial-risk project categorization.

The following principles will guide the procedures:

1. The project will first seek to ***anticipate*** and ***avoid*** potential adverse impacts, then ***minimise*** or ***reduce*** them; where impacts remain, it will then apply ***mitigation*** measures; the ***offset*** of impacts that have not been mitigated will be used as a last resort where technically and financially feasible.
2. The lack of full scientific certainty shall not be used as a reason for postponing measures to prevent serious threats.
3. The project will consider all relevant impacts, not just in the immediate project area but also in the project's area of influence; it will also consider cumulative impacts from the project or from other relevant past, present, and reasonably foreseeable developments in the geographic area.
4. The cost of mitigation is borne by the agent causing the damage ("polluter pays").

As specified by the UNDP Guidance Note on Social and Environmental Assessment, substantial risk projects are required to disclose draft assessments and reports, including any draft management plans, before being finalised, in order to provide key stakeholders the opportunity to fully understand potential risks and to meaningfully comment on the plans before they are finalised.

8.2 Assessment Procedures

As explained in the SESP, many social and environmental assessment and management measures have been included and budgeted directly as project activities. In line with UNDP SES requirements for Substantial risk projects, a scoped Social and Environmental Impact Assessment (ESIA) will be prepared at project inception. In addition to this, it is important to note the project has mainstreamed the use of certain tools (some specific to the fishery sector), which will also support the implementation of social and environmental standards throughout project implementation.

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1. Scoped Environmental and Social Assessment (ESIA)

In line with UNDP SES requirements for Substantial risk projects, a scoped Social and Environmental Impact Assessment (ESIA) will be prepared. This will include one document for the Latin American countries and one for the African countries, to be prepared at the inception of the project. Due to the differences in countries' contexts, including environmental laws and regulations, an ESIA will be carried out in each of the six participating countries.

The scoped ESIA's will include a range of assessment tools, including (1) further assessment of vulnerable ethnic minorities in relation of the project target supply chain in the African countries, (2) a baseline analysis of the Emberá-Wounaan artisanal shrimp fishers in Panama (to confirm their involvement in the fishery and their conditions), and (3) a cultural heritage impact assessment of target fisheries.

The activities and specific assessment tools to be used for the scoped ESIA are described below.

1.a. Ethnic minorities assessment

As noted in the previous section (section 7), further assessment of the presence of ethnic minorities groups that could fit the conditions/criteria indicated in UNDP SES Guidance Note on Indigenous Peoples in the target supply chains of the African Countries will be done. If their presence is confirmed an Indigenous Peoples Plan will be prepared and the Stakeholder Engagement Plan will be updated.

1.b. Baseline analysis of Emberá-Wounaan artisanal shrimp fishers

The project already includes specific activities to document and diagnose the situation of Emberá-Wounaan artisanal shrimp fishers on the Pacific coast of Panama. This will include the confirmation that Emberá-Wounaan are engaged into the artisanal shrimp fishery and, if so, to identify their conditions (number or fishers, fishing gear, fishing areas, landing ports, catch composition, level of organisation) and the uses of the capture (shrimp and bycatch) (e.g., self-consumption, trade and related supply chain). Their cultural heritage will also be assessed. If their participation in the shrimp fishery is confirmed, an Indigenous Peoples Plan will be prepared and the Stakeholder Engagement Plan will be updated. Also, if cultural heritage risks are identified, then a Cultural Heritage Management Plan will be prepared.

1.c. Cultural heritage impact assessment

Given that the project will have an impact on fishing practices, it was identified in the SESP that there is a potential risk to cultural heritage (risk 11), in particular to intangible cultural heritage. As specified in UNDP Standard 4[85], this includes practices, representations, expressions, knowledge, skills—as well as the instruments, objects, artefacts and cultural spaces associated therewith—that communities/groups recognise as part of their Cultural Heritage, as transmitted from generation to generation and constantly recreated by them in response to their environment, their interaction with nature and their history and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity.

[85] https://ses-toolkit.info.undp.org/standard-4

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To assess this risk, the project has included the use of a Cultural Heritage Impact Assessment (CHIA) at the start of the project. This assessment will identify and document intangible cultural heritage linked to the target fisheries of the project[86], in order to assess potential impacts and risks. If impacts and risks are confirmed in this assessment, a Cultural Heritage Management Plan (CHMP) will be prepared (see management procedures section below).

For the identification of fishing practices which could be considered cultural heritage, the assessment will look at aspects such as:

- Traditional fishing practices: many communities have developed unique and traditional methods of fishing that have been practiced for generations, which can become integral to a community's cultural identity.
- Rituals and beliefs: fishing can be associated with rituals, ceremonies, and beliefs that are passed down as part of a community's cultural heritage.
- Culinary traditions: the way fish is prepared, cooked, and consumed can also be a part of a community's cultural heritage. Different regions may have their own traditional recipes and cooking techniques for fish.
- Folklore and stories: fishing often inspires folklore, stories, and legends that are an important part of a community's oral tradition and cultural heritage.
- Art and crafts: fish and fishing can be depicted in art, crafts, and other forms of cultural expression. This artwork can serve as a representation of the cultural significance of fishing.
- Festivals and celebrations: many cultures have festivals and celebrations dedicated to fishing or the harvest of fish. These events are often rooted in cultural traditions and practices.

2. Assessments of social, economic, labour and working conditions.

Project activities focused on improving participation of small-scale fishers and local supply chain partners in each country and on fishery management instruments include assessments of the social, economic, labour and working conditions. These assessments will provide direct inputs to specific processes in the co-management platforms and the FIPs (see Annex 3 in the PRODOC). This will be key to ensuring specific risks and management measures are adapted to each country context and specific stakeholders, following SES Standard 7. It will help gather information and respond to some of the risks identified in the SESP, including the risk of exclusion of vulnerable stakeholders (risk 1), the risk of economic displacement (risk 3), the risk of conflicts (risk 4) and the risk of labour exploitation and poor working conditions (risk 8).

Two types of assessments will be implemented:

- Labour and working conditions assessment (of shrimp trawlers and longline vessels). These assessments will provide direct inputs for the development of fisheries management plans, conservation and management measures, and the FIPs.
- Social, economic, labour and working conditions of fisheries assessment (which will provide a wider overview of conditions of certain vulnerable stakeholders, in and outside of their work). These assessments will provide direct inputs for the development of the actions to strengthen engagement of vulnerable groups into fisheries governance processes and the FIPs (output 2.1.3) and the development of the fisheries management plans, the conservation and management measures, and the FIPs.

[86] The Emberá-Woonaan will not be included in this assessment since the baseline analysis to be carried out will include an assessment of cultural risks.

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These assessments will ensure consistency with UNDP SES 7 on Labour and Working Conditions[87], and integrate criteria on terms and conditions of employment, non-discrimination and equal opportunity, workers organizations, forced labour, child labour, occupational safety and health, workplace grievance, and contractor/third party workers.

Table 7. List of activities which will undergo an evaluation of social, economic, and labour conditions.

Project Output	Assessment Activity in PRODOC
2.1.3. Artisanal and small-scale fishers and local supply chain partners effectively engage into fisheries improvement projects and co-management platforms.	Ecuador. Assessment of social, economic, labour and working conditions of pomada bolso fishers.
	Ecuador. Assessment of social, economic, labour and working conditions of women shrimp peelers in Posorja.
	Guatemala. Assessment of social, economic, labour and working conditions of fishers associated to the dorado and sharks fisheries and value chains.
	Panama. Assessment of social, economic, labour and working conditions of Panamanian artisanal shrimp fishers (including Emberá-Wounaan fishers if their involvement is confirmed).
	Senegal. Assessment of social, economic, labour and working conditions of women that process small pelagic fish in the Joal area.
2.2.2 Nine fisheries management instruments that integrate social and economic objectives and targets.	Ecuador. Assessment of labour and working conditions in pomada shrimp trawlers.
	Ecuador. Assessment of labour and working conditions in longline vessels.
	Panama. Assessment of labour and working conditions in shrimp trawlers.
	Panama. Assessment of labour and working conditions in industrial longliners.

Moreover, even after the assessments listed above and whichever the outcome of these, **the project will continuously monitor labour and working conditions linked to project activities.**

Regulatory Impact Assessment

Regulatory Impact Assessment (RIA)[88] is a tool designed to improve decision making and supports policy coherence. RIA is used to assess probable impacts (social, economic, environmental) of a proposed regulation or measure, in order to facilitate choosing the best alternative and designing mitigation/ compensation

[87] https://info.undp.org/sites/bpps/SES_Toolkit/SitePages/Standard%207.aspx
[88] For more information on RIA and tools, see OECD: https://www.oecd-ilibrary.org/docserver/26f5be27-en.pdf?expires=1691067327&id=id&accname=guest&checksum=551A5F33DB86F4C5E5DEF843E657EFD5 https://www.oecd-ilibrary.org/docserver/663f08d9-en.pdf?expires=1691067329&id=id&accname=guest&checksum=B33EF7BB885825A2B8733637F1B42237-

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measures. The Project has included the use of RIA for the design of fishery regulation and conservation and management measures (activities under output 2.2.2), which will be decided by pertinent authorities during project implementation. It will be used to respond to the potential risks identified in the SESP, including potential risk of exacerbating economic disparities and increased social inequalities among industry actors (risk 2), risk economic displacement (risk 3), risk of conflict (risk 4), risk of inadvertently increasing illegal fishing (risk 5), risks to food security (risk 9).

Although UNDP SES at project preparation phase would warrant a SESA, RIA has been selected because the project aims to support Fishery Authorities to mainstream the use of this tool and apply it systematically to regulatory decisions, even after the project ends. Moreover, it is a tool some governments have adopted for fisheries (e.g., Australia, Ireland, Kenya, New Zealand, USA, and Wales, among others) and which allow decision makers to integrate additional elements to the social and environmental impact assessment of a SESA, such as financial, compliance and macroeconomic costs, among others.

As RIA is a flexible tool, for this project **it will make sure to integrate elements of SESA and comply with UNDP SES requirements**[89]. This means it will:

- Identify social and environmental priorities that should be included in planning and policy processes.
- Assess gaps in the institutional, policy, and legal frameworks to address these priorities.
- Identify potential adverse social and environmental impacts associated with policy options.
- Engage decision makers and key stakeholders to ensure a common understanding and broad support for implementation.
  Formulate policy and institutional measures needed to close policy and legal gaps, address institutional weaknesses, and avoid adverse social and environmental impacts.

As part of the inception of the project, a rapid assessment will be done on the consistency of RIA and UNDP SES, to ensure any potential gaps or limitations are addressed for the use of RIA in the project, which will need to align fully with UNDP requirements.

Key stakeholder engagement is an integral part of the RIA process to develop, enforce and review regulations. Nonetheless, the project will ensure that stakeholder engagement is systematically incorporated in the RIA process to give an opportunity for all stakeholders to participate in the RIA process. The project will apply the OECD Best Practice Principles on Stakeholder Engagement in Regulatory Policy. This is in line with the application of the SESA which combines analytical and participatory approaches in an iterative fashion. This is why the project activities related to RIA include budgets for participatory processes and technical support from experts to guide this process.

The RIA will pay particular attention to the risk of access restrictions, and the potential impact restrictive fishery management measures could have on key stakeholders, including economic displacement[90] and loss of livelihoods. The application of the RIA process will also pay particular attention to the Emberá-Wounaan artisanal fishers in the shrimp fishery in Panama (if their involvement is confirmed), as well as the vulnerable stakeholders in other fisheries identified in the SEP. If the risk is confirmed by the RIA, this will lead to the development of Livelihood Action Plans in those cases in which the impact is unavoidable and no mitigation or compensation measures have been developed by the pertinent authorities.

[89] To ensure alignment with UNDP SES, UNDP's SES policy and the UNDP SES Guidance Note on Assessment and Management to identify and assess social and environmental impacts.
[90] Economic displacement occurs when individuals or communities are restricted, partially, or fully, in their access to land or resources that are important to their means of livelihood or economic well-being.

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RIA aims to include benefit cost analyses that consider the welfare impacts of regulation taking into account economic, social and environmental impacts including the distributional effects over time, identifying who is likely to benefit and who is likely to bear costs. When regulatory proposals would have significant impacts, *ex ante* assessment of costs, benefits and risks should be quantitative whenever possible. Assessments should, where relevant, provide qualitative descriptions of those impacts that are difficult or impossible to quantify, such as equity, fairness, and distributional effects.

As a minimum, every RIA process will include these elements: process/method and stakeholder engagement, context, problem definition, objective, description/background on the regulatory proposal, baseline data, institutional capacity analysis, identification of social and environmental risks, identification of alternatives, recommendations for management measures of risks, analysis of benefit and costs (including financial, identification of the preferred solution and setting out the monitoring and evaluation framework)[91].

Basic steps in the regulatory impact assessment process include:

- Consultations and stakeholder engagement – Use inputs from all potentially affected stakeholders as well as other relevant experts in all stages of the RIA process.
- Context and Problem definition – Describe assessment of the nature and extent of the problem to be addressed by the regulatory proposal, preferably in quantitative terms.
- Objective – clearly state the policy objective(s) and goal(s) of the regulatory proposal.
- Description of the regulatory proposal – Describe the existing regulatory framework, the proposed draft, it's probably impacts, identify administrative bodies and institutions responsible for drafting, implementing and enforcing the proposal, outline the enforcement regime and proposed strategy for ensuring compliance.
- Legal, Policy and Institutional capacity analysis
- Baseline data
- Assessment of social and environmental impacts of the proposal as well as proposed management measures for these impacts
- Identification of alternatives – List the practical alternatives, including any non-regulatory approaches considered as potential solution of the identified problem.
- Analysis of benefit and costs – Clearly outline the benefits and costs expected from alternatives identified in previous steps.
- Identification of the preferred solution – Outline how and in what ways the identified regulatory proposal is superior to the alternatives that were considered.
- Setting out the monitoring and evaluation framework – Describe how performance of the regulation will be evaluated and anticipate the necessary data requirements.

To achieve the roll out and use of RIA, the work is arranged in three interlinked phases (output 2.2.2): (i) training on RIA, (ii) regional learning exchanges on fisheries management plans, and (iii) direct support to update or develop the management plans of the target fisheries applying RIA.

Table 24. List of activities which will undergo a Regulatory Impact Assessment.

[91] https://www.oecd-ilibrary.org/docserver/663f08d9-en.pdf?expires=1691580189&id=id&accname=guest&checksum=ACAB78301BC7BB17B4659E86BBC20D61

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Project Output	Fishery/Country	Assessment activity in PRODOC
2.2.2. Nine fisheries management instruments that integrate social and economic objectives and targets.	General	Training on Regulatory Impact Assessment. Regional learning exchanges on fisheries management plans.
	Pomada in Ecuador	Ecuador. Test Regulatory Impact Assessment in the pomada fisheries management framework
		Ecuador. RIA of options to eliminate illegal fishing and catch laundering in the pomada value chain.
	Large pelagic fish Ecuador	Ecuador. Prepare fisheries management plan for large pelagic fish based on Regulatory Impact Assessment.
	Sharks in Guatemala	Guatemala. Undertake Regulatory Impact Assessment of draft PAN sharks.
		Guatemala. Undertake Regulatory Impact Assessment of proposed conservation and management measures (including reducing the bycatch of sharks in longline fisheries).
	Dorado and sharks fishery in Guatemala	Guatemala. Prepare the action plan for the dorado and sharks fishery based on a RIA process and a whole-of-government approach.
	Shrimp Panama	Panama. Apply Regulatory Impact Assessment to the current shrimp fisheries management framework.
	Large pelagic fish in Panama	Panama. Apply Regulatory Impact Assessment to the current longline large pelagic fisheries management framework and regulations to reduce the bycatch of sharks in the longline fisheries.
	Small pelagic fish in Senegal	Senegal. Apply Regulatory Impact Assessment to the management framework of the fishery for small pelagic fish.
	Octopus in Senegal	Senegal. Apply Regulatory Impact Assessment to the current octopus fisheries management framework
	Mauritania octopus FIP	Mauritania. Apply Regulatory Impact Assessment to the current octopus fisheries management framework

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Additional tools which will support SES implementation

In addition to the UNDP SES requirements, the project has included a variety of sector specific tools which will also contribute to ensuring the social and environmental impacts are identified and addressed during project implementation. These assessments included during project implementation will allow to best target the specificities of each country and fishery. This will allow to adapt the information included in the SESP, SEP, GAP and ESMF to the activities and measures being implemented in each country.

Social Responsibility Assessments

The Social Responsibility Assessment (SRA) Tool for the Seafood Sector[92] has been included in the project because it is a required assessment Fishery Improvement Projects (FIPs) need to undergo to be considered valid and accepted by the buyers. **The use of this tool was not triggered by specific risks identified in the SESP**, as the FIP interventions are mostly focused on research, assessments, data collection, training, design of systems (e.g., traceability, electronic logbooks, monitoring). It is a risk assessment tool specifically designed for the seafood industry and will be applied to Output 2.1.2 activities which focus on launching and/or supporting the eight industry-led verifiable FIPs. In using this tool, it will be clearly noted how it complement/supports the principles, components, and indicators to UNDP SES principles and standards and how its results contribute to the implementation of safeguards. Moreover, **as part of the inception of the project, a rapid assessment will be done on the consistency of SRA and UNDP SES, to ensure that when SRAs are implemented they are aligned with UNDP requirements.**

The SRA is based on the Monterey Framework, a definition for socially responsible seafood that was developed by environmental practitioners, human and labour rights advocates, academics, and industry representatives. The SRA addresses relevant international human and labour rights standards and existing certification and ratings practices for social issues in seafood. It is based on three main principles, six key components and a multitude of performance indicators reflecting key social and environmental standards.

The SRA will be applied to the activities focused on supporting FIPs in specific target fisheries of the six participating countries. Each of the FIPs has this assessment included and budgeted as a project activity[93]. This will aim to identify any particular social conditions, risks or impacts of the FIPs. Results of these assessments will inform the development of a Social Workplan, in order to address gaps or mitigate risks.

[92] Social Responsibility Assessment Tool for the Seafood Sector, Conservation International, 2021. https://media.riseseafood.org/resources/SRAT_20210317_FINAL.pdf https://riseseafood.org/topics/implementing-the-social-responsibility-assessment-tool/

[93] Except for the Mauritania small pelagic fish FIP. The SRA of this FIP was undertaken by the Global Roundtable on Marine Ingredients and was published in October 2023.

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Table 8. Principles, components, and performance indicators for the Social Responsibility Assessment Tool.

PRINCIPLE	COMPONENT	PI	PERFORMANCE INDICATOR
1 Protect human rights, dignity, and access to resources	1.1 Human and labor rights	1.1.1	Abuse and harassment
		1.1.2a	Human trafficking and forced labor
		1.1.2b	Debt bondage in small-scale fisheries
		1.1.3	Child labor
		1.1.4	Freedom of association and collective bargaining
		1.1.5	Earnings and benefits
		1.1.6	Adequate rest
		1.1.7a	Access to basic services for worker housing/ live-aboard vessels
		1.1.7b	Access to basic services for small-scale fishing communities
		1.1.8	Occupational safety
		1.1.9	Medical response
	1.2 Access Rights	1.2.1	Customary resource use rights
		1.2.2	Corporate responsibility and transparency
2 Ensure equality and equitable opportunity to benefit	2.1 Equality	2.1.1	Grievance reporting and access to remedy
		2.1.2	Stakeholder participation and collaborative management
	2.2 Equity	2.2.1	Equitable opportunity to benefit
		2.2.2	Discrimination
3 Improve food, nutrition, and livelihood security	3.1 Food and nutrition security	3.1.1a	Food and nutrition security impacts of industrial fisheries
		3.1.1b	Food and nutrition security for small-scale fishing communities
		3.1.2	Healthcare
		3.1.3	Education
	3.2 Livelihood security	3.2.1	Benefits to and within community
		3.2.2	Economic value retention
		3.2.3	Long-term profitability and future workforce
		3.2.4	Economic flexibility and autonomy
		3.2.5	Livelihood security
		3.2.6	Fuel resource efficiency

Table 9. List of activities which will undergo a Social Responsibility Assessment

Project Output	Fishery / Country	Assessment Activity in PRODOC
2.1.2. Eight industry-led verifiable Fishery Improvement Projects that contribute to improved fisheries	Pomada FIP in Ecuador	Ecuador. Prepare social responsibility assessment and workplan for the pomada FIP.
		Ecuador. Implement workplan to address the gaps identified in the social performance risk assessment (funded by pomada FIP).
	ASOMAN FIP in Ecuador	Ecuador. Prepare social responsibility assessment and workplan for the ASOAMAN FIP.

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Project Output	Fishery / Country	Assessment Activity in PRODOC
governance and stock health.		Ecuador. Implement workplan to address the gaps identified in the social performance risk assessment (funded by ASOAMAN FIP).
	Dorado and Shark FIP in Guatemala	Guatemala. Prepare social responsibility assessment and workplan for the dorado and sharks FIP.
		Guatemala. Implement workplan to address social risks of the dorado and sharks FIP (funded by the FIP).
	Shrimp FIP in Panama	Panama. Prepare social responsibility assessment and workplan for the shrimp FIP.
		Panama. Implement workplan to address social risks of the shrimp FIP (funded by the FIP).
	Large pelagic fish FIP in Panama	Panama. Prepare social responsibility assessment and workplan for the large pelagic fish FIP.
		Panama. Implement workplan to address social risks (funded by the FIP).
	Octopus FIP in Senegal	Senegal. Prepare social responsibility assessment and workplan for the octopus FIP.
		Senegal. Implement a workplan to address the social risks of the octopus FIP (funded by the FIP).
	Mauritania small pelagic fish FIP.	Mauritania. Support the implementation of a workplan to address the social risks of the FIP (funded by the FIP).
	Mauritania octopus FIP	Mauritania. Prepare social responsibility assessment and workplan for the octopus FIP.
		Mauritania. Implement workplan to address social risks of the FIP (funded by the FIP).

Table 11. Summary overview of assessments

SRA: Social Responsibility Assessment
RIA: Regulatory Impact Assessment
ASELWC: Assessment of Social, Economic, Labour and Working Conditions
IPA: Indigenous Peoples Assessment
CHIA: Cultural Heritage Impact Assessment

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Country	Fishery	Seven Management platforms to improve fishery governance and stock health (Output 2.1.1)	Eight Fishery Improvement Projects that contribute to improved fisheries governance and stock health (Output 2.1.2)	Artisanal and small-scale fishers and local supply chain partners effectively engage into fisheries improvement projects and co-management platforms (Output 2.1.3)	Nine fisheries management instruments that integrate social and economic objectives and targets (Output 2.2.2)	Three management instruments that integrate objectives and targets to reduce ecosystem impacts and bycatch. (Output 2.3.1)	Four FIPs that implement actions to reduce ecosystem impacts and bycatch. (Output 2.3.2)
Ecuador	*Pomada*		SRA	ASELWC	RIA SRA ASELWC		
	Large pelagic fish		SRA		RIA ASELWC		
Guatemala	*Dorado and shark*		SRA	ASELWC	RIA	RIA	
Panama	*Shrimp*		SRA	IPA ASELWC	RIA ASELWC		
	Large pelagic fish		SRA		RIA ASELWC	RIA	
Senegal	*Small pelagic fish*			ASELWC	RIA SRA		
	Octopus		SRA		RIA		
Mauritania	*Small pelagic fish*						
	Octopus		SRA		RIA		

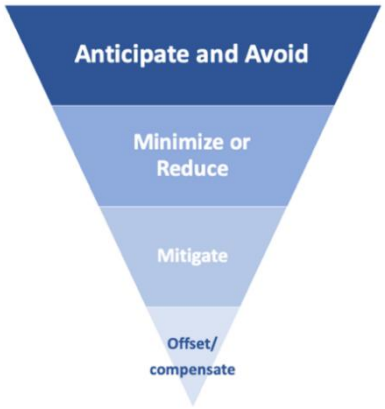
8.3 Scoped Environmental and Social Management Plan (ESMP)

The development of management measures follows the mitigation hierarchy outlined by UNDP. Avoidance of adverse social and environmental impacts is usually the most effective and least-cost option. Where avoidance is not possible, then the project should be modified to minimize potential adverse impacts ("design out

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risk"). Where significant impacts remain after impact avoidance and minimization, mitigation measures need to be incorporated into the management plan. Lastly as a final resort, measures to offset and compensate any significant residual impacts should be applied.

Figure 16 UNDP's SES mitigation hierarchy



As explained in the SESP and Table 5, several risks identified are mitigated by other activities directly included in the project document. For the others, specific plans have been developed or will be required before implementation.

Table 12. Overview of project social and environmental management procedures.

Procedure/tool	**Responsibility**	**Timing**
Environmental and Social Management Framework (ESMF)	PMU and Lead CO	Project design phase – before validation
Stakeholder Engagement Plan (SEP)	PMU and Lead CO	Project design phase – before validation
Gender Action Plan (GAP)	PMU and Lead CO	Project design phase – before validation
Grievance Redress Mechanism	PMU and Lead CO	Project design phase – before validation

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Procedure/tool	Responsibility	Timing
Specific management plans (work plan, action plan, management plan) resulting from SRA, RIA and assessment of labour and working conditions	PMU and Lead CO	Project implementation
Livelihood Actions Plans	PMU and Lead CO	Project implementation, as required
Indigenous Peoples Plan	PMU and Lead CO	Project implementation, as required
Cultural Heritage Management Plan	PMU and Lead CO	Project implementation, as required

Environmental and Social Management Framework (ESMF)

The present ESMF has been developed as part of UNDP's due diligence process in the project cycle, following the screening of the present project with the SESP. Based on the project particularities, risk categorization and its specific risks, the ESMF presents the procedures and tools for screening, assessing, and managing those risks that must be followed during the inception and implementation phases of the project.

Environmental and Social Management Plan (ESMP)

As outlined in previous sections, the project has included directly as project activities the assessment of potential impacts of activities/measures. These are always followed by the design of an action plan, work plan or management plan to address any gaps identified and/or mitigate any risks or adverse impacts. These plans will therefore outline how specific risks will be addressed and integrated into the ESMP. The project implementers will ensure the ESMP is aligned with the UNDP SES.

The scoped ESMP will be prepared during the first year of project implementation and will include the pertinent plans as needed based on the results of the following assessments to be prepared as part of the scoped ESIA: (i) impacts on cultural heritage, (ii) baseline conditions of the Emberá-Woonaan artisanal shrimp fishers, (iii) ethnic minorities related to the target value chains of West Africa, and (iv) Strategic Environmental and Social Assessment of potential fishery conservation management measures (Figure 2). As indicated before, other assessments and related management plans will be prepared during project implementation as needed (Figure 2, Tables 10, 11 and 13, and Annex 3 of the PRODOC).

Table 13. List of specific management plans to be developed during project implementation.

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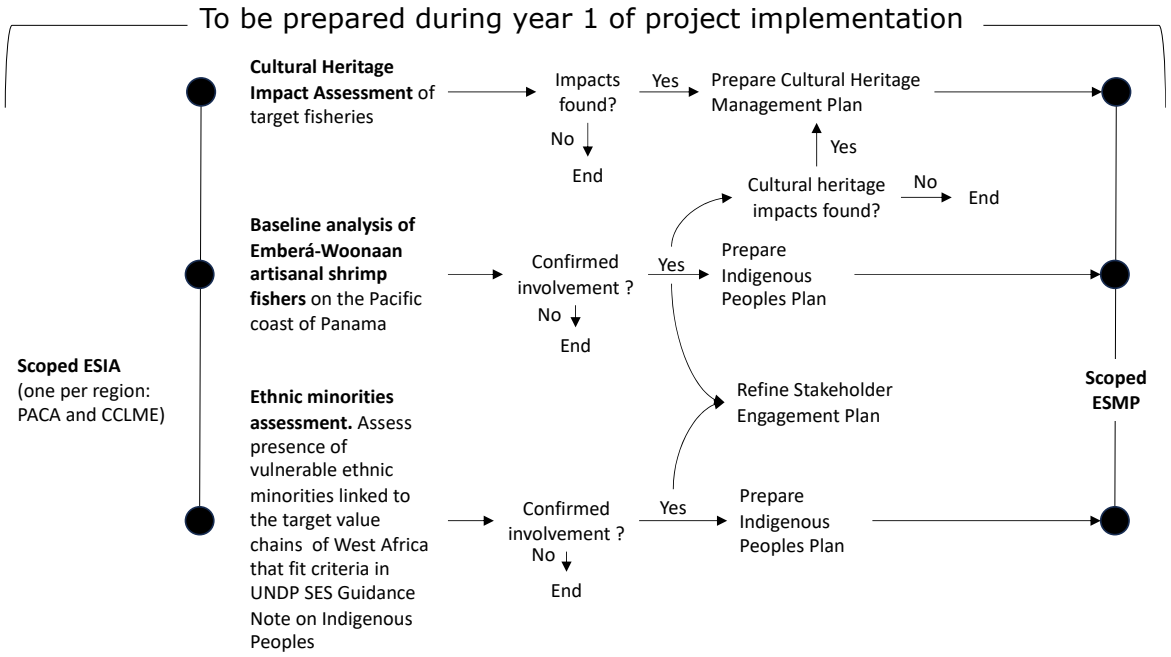
Fishery	Specific Management Plans
Pomada FIP in Ecuador	Ecuador. Prepare and implement workplan to address the gaps identified in the social performance risk assessment (funded by pomada FIP).
	Ecuador. Prepare and implement a workplan to support the development of governance and co-management skills of pomada bolso fishers' organizations.
	Ecuador. Prepare workplan to support the empowerment of women pomada peelers to effectively participate in fisheries governance.
	Ecuador. Prepare and implement an action plan to address labour and working condition gaps in the pomada shrimp trawlers applying regulatory impact assessment.
	Ecuador. Develop and test impact mitigation strategies to protect the most vulnerable groups (bolso fishers and women pomada peelers).
	Ecuador. Prepare and implement an action plan to eliminate illegal fishing and catch laundering in the pomada value chain (based on the results of RIA).
ASOMAN FIP in Ecuador	Ecuador. Prepare and implement workplan to address the gaps identified in the social performance risk assessment (funded by ASOAMAN FIP).
	Ecuador. Prepare fisheries management plan for large pelagic fish based on Regulatory Impact Assessment.
Dorado and Shark FIP in Guatemala	Guatemala. Prepare and implement workplan to address social risks of the dorado and sharks FIP (funded by the FIP).
	Guatemala. Prepare and implement workplan to support the development of governance and co-management skills of artisanal fishers and pertinent organizations.
	Guatemala. Participatory process to prepare the action plan for the dorado and sharks fishery based on Regulatory Impact Assessment.
Shrimp FIP in Panama	Panama. Prepare and implement workplan to address social risks of the shrimp FIP (funded by the FIP).
	Panama. Prepare and implement workplan to support the development of governance and co-management skills of key artisanal shrimp fishers' organizations.

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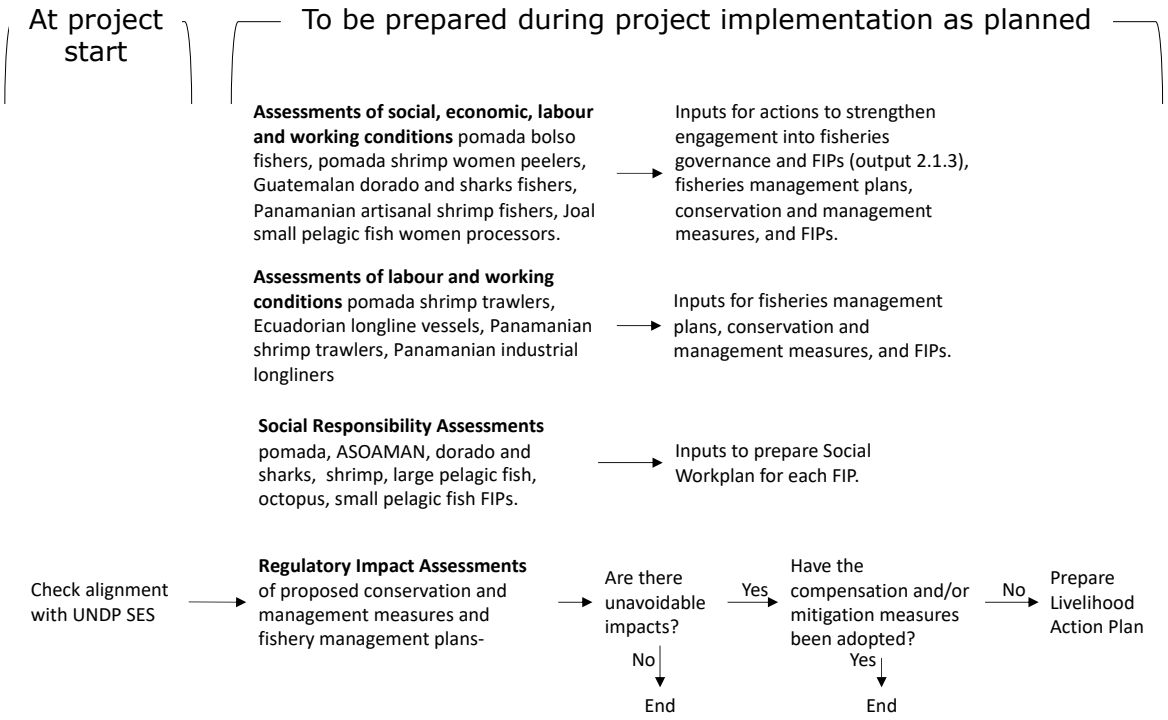
Fishery	Specific Management Plans
	Panama. Affirmative action to support organization process of Emberá-Wounaan artisanal fishers to have a voice and participate in the governance platform.
	Panama. Participatory process to prepare the shrimp management plan based on RIA.
Large pelagic fish FIP in Panama	Panama. Prepare and implement workplan to address social risks (funded by the FIP).
	Panama. Participatory process to prepare the longline large pelagic fish management plan based on RIA.
Small pelagic fish in Senegal	Senegal. Prepare and implement a workplan to support the development of governance, co-management and administrative skills of the Joal CLPA.
	Senegal. Facilitated intersectoral dialogue to develop key measures to address the gaps identified in RIA and social responsibility analysis.
Octopus FIP in Senegal	Senegal. Prepare and Implement a workplan to address the social risks of the octopus FIP (funded by the FIP).
	Senegal. Participatory process to update the octopus management plan based on RIA
Mauritania small pelagic fish purse seine FIP.	Mauritania. Support the implementation of a workplan to address the social risks of the FIP (funded by the FIP).
	Mauritania. Participatory process to discuss and agree upon a strategic plan to develop the value chains for added value small pelagic fish.
Mauritania octopus FIP	Mauritania. Prepare and implement workplan to address social risks of the FIP (funded by the FIP).
	Mauritania. Participatory process to update the octopus management plan based on RIA

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Figure 2. Decision tree of the risk assessments and the elements of the scoped Environmental and Social Impact Assessment and the scoped Environmental and Social Management Plan.



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Stakeholder Engagement Plan (SEP)

A Stakeholder Engagement Plan has been developed during the project's preparation phase to act as a tool to support an adequate process of integration and full participation of stakeholders linked to the GMC2 project. It builds on the results from the stakeholder analysis and provides a roadmap for those responsible for the implementation of the project as to when, how and with whom consultations and inclusive actions should be taken throughout the life of the project. This plan integrates 15 comprehensive activities to be develop during project implementation and will help ensure several potential risks are avoided. The results of the "baseline analysis of Emberá-Woonaan artisanal shrimp fishers" and the "ethnic minorities assessment" will be used to refine the SEP. More details can be found in section 8 of the ESMF and the SEP in Annex 7 of the PRODOC.

Gender Action Plan (GAP)

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A Gender Action Plan has been developed during the project's design phase to act as a tool to ensure equal participation, access and decision-making of women and men in the project and contribute to gender equality, women empowerment, and the reduction of gender gaps in the value chains of the target fisheries of the GMC2 Project. Active promotion of women's participation in planning and decision-making processes is a key feature of the project. More details can be found in the GAP in Annex 9 of the PRODOC.

Indigenous Peoples Plan (IPP)

This plan will be developed during project implementation if and when the information gathering and assessment of the Emberá-Wounaan confirm the existence of artisanal shrimp fishers of this indigenous community and that the project may affect their activities. If impacts are confirmed through the assessment, an IPP will need to be in place prior to implementing project activities in the Panamanian shrimp supply chain.

The IPP will be based on the findings of the assessment process and be developed with full, effective and meaningful participation of potentially affected indigenous peoples. The IPP will establish a timebound, fully budgeted action plan for ensuring that identified impacts are appropriately addressed, culturally appropriate benefits are provided, participatory processes are followed, and needed capacity support and institutional arrangements are in place.

The IPP will have a level of detail proportional to the complexity of the nature and scale of activities and its potential impacts on indigenous peoples and their rights, lands, territories, and resources. Enhancement and mitigation measures outlined in the IPP will reflect an appropriate response to the assessment's findings and adhere to all relevant requirements of Standard 6.

It is also important to note project activities have included specific support to the Emberá-Wounaan. This will include support to re-activate artisanal fishing organisations, support to participate and contribute to the co-management platform, and developing capacities to participate in the fishery governance.

An outline of the IPP has been provided in Annex 3 of the ESMF. It is based on the UNDP Guidance template.

Livelihood Action Framework (LAF)

Given the unknowns at this point regarding the fishery management and conservation measures to be decided and implemented by the fishery authorities during project implementation (Output 2), a Livelihood action framework is outlined in this section. This will potentially lead to the development of Livelihood Action Plans (LAPs) during project implementation if and when Regulatory Impact Assessments applied to target fishery management regulations/plans/measures (defined under output 2.2.2 and 2.3.1 for each target fishery) identify access restrictions leading to economic displacement or loss of livelihoods. The RIA might propose alternative measures which avoid or mitigate economic displacement, but in the case that economic displacement is determined as unavoidable and has not been addressed by pertinent authorities, LAPs will be designed in line with UNDP SES Guidance Note on Standard 5[94] and using the template/structure provided under Annex 3 of the present ESMF.

[94] UNDP SES Guidance Note: Standard 5: Displacement and Resettlement

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It must be noted that these processes will be led by the national authorities and co-management platforms for each target fishery. The GMC2 project will support costs for the facilitation of the process and design of LAPs, to ensure the risk is being addressed and a process is in place. However, any alternative measures, restoration or compensation measures decided in the LAP will need to be funded by other means.

The LAPs will detail procedures and actions that will be undertaken to ensure that the capacity, production levels, and standards of living of economically displaced people are improved or at least restored, and that displaced people are compensated adequately. The design of these plans will be guided by principles of fairness and equity, inclusivity, transparency and accountability, and sensitivity (to gender, vulnerability, context, and culture). It will consider several issues, including the importance of fisheries to people's livelihoods, the nature of impacts, data quality and cost, and the choice in the management measures.

An outline for the LAP has been provided in Annex 3 of this ESMF. It is based on the UNDP Guidance template and has been adapted for the GMC2 project. It must be noted that some of the assessment and information will likely have been done/gathered through the RIA process and the fishery management platforms and should inform the LAP preparation.

The framework/process to design the LAPs will include the following elements/steps outlined below.[95] This process should be done in a participatory manner, involving affected stakeholders, in line with principles outlined in the SEP and ESMF.

Key elements/steps include:

1. Carry out a baseline assessment update of fishing-based livelihoods of potentially affected stakeholders to develop a more comprehensive understanding of their current fishing, processing, distribution, and marketing of fish; the productivity of these activities; and their contribution to livelihoods. Participatory livelihood appraisal methodologies can be used for assessment of household (and community) fishing activities and livelihoods. This could include direct observation, household surveys, key informant and focus group interviews with fishermen and other stakeholders (e.g., traders, buying agents), and secondary sources. The assessment should include a description of the different livelihood activities, relative contributions to household income and welfare, and key issues, such as the nutritional contribution of fisheries and the role of fisheries in promoting stability and resilience (or reducing the vulnerability) of livelihoods.

2. Quantify the fishery management activity/measure's potential impacts on fishing and associated activities and livelihoods. The assessment of project impacts on fishing activities requires consideration of the scope of the project and its impacts, the relative importance of fisheries, the magnitude of impacts, significance of any expected impacts. The relative importance of fisheries to livelihoods determines the importance of mitigation of impacts. Relative importance is greater with higher dependence on fisheries for household employment, food security, nutrition, and income. Assessment of the magnitude of impacts should include consideration of the duration of impacts, the scale of impacts and project impacts on productivity (both fisheries resource and fishing activity). This will provide a detailed assessment of impacts of restrictions on livelihoods and economies of affected stakeholders.

3. Determine participation rates, eligibility and entitlement of stakeholders, as well as appropriate levels of compensation. The open access and common property nature of the resource allows for both ready entry and exit from fishing, as well as variation in the intensity of participation, depending on the

[95] Moreover, the assessments can build on specific existing methodologies from the fishing sector, such as 'Addressing Project Impacts on Fishing-Based Livelihoods – A Good Practice Handbook: Baseline Assessment and Development of a Fisheries Livelihood Restoration Plan' (IFC, 2015). https://www.commdev.org/publications/addressing-project-impacts-on-fishing-based-livelihoods-a-good-practice-handbook-baseline-assessment-and-development-of-a-fisheries-livelihood-restoration-plan/

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availability of alternative economic opportunities. One of the biggest challenges in determining the level of impact that an activity/measure will have on local fisheries and fishing communities is defining who should be considered as 'impacted'. This will result in eligibility criteria, to define who and what is eligible for compensation, and conversely who and what is not. To the greatest extent possible, this should seek to ensure a correlation between impact and response, and ensure that impact management interventions can be deemed to be solely directed toward affected stakeholders.

4. Design and implement appropriate avoidance, minimization, and/or alternative mitigation and/or compensation strategies. The key issue when addressing economic displacement of fishermen is determining what constitutes adequate mitigation and compensation (where this is determined to be appropriate). Typically, determination of the adequacy of mitigation and compensation is based on a reasonable assessment of the economic displacement. Management measures to mitigate these livelihood impacts should focus on the restoration and development of fisheries activities of project-affected households, fishermen groups, and/or communities and also consider interventions related to improving opportunities for other non-fishing livelihood activities. LAP will need to define compensation (cash, in kind) and/or restoration measures (equipment, alternative livelihood projects, capacity building/training, infrastructure development, access to credit, market development, etc.) and outline a clear plan, process, responsibilities, monitoring framework and budget to implement.

These steps should result in a complete LAP (as outlined in annex 4 of the ESMF), proportionate to the scale of potential economic displacement risks and impacts; and disclosed to affected stakeholders in a timely manner.

Cultural Heritage Management Plan (CHMP)

A CHMP might be required, depending on the results of the Cultural Heritage Impact Assessment. Where impacts on Cultural Heritage cannot be avoided, mitigation measures will be developed in accordance with the mitigation hierarchy, considering the specific characteristics of the Cultural Heritage being affected and the different values attributed to it by various stakeholders.

The CHMP will outline strategies and actions for safeguarding the Cultural Heritage which could be affected by project activities. It will be prepared with the communities whose cultural heritage would be affected.

UNDP does not provide a specific template for a CHMP but an outline has been included in Annex 5 of the ESMF.

8.4 Further Screening and Assessment

As part of the annual report of project advances through the PIR, the project SESP will be reviewed and adjusted as necessary if new social and environmental risks arise. Throughout the project, participation of women and vulnerable populations will be ensured, through implementation and monitoring of the respective GAP and SEP. Depending on the implementation of these plans and the consultations with relevant stakeholders, all necessary adjustments will be made to prevent or anticipate any new risks.

Whilst the majority of project activities are known at his time, there is the potential that certain project activities will need to change. This could be due to the evolving nature of the project/adaptive management. In such circumstances, any 'new'/substantive changes to the project will require screening, assessment,

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and management, using the SESP methodology to ensure that any impacts are identified, their significance is assessed, and any required impact-specific management actions are developed and applied.

Screening of further project activities that have not been included in the existing SESP, will take place as specific new activities are designed. Screening will use the SESP template, and rate foreseen impacts as "High", "Substantial", "Moderate" or "Low".

Assessment of further activities will be commensurate with the magnitude of the envisaged risk, and targeted specifically at the risk, especially taking into account risks to poor, vulnerable or marginalized communities and individuals. Full stakeholder consultation will be required at all stages.

Management of identified risks will follow the "mitigation hierarchy" model. Management of additional site-specific activities will be integrated into the future ESMP. The ESMP is dynamic, and may require amendments as new project activities are identified, screened, assessed and implemented. When required, additional stand-alone plans for the activity may be developed, or addendums made to existing stand-alone plans, such as a Livelihood Action Plan or Indigenous Peoples' Plan, or a site-specific addition to the Gender Action Plan.

9. Stakeholder engagement and information disclosure process

The institutional guidelines for UNDP social and environmental safeguards regarding stakeholder engagement ensure the development of adequate processes for the participation of the relevant parties in the preparation stage of the PPG document (Stakeholder Engagement Guidance Note). Following these principles, during the PPG, a participation and engagement strategy was designed to provide meaningful access to dialogue into GMC2 project design, as well as to identify stakeholders' priorities and then to better tailor the project activities and benefits. The PPG Phase was conducted in full consultation and with the close engagement of governments, private actors, inter-governmental organizations, and other relevant stakeholders – in particular those who will be directly involved in the implementation of the project activities, those who may be impacted (positively or negatively) by the project. The strategy for consultation and stakeholders' involvement for the PPG was developed in three levels:

1. Institutional meetings with focal points and institutions that are GMC2 project partners (virtual workshops and meetings).
2. Consultation workshops with key stakeholders in each country *(hereinafter consultation workshops*).
3. Meetings with local stakeholders and other parties involved in the project held by the PPG team (virtual and in-person meetings).

A detailed documentation of the PPG stakeholder assessment and stakeholder participation and engagement activities can be found in Annex 18 of the PRODOC.

The design of the project has paid special attention to the principle of integration based on the participation of key stakeholders of the target fisheries and the related vulnerable populations, integrating them throughout the design of the project and supporting their involvement, participation, and commitment. The project SEP and GAP will be followed to ensure that stakeholders are engaged in project implementation and particularly in the further assessment of social and environmental impacts and the development of appropriate management measures. The SEP and GAP will be updated during project implementation based on the assessments and management plans conducted in line with this ESMF, as needed.

Potentially affected stakeholders will be engaged during the implementation of this ESMF, as outlined in previous sections. This will include the use of participatory approaches. As part of the stakeholder engagement process, UNDP's SES require that project stakeholders have access to relevant information.

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Specifically, the SES (SES, Policy Delivery Process, para. 21) stipulates that, among other disclosures specified by UNDP's policies and procedures, UNDP will ensure that the following information be made available:

- Stakeholder engagement plans and summary reports of stakeholder consultations;
- Social and environmental screening reports with project documentation;
- Draft social and environmental assessments, including any draft management plans;
- Final social and environmental assessments and associated management plans; and
- Any required social and environmental monitoring reports.

As outlined in the SES and UNDP's Social and Environmental Screening Procedure, the type and timing of assessments and management plans vary depending on the level of social and environmental risk associated with a project, as well as on the timing of the social and environmental assessment. This ESMF (and project SESP) will be disclosed via the UNDP Lead Country Office website in accordance with UNDP SES policy. The subsequent management plans will also be publicly disclosed via the UNDP Lead Country Office website, once drafted. They will be presented in appropriate languages to the project beneficiaries. The PMU will be responsible for ensuring that the information is channelled all the way to the project stakeholders in order to allow them to understand, comment on, and finally approve the SES documents.

The ESMF, GAP, SEP, and ESIA/ESMP will be finalised and adopted only after the required time period for disclosure has elapsed. These requirements for stakeholder engagement and disclosure will be adhered to during the implementation of this ESMF, and the subsequent implementation of the resulting stand-alone management plans.

10. Accountability and Project Grievance Mechanism

10.1 UNDP accountability mechanism

In addition to the project-level Grievance Redress Mechanism (GRM) described below, Social and Environmental Compliance Review Unit (SECU) and Stakeholder Response Mechanism (SRM remain available, and stakeholders will be informed of this option to file a complaint or submit a request. UNDP recognises that even with strong planning and stakeholder engagement, unanticipated issues can still arise. Therefore, its social and environmental compliance reviews and stakeholder response mechanisms are underpinned by an Accountability Mechanism with two key components:

- A Social and Environmental Compliance Review Unit (SECU) to respond to claims that UNDP is not in compliance with applicable environmental and social policies; and
- A Stakeholder Response Mechanism (SRM) that ensures individuals, peoples, and communities affected by projects have access to appropriate grievance resolution procedures for hearing and addressing project-related complaints and disputes.

SECU and SRM Requests can be submitted via:

- An online webform: https://secure.ethicspoint.eu/domain/media/en/gui/104895/index.html

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- WhatsApp, Viber, and Signal using 001 (917) 207 4285, or through the WeChat Account @SECUSRM
- Call (costs are incurred by caller) using 001 (917) 207 4285. Skype is an affordable way to place such a call.
- By post: Attn: SECU/SRM, OAI, UNDP, 1 U.N. Plaza, 4th Floor, New York, NY USA 10017
- By email to: project.concerns@undp.org

Complaints should be as specific as possible, describing current or potential adverse impacts that have a plausible causal link to a UNDP-supported project/programme and, if possible, the UNDP social and environmental standards/commitments that are believed to have been violated.

10.2 Project Level Grievance Mechanism

In accordance with UNPD policies and Social and Environmental Safeguards and the Terms of Reference of Project-level Grievance Redress Mechanism (2022), the present mechanism has been developed to offer interested parties the option of presenting their complaints about possible claims that may arise during the execution of the GMC2 project in each country.

In this context, any person or group of people who believe they are negatively affected by the project, or at risk of adverse impacts, may file a claim. It is not a substitute for proactive outreach to stakeholders to inform them about the Project, seek their input, and respond to their suggestions and concerns regarding social and environmental benefits, risks and impacts.

This is a mechanism that integrates a procedure for complaints or disputes to be presented, heard, and resolved, and to prevent any potential impact that stakeholders identify during project execution.

If the grievance processes have taken place, following due process, and have not reached a solution after the process set out in this document, has reached the highest instance of the Project Board, the claimant may apply directly to the staff of UNDP Country Office Staff/ or UNDP Staff managers as follows[96]:

- Project website: complaint portal to be developed in the 3rd trimester of Year 1[97]
- Sustainable Fisheries Partnership (SFP) Project Grievance Mechanism site: to be completed during the inception phase.
- Project Coordinator information (to be fulfilled at inception phase: email, WhatsApp number, address, Office phone number, etc)
- UNDP Project Assurance function email, WhatsApp number, address, Office phone number, etc. (DRR or RR)
- UNDP Accountability Mechanism Web complaint portal (www.undp.org/secu-srm) or to the following emails: stakeholder.response@undp.org ; project.concerns@undp.org ; secuhotline@undp.org

The information about the grievance mechanism and the different channels to present claims should be disseminated by all project communication means so that the diverse stakeholders can know and access this tool for its proper use when they deem it necessary.

[96] The Project Web site for receiving complaints will be ready after the 3rd trimester of Year 1, until then, the temporary grievances reception may directly be addressed to the Project Coordinator.
[97] In the event that the complaints come from vulnerable people that may have difficulty attending the procedure, as a temporary measure, the complaint can be received directly through any of the emails and addresses established here.

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Eligible complaints

To be eligible for a project GRM response, the complaint must pertain to the GMC2 project and its activities after signature of the project Document and prior to project closure. In addition, the complaint must:

a) Indicate how project activity(ies) have caused or contributed or may cause or contribute to social or environmental harm.
b) Be made by a person or people (directly or through an authorized representative) who could plausibly be affected by the harm(s) referenced in the complaint. Complainants may request and receive confidentiality, but the GRM cannot respond to anonymous grievances.

Who can submit a complaint?

A complaint can be submitted by any individual or group of individuals that believes it has been or will be harmed by the Project. If a complaint is to be lodged by a different individual or organization on behalf of those said to be affected, the Complainant must identify the person/people on behalf of who the complaint is submitted and provide written confirmation by the person/people represented that they are giving the Complainant the authority to present the complaint on their behalf. The GRM will take reasonable steps to verify this authority. They should be presented in English, Spanish or French.

What information should be included in a complaint?

a) the name(s) of the person/people submitting the complaint ("the Complainant");
b) a means for contacting the Complainant (email, phone, address, other);
c) if the submission is on behalf of those alleging a potential or actual harm, the identity of those on whose behalf the complaint is made, and written confirmation by those represented of the Complainant's authority to lodge the complaint on their behalf;
d) a description of the potential or actual harm;
e) names of the individual(s) or institutions responsible for the risk/harm (if known), and the location(s) and date(s) of harmful activity (if Complainant states that harm has already occurred);
f) what has been done by Complainant thus far to resolve the matter;
g) whether the Complainant wishes for their identity to be kept confidential; and
h) the specific response requested from the GRM.

Complainants are not required to provide all of the information listed above. Initially, the Complainant need only provide enough information to determine eligibility. If insufficient information is provided, the GRM has an obligation to make a substantial, good faith effort to contact the Complainant to request whatever additional information is needed to determine eligibility, and if eligible, to develop a proposed response.

Grievance files and tracking

After the receipt of a grievance, the GRM should be registered in a file and assigned a tracking number. Each Grievance file will contain, at a minimum:

- the date of the request as received;
- the date the written acknowledgment was sent (and oral acknowledgment if also done);
- the dates and nature of all other communications or meetings with the Complainant and other relevant Stakeholders.

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- specific concerns raised by the complaint, and additional information regarding those concerns provided.
- the eligibility determination and rationale.
- any requests, offers of, or engagements of a mediator or facilitator;
- the dates of discussions between the Complainant, GSPC, Project Coordinator and/or Project Assurance staff, and any other relevant parties related to the proposed resolution/way forward, and the main substantive points from each discussion;
- the Complainant's acceptance or objections to proposed resolutions, and the responses of other relevant parties to proposed resolutions;
- the proposed next steps if objections arose;
- the alternative resolution if renewed dialogues were pursued;
- notes regarding implementation of any agreed resolution;
- any conclusions and recommendations arising from monitoring and follow up.

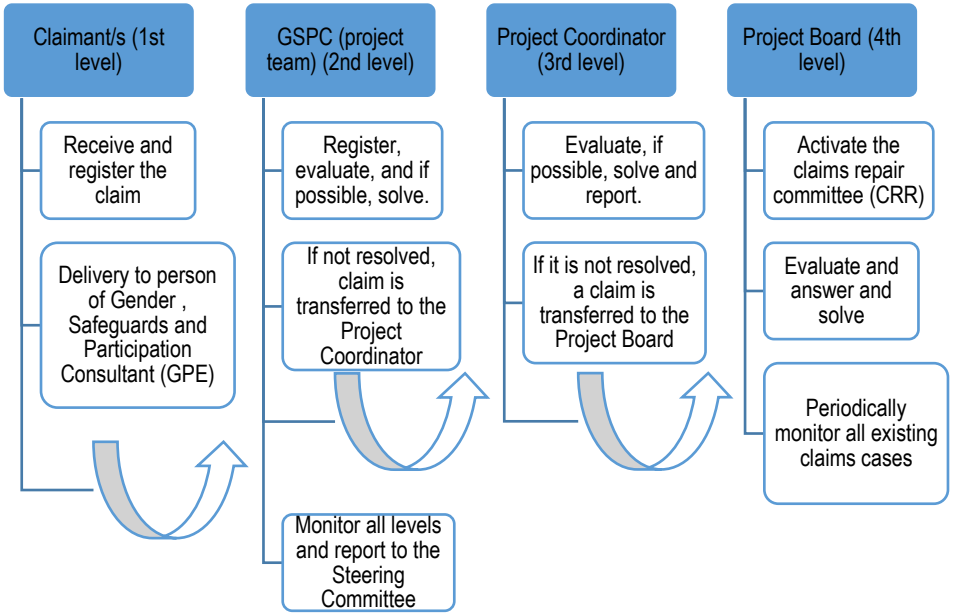
GRM at project management level

The complaints for the GMC2 project should follow the following procedure to present their claim. The procedure for the presentation and resolution of claims has several levels as described below:

The procedure to submit a claim consists of four levels (see Figure 2), which has been designed to reach a solution of the submitted claim. The GRM will maintain a flexible approach with respect to receiving complaints in light of known local constraints with respect to communications and access to resources for some stakeholders. A complaint can be transmitted by any means available (e.g., by email, letter, phone call, meeting, SMS, etc.). Based on the difficulty or complexity of its resolution or reparation, the process starts with the GSPC, and escalates to the next level of decision making until the Project Board is reached.

Figure 3 Levels of reception and claim reparation procedure

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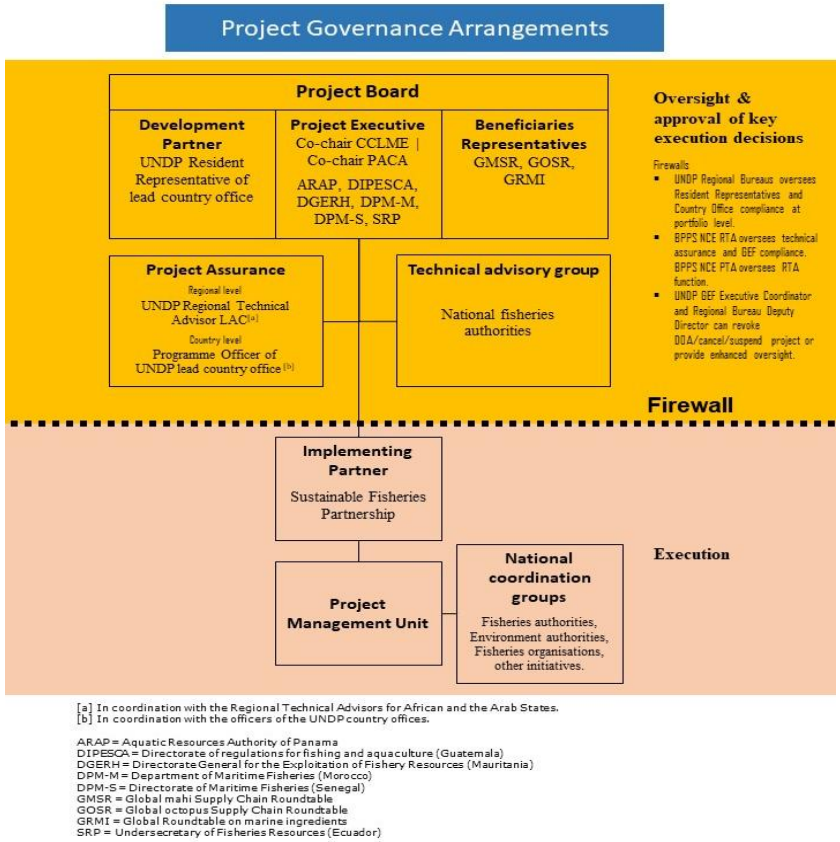
More information on the full GRM procedure can be found in the SEP (PRODOC Annex 7)

11. Institutional Arrangements for the ESMF

A full description of project institutional arrangements can be found directly in the PRODOC. This section provides overview of the roles and responsibilities of project staff and associated agencies for implementation of this ESMF.

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Figure 4. Project institutional framework



[a] In coordination with the Regional Technical Advisors for African and the Arab States.
[b] In coordination with the officers of the UNDP country offices.

ARAP = Aquatic Resources Authority of Panama
DIPESCA = Directorate of regulations for fishing and aquaculture (Guatemala)
DGERH = Directorate General for the Exploitation of Fishery Resources (Mauritania)
DPM-M = Department of Maritime Fisheries (Morocco)
DPM-S = Directorate of Maritime Fisheries (Senegal)
GMSR = Global mahi Supply Chain Roundtable
GOSR = Global octopus Supply Chain Roundtable
GRMI = Global Roundtable on marine ingredients
SRP = Undersecretary of Fisheries Resources (Ecuador)

Project Management Unit

The leadership for ESMF implementation will be with the PMU and its Gender and Safeguard Consultant (GSS), who will be responsible for ensuring the proper implementation of the ESMF procedures and tools.

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The PMU will ensure that safeguards responsibilities are carried out and that provisions under the partnership agreements include the coordination for carrying of any additional studies, consultations and capacity building for safeguards implementation. Consultants with relevant expertise in social and environmental safeguards/fisheries/labour conditions will be engaged to support the completion of the targeted assessments (SRA, RIA, Labour and working conditions assessment) and subsequent management plans as needed.

The PMU will:

- Supervise and manage implementation of measures defined in this ESMF.
- Assign specific responsibilities for implementation of this ESMF, including monitoring.
- Supervise the assessments done by external consultants and facilitate processes with national authorities.
- Maintain relevant records associated with management of environmental and social risks, including updated SESPs, impact assessments, GRM implementation together with documentation of management measures implemented.
- Report to the Implementing Partner, the Project Board, Technical advisory group, and UNDP on the implementation of the ESMF.
- Ensure that all service providers are informed of their responsibilities for the day-to-day compliance with the ESMF.

As noted above, the projects' subsequent management plans as required, will describe the roles and responsibilities in the implementation of those plans. Those new roles and responsibilities will be assessed and integrated, as appropriate, as part of the participatory decision making and implementation proceedings of the project.

The PMU be responsible for compiling the necessary information for the quarterly reports, which will include a specific section on safeguard issues. A hot line for grievances redress mechanism (GRM) shall be established at the PMU, which shall maintain adequate records of any issues or complaints throughout project execution. For quality, assurance purposes random site visits may occur, during project supervision missions, to verify safeguard implementation status as well of the good functioning of the GRM.

Project Board

The Project Board provides strategic guidance to implementation of the project including oversight for safeguards and the implementation of this ESMF. It is also responsible for taking corrective action as needed to ensure the project achieves the desired results. It will:

- Monitor implementation of this ESMF and compliance with national and international regulations, and UNDP social and environmental standards.
- Provide guidance on new project risks, and agree on possible mitigation and management actions to address specific risks.
- Ensure coordination with various government agencies and their participation in project activities.
- Decision-making for the adoption of necessary measures, including full integration of management measures within project outputs and annual work plans.
- Establish and support GRM to address any grievances.

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Implementing partner

The Implementing Partner for this project is Sustainable Fisheries Partnership (SFP), an NGO specialized in transforming the seafood market by engaging supply chains into sustainable and responsible production. It is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document. It will be in charge of project planning, coordination, management, monitoring, evaluation, and reporting. This includes providing all required information and data necessary for timely, comprehensive, and evidence-based project reporting, including results and financial data, as necessary.

For the ESMF, this will include:

- Ensuring that the required assessments and assessment report and the required management plan are developed, disclosed for public consultation and approved, and management measures are adopted and integrated during project implementation.
- Report, fairly and accurately, on project progress against agreed work plans in accordance with the reporting schedule and required formats.
- Ensure all requirements of UNDP's SES and national regulatory/policy frameworks and relevant international standards have been addressed (e.g., mitigation of voluntary resettlement impacts).
- Hold responsibility and accountability to UNDP for overall management of the project, including compliance with UNDP SES.

UNDP

UNDP is accountable to the GEF for the implementation of this project. This includes oversight of project execution to ensure that the project is being carried out in accordance with agreed standards and provisions. UNDP is responsible for delivering GEF project cycle management services comprising project approval and start-up, project supervision and oversight, and project completion and evaluation. UNDP is also responsible for the Project Assurance role of the Project Steering Committee.

In terms of the ESMF, UNDP will:

- Provide oversight on all matters related to safeguards.
- Inform all the stakeholders and right-holders involved in, or potentially impacted (positively or negatively) by the GEF-financed projects, about the UNDP's Accountability Mechanism (described below).
- Ensure that the Compliance Review and the Stakeholder Response Mechanisms are operational during the lifetime of the projects.
- Ensure adhesion to the SES for project activities implemented using funds channelled through UNDP's accounts, and undertake appropriate measures to address any shortcomings.
- Verify and document that all UNDP SES requirements have been addressed.
- Provide technical guidance on implementation of this ESMF and administrative assistance in recruiting and contracting expert safeguards services (as required), and monitor adherence of each project to the ESMF and UNDP policies and procedures.
- Ensure that the required assessment and assessment report and the required management plan(s) are developed, disclosed for public consultation and approved, and management measures are adopted and integrated during project implementation.

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- Report, fairly and accurately, on project progress against agreed work plans in accordance with the reporting schedule and required formats.
- Maintain documentation and evidence that describes the proper and prudent use of project resources in conformity with the signed Project Document and in accordance with applicable regulations and procedures (e.g., SES).
- Ensure all requirements of UNDP's SES and national regulatory/policy frameworks and relevant international standards have been addressed (e.g., mitigation of voluntary resettlement impacts).
- Supervise and manage implementation of measures defined in this ESMF as well as in the SEP and GAP;
- Ensure that all service providers are informed of their responsibilities for the day-to-day compliance with the ESMF.

Project partners (national authorities)

The project partners are the fisheries authorities of the six participating countries. In addition, as pertinent, the environment authorities in charge of the management of ETP species (e.g., sharks, sea turtles) will contribute to the project. These authorities will have a responsibility regarding the implementation of the ESMF as they will be responsible, with support from the project, for applying the Regulatory Impact Assessment and integrating results into the fishery management plans and measures.

Table 15. Project partners in the participating countries.

Country	Fisheries authority	Environment authority in charge of ETP species
Ecuador	Undersecretary of Fisheries Resources (SRP)	Undersecretary of Natural Patrimony
Guatemala	Directorate of regulations for fishing and aquaculture (DIPESCA)	Ministry of Environment and Natural Resources (MARN)
Mauritania	Ministry of Fisheries and Maritime Economy (MPEM)	Ministry of the Environment and Sustainable Development (MEDD)
Morocco	Department of Maritime Fisheries (DPM-M)	Sustainable Development Department of the Ministry of Energy Transition and Sustainable Development
Panama	Aquatic Resources Authority of Panama (ARAP)	Ministry of Environment (MiAmbiente)
Senegal	Directorate of Maritime Fisheries (DPM-S)	Ministry of Environment and Sustainable Development

12. Monitoring and evaluation arrangements

Monitoring and evaluation of safeguard implementation should fall with the PMU´s M&E responsibilities, with support from the Gender and Safeguard Consultant (GPSS). Reporting on progress and issues in the implementation of this ESMF will be documented in the project quarterly reports and annual project implementation reports (PIRs).

Until specific management plans are put in place, UNDP Lead CO will be responsible for compiling reports on the implementation of this ESMF from PMU and UNDP COs, for reporting to the Project Board. Key issues will be presented to the Project Board during each committee meeting. If any major Social or Environmental risk is faced, an exceptional PSC meeting could be organized.

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Implementation of the subsequent management plans will be the responsibility for the PMU, and/or other partners as agreed upon and described in those plans. The ESMF monitoring and evaluation plan is outlined in the table below.

Table 14. ESMF M&E Plan.

Monitoring Activity	Description	Frequency / Timeframe	Expected Action	Responsibilities
Track progress of ESMF implementation	Implementation of this ESMF coordinated for each activity, and with results reported to project board on an annual basis.	Quarterly (until management plans are in place)	Required ESMF steps are completed in a timely manner.	UNDP
Development of targeted assessments	Carried out for project activities, as described in section 7.2 of the ESMF.	According to activities timeline (see multiyear workplan)	Potential impacts are assessed with support of external consultants and participation of project team and stakeholders; targeted assessment report completed;	PMU
Development of planned management plans/measures	Carried out based on results of assessments, as described in section 7.3 of the ESMF.	According to activities timeline (see multiyear workplan)	Development of management plans/measures for risks identified in targeted assessments	PMU
Development of Livelihood action plans, as needed	Based on results of RIAs, determine if need to develop Livelihood Action Plans.	According to activities timeline (see multiyear workplan)	Decision on need for LAP; launch of process to develop LAP; support to prepare LAP	PMU and UNDP CO
Development of Indigenous peoples plan, as needed	Based on results of the Emberá-Woonan assessment, determine if need to develop an IPP	According to activities timeline (see multiyear workplan)	Decision on need for IPP launch of process to develop IPP; support to prepare IPP	PMU and UNDP CO
Development of a Cultural Heritage Management Plan	Based on the results of the cultural heritage impact assessment, determine if need to develop a CHMP	According to activities timeline (see multiyear workplan)	Decision on need for CHMP; launch of process to develop CHMP; support to prepare CHMP	PMU and UNDP CO
Implementation of management measures and plans and monitoring of potential	Permanent implementation and monitoring of management measures, in accordance with	Annual, pre- PIR and then pre-MTR, and continuous	Implementation of management plans/measures; integration of	PMU oversight by UNDP lead CO

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Monitoring Activity	Description	Frequency / Timeframe	Expected Action	Responsibilities
impacts identified in targeted assessments	findings of targeted assessments and plans.		management plans into project implementation strategies	
Learning	Knowledge, good practices and lessons learned regarding social and environmental risk management will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	At least annually	Relevant lessons are captured by the project teams and used to inform management decisions.	UNDP
Annual project quality assurance	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Annually	Areas of strength and weakness will be reviewed and used to inform decisions to improve project performance.	UNDP
Review and make course corrections	Internal review of data and evidence from all monitoring actions to inform decision-making.	At least annually	Performance data, risks, lessons and quality will be discussed by the project steering committee and used to make course corrections.	PMU
Annual project implementation reports	As part of progress report to be presented to the Project Steering Committee and key stakeholders, analysis, updating and recommendations for risk management will be included.	Annually	Updates on progress of ESMF will be reported in the project's annual PIRs. A summary of the avoidance and mitigation of potential social and environmental impacts will be included in the program annual report, sharing best practices and lessons learned across the programme.	PMU

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Monitoring Activity	Description	Frequency / Timeframe	Expected Action	Responsibilities
Project review	The Project Steering Committee will consider updated analysis of risks and recommended risk mitigation measures at all meetings.	At least annually	Any risks and/ or impacts that are not adequately addressed by national mechanisms or project team will be discussed in project steering committee. Recommendations will be made, discussed and agreed upon.	PMU/UNDP

13. Budget for ESMF implementation

Funding for implementation of the ESMF is included in the project budget, as most ESMF activities are directly included as project activities. In addition, the SEP and GAP activities have also their own budgets. Costs associated with the time of Project Management Unit staff coordinating the implementation of this ESMF support and external consultant support have all be budgeted within the PRODOC. The table below summarises the ESMF activities budgeted in Project.

Table 15. ESMF Budget

ESMF activities included in Project	**Cost (excl. PMU staff time) USD**	**Source of Funding**
Scoped ESIA. Lumpsum to prepare the scoped ESIA of the CCLME countries. Includes (i) cultural Heritage Impact Assessment of target fisheries, (ii) ethnic minorities assessment (presence of vulnerable ethnic minorities linked to the target value chains of West Africa), (iii) Strategic Environmental and Social Assessment of potential fishery conservation and management measures.	20 000	Project
Scoped ESIA. Lumpsum to prepare the scoped ESIA of the PACA countries. Includes (i) cultural Heritage Impact Assessment of target fisheries and (ii) Strategic Environmental and Social Assessment of potential fishery conservation and management measures. The scoped ESIA includes the baseline analysis of Emberá-Woonaan artisanal shrimp fishers on the Pacific coast of Panama, but this cost is included in output 2.1.3.	15 000	Project
Scoped ESMP. Lumpsum to prepare pertinent management plans as required from the results of the scoped ESIA.	35 000	Project
Ecuador. Pomada FIP. Fisheries social consultant to prepare social risk assessment and workplan for the pomada FIP.	15 000	Project

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ESMF activities included in Project	Cost (excl. PMU staff time) USD	Source of Funding
Ecuador. ASOAMAN FIP. Fisheries social consultant to prepare social risk assessment and workplan for the ASOAMAN large pelagic fish FIP.	15 000	Project
Ecuador. Pomada. Consultant team (social, labour) to document social, economic and labour conditions of pomada bolso fishers in Ecuador.	20 000	Project
Pomada. Consultant team (social, labour) to document social, economic and labour conditions of women pomada shrimp peelers in Posorja.	23 000	Project
Guatemala. Dorado and sharks FIP. Fisheries social consultant to prepare social risk assessment and workplan for the dorado and sharks FIP.	15 000	Project
Guatemala. Dorado and sharks FIP. Develop capacities of the members of the dorado and sharks FIP to address social issues during implementation (FIP social workplan). Training in social issues (e.g., gender, child labour, decent work, human rights), social audit tools, social performance, fisheries governance.	17 750	Project
Guatemala. Consultant team (social, labour) to document social, economic and labour conditions of fishers and traders (comerciantes) associated with the dorado and sharks fisheries.	20 000	Project
Shrimp management platform. Consultant team (fisheries specialist, specialist on indigenous peoples) to document shrimp fishing operations by people of Emberá-Wounaan Comarca on the Pacific coast (e.g., fishing gear, fishing areas, landing ports, catch composition, number of fishers, level of organisation) and the uses of the capture (shrimp and bycatch) (e.g., self-consumption, trade and related supply chain). Particular attention will be given to the roles of women and young persons in the fishing activities.	20 000	Project
Panama. Shrimp FIP. Fisheries social consultant to prepare social risk assessment and workplan for the shrimp FIP.	20 000	Project
Panama. Develop capacities of the members of the shrimp FIP and large pelagic fish FIP to address social issues during implementation (FIP social workplan). Training in social issues (e.g., gender, child labour, decent work, human rights), social audit tools, social performance, fisheries governance.	17 750	Project

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ESMF activities included in Project	Cost (excl. PMU staff time) USD	Source of Funding
Panama. LPF FIP. Fisheries social consultant to prepare social risk assessment and workplan for the LPF FIP.	15 000	Project
Panama. Artisanal shrimp fishers. Consultant team (social, labour) to document social, economic, and labour conditions of Panamanian artisanal shrimp fishers in the Pacific coast. Particular attention will be given to the roles of women and young persons in the fishing activities. This study will complement the examination of Emberá-Wounaan shrimp fishers.	25 000	Project
Panama. Baseline analysis of the conditions of Emberá-Wounaan artisanal shrimp fishers, their families and organisations (number of artisanal fishers, fishers´ families conditions, women participation in the shrimp value chain, use - dependency of the fishery´s resources, actual and past levels of organization, interests and views to be organised as fishers for this activity). Indigenous peoples consultant.	12 000	Project
Senegal. Octopus FIP. Fisheries social consultant to prepare social risk assessment and workplan for the Senegalese octopus FIP.	10 000	Project
Mauritania. Octopus FIP. Fisheries social consultant to prepare social risk assessment and workplan for the Mauritanian octopus FIP.	15 000	Project
Ecuador. PAN pomada. Facilitator to support the Ecuadorian fisheries authority in the application of Regulatory Impact Analysis in the existing management framework of the pomada fishery.	15 000	Project
Ecuador. PAN pomada. Social consultant to support the Ecuadorian fisheries authority in the development of mitigation strategies to protect bolso fishers and women shrimp peelers, based on the results of the Regulatory Impact Analysis.	12 000	Project
Ecuador. PAN pomada. Labour consultant to evaluate labour and working conditions in pomada shrimp trawlers.	8 000	Project
Ecuador. PAN pomada. Facilitator to support the Ecuadorian fisheries authority in the application of Regulatory Impact Analysis to eliminate illegal fishing and catch laundering in the pomada fishery.	5 000	Project
Ecuador. PAN pomada. Consultant team to undertake the participatory process to prepare the PAN pomada 2028 - 2032 and the fisheries management plan.	20 000	Project

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ESMF activities included in Project	Cost (excl. PMU staff time) USD	Source of Funding
Ecuador. PAN pomada. Participatory meetings to prepare the PAN pomada 2028 - 2032. Includes refreshments, materials, and travel support to vulnerable groups like women peelers and artisanal fishers.	8 000	Project
Ecuador. PAN large pelagic fish. Labour consultant to evaluate labour and working conditions in large pelagic fish longline vessels and prepare a proposed action plan to address gaps.	8 000	Project
Ecuador. PAN large pelagic fish. Consultant team to (i) prepare a proposal of a fisheries management plan with a corresponding Regulatory Impact Analysis and (ii) undertake the participatory process to prepare the PAN large pelagic fish.	25 000	Project
Guatemalan dorado and sharks action plan. Consultant team to (i) prepare a proposal of a fisheries action plan with a corresponding Regulatory Impact Analysis and (ii) undertake the participatory process to prepare the action plan.	30 000	Project
Guatemalan dorado and sharks action plan. Participatory meetings to prepare the dorado and sharks action plan. Includes refreshments, materials, and travel support to vulnerable groups.	15 000	Project
Panama. Shrimp management plan. Labour consultant to evaluate labour and working conditions in shrimp trawlers. Lumpsum includes honorarium and travel expenses.	10 000	Project
Panama. Shrimp management plan. Consultant team to undertake the participatory process to prepare the shrimp management plan. The process will include a Regulatory Impact Analysis of the draft plan.	20 000	Project
Panama. Shrimp management plan. Participatory meetings to prepare the shrimp management plan. The process will include a Regulatory Impact Analysis of the draft plan. The final plan will include mitigation / compensation measures to protect Emberá-Wounaan artisanal shrimp fishers and vulnerable groups. Includes refreshments, materials, and travel support to vulnerable groups like artisanal fishers and Emberá-Wounaan artisanal shrimp fishers.	15 000	Project
Panama. LPF management plan. Labour consultant to evaluate labour and working conditions in industrial longliners.	10 000	Project

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ESMF activities included in Project	Cost (excl. PMU staff time) USD	Source of Funding
Panama. LPF management plan. Consultant team to undertake the participatory process to prepare the LPF management plan. The process will include a Regulatory Impact Analysis of the draft plan.	25 000	Project
Panama. LPF management plan. Participatory meetings to prepare the LPF management plan. The process will include a Regulatory Impact Analysis of the draft plan. The final plan will include mitigation / compensation measures to protect vulnerable groups.	14 000	Project
Senegal. SPF management. Public policy specialist to support the Senegalese fisheries authority in [1] the application of Regulatory Impact Analysis in the existing management framework of the fishery for small pelagic fish and social responsibility assessment of governance process and supply chain, and [2] conducting intersectoral dialogue to develop key measures to address the identified gaps.	27 000	Project
Senegal SPF management. Social specialist to support the Senegalese fisheries authority in the development of mitigation strategies to protect vulnerable groups during the development of key measures to address the gaps identified in the Regulatory Impact Analysis and social responsibility assessment.	18 000	Project
Senegal SPF management. Lumpsum for various intersectoral meetings to develop key measures to address the gaps identified in the Regulatory Impact Analysis and social responsibility assessment.	11 000	Project
Senegal Octopus management plan. Consultant team to undertake the participatory process to update the Senegalese SEN Octopus management plan.	30 000	Project
SEN Octopus management plan. Participatory meetings to update the Senegalese SEN Octopus management plan. Includes refreshments, materials, and travel support to vulnerable groups like artisanal fishers and women.	20 000	Project
Mauritania. Octopus management plan. Facilitator to support the Mauritanian fisheries authority in the application of Regulatory Impact Analysis to the current octopus fisheries management framework and facilitate multisectoral dialogue to analyse the results of the assessment.	20 000	Project

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ESMF activities included in Project	Cost (excl. PMU staff time) USD	Source of Funding
Mauritania. Octopus management plan. Participatory meetings to apply Regulatory Impact Assessment to current management framework and to update the Mauritanian Octopus management plan.	20 000	Project
Livelihood Action Plans. Lumpsum to prepare livelihood actions plans as needed.	30 000	Project
Total Costs	**736 500**	**Project**

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Annexes

Annex 1: Project activities

Outcome	Output	Activities
Project start and exit strategy		Signing of PRODOC by participating countries
		Sign agreement with host entities to accommodate the project unit
		Formal designation of members of the project board
		Sign agreement with the implementing partner
		Contract project team
		Activate temporary grievance redress mechanism
		Implement full scale grievance redress mechanism
		Introductory training of project partners and key stakeholder of each participating country on the tools (e.g., FIPs, FishSource) and standards to be used in the project.
		Prepare post-project sustainability plan (exit strategy)
		Implement post-project sustainability plan (exit strategy)
		Introductory training in gender equality and women empowerment
		Prepare gender profiles of each target value chain
		Incorporate results of gender profiles in project actions.
		Scoped ESIA. Prepare cultural heritage impact assessment of target fisheries
		Scoped ESIA. Prepare baseline analysis of Emberá-Wounaan shrimp fishers[98],
		Scoped ESIA. Prepare assessment of ethnic minorities related to target supply chain in West Africa.
		Scoped ESIA. Prepare Strategic Environmental and Social Assessment of potential fishery conservation and management measures
		Inception workshop
Outcome 1.1. Increased market demand for sustainable marine commodities in relevant international and domestic markets.	1.1.1. 12 improved seafood purchasing policies and target sustainability commitments adopted by major supply chain partners in international markets sourcing export-oriented commodities.	Prepare scoping analyses to identify key stakeholders and market trends in mid-upper market and end-market of target seafood products[99].
		Design engagement strategies[100].
		Implement engagement strategies.
		Provide information, guidance, and support to key target buyers for the development of (i) seafood purchasing policies and (ii) target sustainability commitments.
		Assess effectiveness of engagement strategies and adjust accordingly.

[98] Activity included in 2.1.3 below.

[99] Fresh and frozen dorado from Guatemala and dorado and tuna (mainly yellowfin tuna) from Panama, shrimps from Panama, pomada from Ecuador, swordfish, sharks and marlins from Ecuador, octopus from Mauritania and Senegal, and small pelagic fish from Mauritania.

[100] Processors, exporters and international buyers (traders, retailers) from dorado from Guatemala and Panama and octopus from Mauritania and Senegal to be invited to integrate the global mahi and octopus roundtables. Processors, exporters and international buyers from large pelagic fish from Ecuador and Panama, shrimp from Panama and pomada from Ecuador will be engaged with specific targeted strategies.

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		Systematise learning about engaging mid-upper and end market buyers to demand sustainable target seafood products (including social responsibility «outcome 1.2» and reduced bycatch «outcome 1.3»)
	1.1.2. Four improved seafood purchasing policies and targeted sustainability commitments adopted by key players in domestic markets.	Assess interest of key levels of domestic supply chains (with special emphasis in end and mid-upper levels) in supplying sustainable seafood products in Ecuador, Guatemala, Morocco, and Senegal.
		Guatemala buyer engagement trial
		Guatemala. Prepare scoping analysis of domestic end-market channels (retailers, hospitality industry) for responsibly sourced and sustainable seafood products from Guatemalan FIPs (dorado and sharks).
		Guatemala. Design domestic markets engagement trial for seafood products from Guatemalan FIPs (dorado and sharks).
		Guatemala. Implement domestic engagement trial in Guatemala.
		Guatemala. Provide information, guidance, and support to target domestic buyers for the development of (i) seafood purchasing policies and (ii) target sustainability commitments.
		Guatemala. Assess effectiveness of engagement trial in Guatemala and adjust accordingly.
		Guatemala. Document, systematise and share lessons
		Senegal buyer engagement trial
		Senegal. Prepare scoping analysis of domestic end-market channels (retailers, hospitality industry) for responsibly sourced and sustainable small pelagic fish products in Senegal.
		Senegal. Design domestic engagement trial for sustainable small pelagic fish products in Senegal.
		Senegal. Implement domestic market engagement trial in Senegal.
		Senegal. Provide information, guidance, and support to target domestic buyers for the development of (i) seafood purchasing policies and (ii) target sustainability commitments.
		Senegal. Assess effectiveness of engagement strategy in Senegal and adjust accordingly.
		Senegal. Document, systematise and share lessons
		Ecuador buyer engagement trial
		Ecuador. Prepare scoping analysis of domestic end-market channels (retailers, hospitality industry) for responsibly sourced and sustainable seafood products from Ecuadorian FIPs (dorado, swordfish, large pelagic fish, sharks).
		Ecuador. Design domestic engagement trial for seafood products from Ecuadorian FIPs (dorado, swordfish, large pelagic fish, sharks).
		Ecuador. Implement domestic engagement trial in Ecuador.
		Ecuador. Provide information, guidance, and support to target domestic buyers for the development of (i) seafood purchasing policies and (ii) target sustainability commitments.
		Ecuador. Assess effectiveness of engagement trial in Ecuador and adjust accordingly.
		Ecuador. Document, systematise and share lessons
		Morocco buyer engagement pilot
		Morocco. Prepare detailed analysis of domestic end-market channels (e.g., retailers, hospitality industry) for sustainable and responsible seafood products, with emphasis on small pelagic fish products (in particular sardines) from Moroccan FIPs[101].

[101] Until June 2023: European sardine *(Sardina pilchardus*) and (FIP 4196) and European anchovy (*Engraulis encrasicolus*) (FIP 9872).

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		Morocco. Adapt the Responsible Seafood Sourcing Standard[102] to the national scenario.
		Morocco. Design and implement a pilot buyer engagement programme with emphasis on products from small pelagic fish (in particular sardines).
		Morocco. Provide information, guidance, and support to target domestic end-market buyers for the development of (i) seafood purchasing policies and (ii) target sustainability commitments.
		Morocco. Participatory assessment of the effectiveness of the engagement strategy in Morocco and adjust accordingly.
		Morocco. Systematise and disseminate learning about engaging domestic buyers to demand sustainable target seafood products (including social responsibility «outcome 1.2» and reduced bycatch «outcome 1.3»)
		Morocco. Prepare a scaling-up strategy and sustainability mechanism for the buyer engagement programme.
Outcome 1.2. Increased market demand for socially responsible seafood commodities.	1.2.1. Socially responsible seafood standard integrated into the FishSource rating system and available to major supply chain partners worldwide.	Develop indicator set standard prototype.
		Pilot trial of indicator set for standard prototype.
		Refine or adjust standard.
		Launch the socially responsible standard indicator set in FishSource and apply it to the project target fisheries.
		Peer review with experts of use and utility of FishSource socially responsible standard indicators, systematise learning and provide recommendations for improvement.
		Adjust socially responsible standard indicator set, as necessary.
		Promote the use of the FishSource socially responsible standard.
		Systematise learning from development and application of FishSource socially responsible standard.
	1.2.2. Three major international supply chain partners integrate socially responsible seafood requirements in their policies and commitments.	Provide information, guidance, and support to key target international buyers to integrate socially responsible requirements in their policies and commitments (as part of 1.1.1 work).
	1.2.3. Two key players in domestic supply chains integrate socially responsible seafood commitments in their policies and commitments.	Provide information, guidance, and support to key domestic buyers to integrate socially responsible requirements in their policies and commitments (as part of 1.1.2 work).
Outcome 1.3. Increased market demand for seafood commodities from fisheries with reduced bycatch and environmental impact.	1.3.1. Three major international supply chain partners take action to demand seafood sourced from fisheries with reduced bycatch and ecosystem impacts.	Apply the reduced bycatch and ecosystem impacts standard to the project target fisheries.
		Promote the use of the FishSource reduced bycatch and ecosystem impacts standard among target supply chains.
		Provide information, guidance and support to key target international buyers so that they integrate reduced bycatch and ecosystem impacts requirements in their policies and implement pertinent commitments in their supply chains (as part of 1.1.1 work).
		Track implementation of the reduction of bycatch and ecosystem impacts commitments in the target supply chains.

[102] The Responsible Seafood Sourcing Standard was developed in The Philippines as is implemented by the "Better Seafood Philippines" programme (betterseafoodph.org).

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		Systematise learning from promoting the adoption of FishSource reduced bycatch and ecosystem impacts standard in the target supply chains.
	1.3.2. Two key players in domestic supply chains take action to demand seafood sourced from fisheries with reduced bycatch and ecosystem impacts.	Provide information, guidance, and support to key domestic buyers to integrate reduced bycatch requirements in their policies and commitments (as part of 1.1.2 work).
Outcome 2.1. Increased supply of seafood products that demonstrate improved fisheries governance and stock health.	2.1.1. Seven government led national co-management platforms that improve fisheries governance and stock health.	*[1] Ecuador. Support the development and operation of the Dialogue Roundtable and Technical Committee of the pomada fishery.*
		Ecuador. Situation analysis of Dialogue Roundtable and Technical Committee of the pomada fishery (including conflict assessment).
		Ecuador. Assess gender integration in the PAN pomada 2021-2027 and propose actions for gender mainstreaming through a gender-responsive action plan.
		Ecuador. Prepare and implement workplan to support the advance and operation of the Dialogue Roundtable and Technical Committee of the pomada fishery, including gender mainstreaming.
		Ecuador. Awareness sessions on gender and fisheries for stakeholders of the dialogue roundtable and technical committee of the pomada fishery
		Ecuador. Annual performance assessment of the pomada Dialogue Roundtable
		[2] Ecuador. Develop the management platform for the longline large pelagic fish fishery.
		Ecuador. Design the management platform for the longline large pelagic fish fishery.
		Ecuador. Establish management platform for the longline large pelagic fish fishery.
		Ecuador. Prepare and implement workplan to support the advance and operation of the management platform for the longline large pelagic fish fishery, including a conflict assessment
		Ecuador. Prepare official national position about regional conservation and management measures for pertinent species covered by the Antigua Convention[103] to be sustained in IATTC meetings (as part of the meetings of the management platform).
		Ecuador. Awareness sessions on gender and fisheries for stakeholders of the management platform of the longline large pelagic fish fishery
		Ecuador. Annual performance assessment of the management platform for the longline large pelagic fish fishery.
		[3] Guatemala. Develop the management platform for the dorado and sharks fishery.
		Guatemala. Design the management platform for the dorado and sharks fishery (in line with PAN sharks 2021 - 2026)
		Guatemala. Establish the management platform for the dorado and sharks fishery (in line with PAN sharks 2021 - 2026).
		Guatemala. Prepare and implement workplan to support the advance and operation of the management platform for the dorado and sharks fishery, including a conflict assessment.
		Guatemala. Awareness sessions on gender and fisheries for stakeholders of the management platform of the dorado and shark fishery.

[103] This includes tunas, swordfish, marlins, sharks and species that interact with the fishery (seabirds, marine mammals, and sea turtles).

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		Guatemala. Annual performance assessment of the management platform for the dorado and sharks fish fishery.
		Guatemala. Prepare financial strategy for the operation of the management platform.
		[4] Panama. Develop the management platform for the shrimp fisheries of the Pacific coast.
		Panama. Design the management platform for the shrimp fisheries of the Pacific coast.
		Panama. Establish the management platform for the shrimp fisheries of the Pacific coast.
		Panama. Prepare and implement workplan to support the advance and operation of the management platform for the shrimp fisheries of the Pacific coast, including a conflict assessment
		Panama. Awareness sessions on gender and fisheries for stakeholders of the management platform of the shrimp fisheries of the Pacific coast.
		Panama. Annual performance assessment of the management platform for the shrimp fisheries of the Pacific coast.
		[5] Panama. Develop the management platform for the longline fishery for large pelagic fish of the Pacific coast.
		Panama. Design the management platform for the longline fishery for large pelagic fish of the Pacific coast.
		Panama. Establish the management platform for the longline fishery for large pelagic fish of the Pacific coast.
		Panama. Prepare and implement workplan to support the advance and operation of the management platform for the longline fishery for large pelagic fish of the Pacific coast, including a conflict assessment
		Panama. Awareness sessions on gender and fisheries for stakeholders of the management platform of the longline fishery for large pelagic fish of the pacific coast.
		Panama. Annual performance assessment of the management platform for the longline fishery for large pelagic fish of the Pacific coast.
		[6] Senegal. Support the operation of the governance framework for the small pelagic fish fishery.
		Senegal. Situation analysis of the governance framework for the small pelagic fish fishery (CNAPP, CNPCM, CLPAs, GIE CONIPAS, FENETRANS[104]).
		Senegal. Assess gender integration in the 2023 sardinellas management plan and propose a complementary GAP.
		Senegal. Implement a workplan to address governance gaps and to promote effective women participation in the governance framework.
		Senegal. Awareness sessions on gender and fisheries for stakeholders of the governance framework of the small pelagic fish fishery.
		Senegal. Annual performance assessment of the management framework for small pelagic fish.
		[7] Mauritania. Support the management framework of the fishery for small pelagic fish.

[104] Commission nationale d'Appui à l'Aménagement des Pêcheries (CNAPP), Conseil National Consultatif des Pêches Maritimes(CNPCM), Conseil Local de Pêche Artisanale (CLPA), Groupements d'intérêt économique (GIE), Conseil National Interprofessionnel de la Pêche Artisanale au Sénégal (CONIPAS), Fédération Nationale des Femmes Transformatrices du Sénégal (FENETRANS).

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		Mauritania. Situation analysis of the management structure (CNC-PP, CAAP and CCNADP[105]).
		Mauritania. Prepare a workplan to support CNC-PP and PAP-PP coordination unit.
		Mauritania. Implement workplan to strengthen the operation of the CNC-PP, including a conflict assessment
		Mauritania. Awareness sessions on gender and fisheries for stakeholders of the management structure of the small pelagic fish fishery.
		Mauritania. Annual assessment of PAP-PP and preparation of annual action plan and budget.
		Mauritania. Annual assessment of governance performance of the management framework of the fishery for small pelagic fish.
		[8] Support collaborative management of small pelagic fish between Morocco and Mauritania.
		Prepare joint research workplan to improve estimation of stock condition and allowable catch rate of shared resources.
		Strengthen the implementation of a joint research workplan.
		Undertake and make public joint stock assessments of shared small pelagic fish resources.
		Develop agreed harvest strategy for shared small pelagic fish resources.
		Develop agreed protocol to document and report interactions of the small pelagic fleets with ETP species
	2.1.2. Eight industry-led verifiable Fishery Improvement Projects that contribute to improved fisheries governance and stock health.	*[1] Ecuador. Support the implementation of the pomada FIP.*
		Ecuador. Complete MSC pre-assessment or updated Rapid Assessment (MSC fisheries standard 3.0) and update the FIP scoping document and workplan of the pomada trawl FIP.
		Ecuador. Complete MSC pre-assessment or updated Rapid Assessment (MSC fisheries standard 3.0) of the pomada bolso fishery.
		Ecuador. Design improved monitoring system to collect data from pomada trawlers and bolsos in line with the SIAP.
		Ecuador. Implement improved monitoring system in pomada trawlers in line with SIAP (funded by pomada FIP)
		Ecuador. Implement pilot participatory monitoring system with selected pomada bolso organisations.
		Ecuador. Training of trawler and bolso fishers on best practice and data collection.
		Ecuador. Assess spatial distribution of population units of pomada.
		Ecuador. Stock assessment of pomada.
		Ecuador. Comprehensive stock assessment of pomada (trawlers and bolsos).
		Ecuador. Train FIP research team (industry and IPIAP) in Risk Based Framework Assessment (RBF)
		Ecuador. Prepare RBF for pomada fishery (funded by pomada FIP).
		Ecuador. Prepare social performance risk assessment and workplan for the pomada FIP.
		Ecuador. Implement workplan to address the gaps identified in the social performance risk assessment (funded by pomada FIP).
		Ecuador. Encourage the integration of bolso fishers into the FIP.
		[2] Ecuador. Launch the ASOAMAN large pelagic fish FIP.
		Ecuador. Prepare MSC pre-assessment or Rapid Assessment, FIP scoping document, workplan and budget for the ASOAMAN FIP.

[105] Commission Nationale de Concertation sur les Petits Pélagique (CNC-PP), Commission d'appui à l'aménagement des pêcheries (CAAP), Conseil Consultatif National pour l'Aménagement et le Développement des Pêcheries (CCNADP).

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		Ecuador. Update MSC pre-assessment or Rapid Assessment, FIP scoping document, workplan and budget for the ASOAMAN FIP.
		Ecuador. Prepare social performance risk assessment and workplan for the ASOAMAN FIP.
		Ecuador. Implement workplan to address the gaps identified in the social performance risk assessment (funded by ASOAMAN FIP).
		Ecuador. Register ASOAMAN FIP in FisheryProgress and FishSource.
		Ecuador. Training of ASOAMAN fishers on best practice and data collection.
		Ecuador. Design a traceability system that complies with the SIAP.
		Ecuador. FIP members implement traceability system that complies with the SIAP (funded by ASOAMAN FIP).
		Ecuador. Pilot testing of electronic logbook on the fleet.
		Ecuador. Long-term implementation of electronic logbook on the ASOAMAN fleet (funded by ASOAMAN FIP).
		[3] Guatemala. Launch the dorado and sharks FIP.
		Guatemala. FIP scoping (supply chain analysis, participants, FIP scope, MSC pre-assessment, draft pre-FIP plan).
		Guatemala. Organise governance and implementation arrangements for FIP development.
		Guatemala. Prepare MSC pre-assessment or Rapid Assessment, FIP scoping document, workplan and budget for the dorado and sharks FIP.
		Guatemala. Update MSC pre-assessment or Rapid Assessment, FIP scoping document, workplan and budget for the dorado and sharks FIP.
		Guatemala. Organise and support FIP research team.
		Guatemala. Prepare social performance risk assessment and workplan for the dorado and sharks FIP.
		Guatemala. Implement workplan to address social risks of the dorado and sharks FIP (funded by the FIP).
		Guatemala. Register dorado and sharks FIP in FisheryProgress and FishSource.
		Guatemala. Training of fishers, traders and processors on best practice and data collection.
		Guatemala. Design and support initial implementation of electronic logbook on the FIP fleet.
		Guatemala. Long-term implementation of electronic logbook on the fleet (funded by the dorado and shark FIP).
		Guatemala. Design and initial implementation of traceability system into the supply chain.
		Guatemala. Document and disseminate experience and lessons of FIP implementation.
		[4] Panama. Support the development of a FIP for the shrimp fisheries.
		Panama. Assess the situation of the Panamanian shrimp FIPs[106].
		Panama. FIP scoping (supply chain analysis, participants, FIP scope, MSC pre-assessment, draft pre-FIP plan).
		Panama. Organise governance and implementation arrangements for FIP development.
		Panama. Prepare MSC pre-assessment or Rapid Assessment, FIP scoping document, workplan and budget for shrimp FIP.
		Panama. Update MSC pre-assessment or Rapid Assessment, FIP scoping document, workplan and budget for the shrimp FIP.

[106] Until July 2023, the two Panamanian shrimp FIPs were rated "inactive" (https://fisheryprogress.org/fip-profile/inactive-panama-shrimp-bottom-trawl) and "negligible progress" (https://fisheryprogress.org/fip-profile/panama-northern-nylon-shrimp-bottom-trawl).

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		Panama. Organise and initial support of the FIP research team.
		Panama. Prepare social performance risk assessment and workplan for the shrimp FIP.
		Panama. Implement workplan to address social risks of the shrimp FIP (funded by the FIP).
		Panama. Register shrimp FIP in FisheryProgress and FishSource.
		Panama. Training of fishers, traders and processors that are part of the FIP on best practice and data collection.
		Panama. Design and support initial implementation of electronic logbook on the FIP fleet.
		Panama. Long-term implementation of electronic logbook on the fleet (funded by the FIP).
		Panama. Design and initial implementation of traceability system into the supply chain.
		Panama. Stock assessment of shrimp.
		Panama. Document and disseminate experience and lessons of FIP implementation.
		[5] Panama. Support the implementation of the large pelagic fish longline FIP
		Panama. Establish a cooperation agreement between ARAP and the FIP implementers.
		Panama. Update the monitoring system to collect data from the fishing operations and the supply chain.
		Panama. Implement updated monitoring system (funded by the FIP).
		Panama. Training of FIP fishers on best practice and data collection (e.g., fisheries data, bycatch, ETP species).
		Panama. Pilot use of electronic monitoring onboard longline vessels.
		Panama. Document and distribute lessons from the pilot use of electronic monitoring onboard longline vessels.
		Panama. Prepare social performance risk assessment and workplan for the large pelagic fish FIP.
		Panama. Implement workplan to address social risks (funded by the FIP).
		[6] Senegal. Launch a small pelagic fish supply chain improvement project in the Joal CLPA.
		Senegal. Prepare situation analysis of the supply chain of small pelagic fish in Joal.
		Senegal. Prepare a workplan and budget (in line with domestic market engagement strategy in 1.1.2) for the small pelagic fish supply chain improvement project.
		Senegal. Convene key actors and organise the governance and funding arrangements for a supply chain improvement project.
		Senegal. Implement the small pelagic fish supply chain improvement project in Joal.
		Senegal. Seek allies and build strategic partnerships to sustain long-term support to the supply chain improvement project in Joal.
		Senegal. Assess progress and document lessons of the implementation of the small pelagic fish supply chain improvement project in Joal.
		Senegal. Prepare a lessons learned document and recommendations for scaling-up solutions.
		[7] Senegal. Launch octopus FIP.
		Senegal. FIP scoping (supply chain analysis, stakeholders, FIP scope, draft pre-FIP plan).
		Senegal. Define governance and implementation arrangements for FIP development.
		Senegal. Prepare Rapid Assessment, FIP scoping document, workplan and budget for the octopus FIP.
		Senegal. Update Rapid Assessment, FIP scoping document, workplan and budget for the octopus FIP.
		Senegal. Organise and support the establishment of a public-private alliance to undertake an applied research plan (funded by the FIP).
		Senegal. Prepare social risk assessment and workplan for the octopus FIP.

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		Senegal. Assessment of the clay pot production value chain and the social and economic condition of women potters.
		Senegal. Implement a workplan to address the social risks of the octopus FIP (funded by the FIP).
		Senegal. Design and test a financial mechanism to internalise pot costs into the costs of the product.
		Senegal. Implement a financial mechanism to internalise pot costs into the costs of the product (funded by the FIP).
		Senegal. Register Senegal´s octopus FIP in FisheryProgress and FishSource.
		Senegal. Document and disseminate experience and lessons of FIP implementation.
		[8] Mauritania. Support the implementation of the small pelagic fish purse seine FIP.
		Mauritania. Support the implementation of a workplan to address the social risks of the FIP (funded by the FIP).
		Mauritania. Establish a local FIP coordination team.
		Mauritania. Maintain the operation of the local FIP coordination team (funded by the FIP).
		Mauritania. Design and test monitoring system to collect data from the coastal fleet.
		Mauritania. Implement monitoring system to collect data from the coastal fleet (funded by the FIP).
		[9] Mauritania. Support the implementation of the octopus FIP[107]*.*
		Mauritania. Prepare social performance risk assessment and workplan for the octopus FIP.
		Mauritania. Implement workplan to address social risks of the FIP (funded by the FIP).
		Mauritania. Design monitoring system to collect data from the three fleets (pirogues, inshore fishing boats, trawlers) based on a public-private alliance among fishers – processors - fisheries research entity.
		Mauritania. Test and adjust monitoring system.
		Mauritania. Implement improved monitoring system (funded by the FIP).
		Mauritania. Strengthen the governance and operation of AMPEP.
	2.1.3. Artisanal and small-scale fishers and local supply chain partners effectively engage into fisheries improvement projects and co-management platforms.	*Ecuador. Development of participatory governance and fisheries co-management skills of pomada bolso fishers' organisations.*
		Ecuador. Evaluate social, economic, and labour conditions of pomada bolso fishers.
		Ecuador. Assessment of social, economic, labour and working conditions of pomada bolos fishers.
		Ecuador. Prepare and implement a workplan to support the development of governance and co-management skills of pomada bolso fishers' organisations.
		Ecuador. Support the establishment of a coalition of pomada bolso fishers' organisations.
		Ecuador. Build capacity and develop skills to engage in FIPs.
		Ecuador. Develop capacities and skills to implement a traceability process in line with the SIAP.
		Ecuador. Support the development of capacities to establish alliances for long-term support to the organisations.
		Ecuador. Annual meetings of the pomada bolso fishers' organisations to analyse the condition of the fishery and exchange lessons.
		Ecuador. Annual review of progress in the development of governance and co-management skills of pomada bolso fishers' organisations.

[107] By July 2023 this was a "prospective FIP", see: https://fisheryprogress.org/fip-profile/prospective-mauritania-octopus-bottom-trawl-jig-pottrap

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		Ecuador. Empowering women pomada peelers to engage into fisheries governance and value chain improvement.
		Ecuador. Prepare a register of pomada peeler in Posorja.
		Ecuador. Prepare a register of pomada peeling facilities (formal and informal) in Posorja (to be funded by SRP).
		Ecuador. Assessment of social, economic, labour and working conditions of women shrimp peelers in Posorja.
		Ecuador. Prepare workplan to support the empowerment of women pomada peelers to effectively participate in fisheries governance.
		Ecuador. Seek partners and build strategic alliances to sustain long-term support to empower women shrimp peelers.
		Ecuador. Foster collaboration and trust among women pomada peelers to have a voice in fisheries governance and value chain improvement.
		Ecuador. Support the development of capacities of women pomada peelers to build alliances and establish collaboration with public and private development entities.
		Ecuador. Discussions of labour conditions issues of women pomada peelers in the Dialogue Roundtable and other fora.
		Guatemala. Development of participatory governance and fisheries co-management skills of artisanal fishers.
		Guatemala. Assessment of social, economic, labour and working conditions of fishers associated to the dorado and sharks fisheries and value chains.
		Guatemala. Assess the involvement and contributions of women in the dorado and sharks value chains and define a gender strategy to promote their access, participation, decision making and visibility in the value chains.
		Guatemala. Assessment of capacity needs of artisanal fishers and existing pertinent fishers' organisations to engage into participatory governance and fisheries co-management
		Guatemala. Prepare and implement workplan to support the development of governance and co-management skills of artisanal fishers and pertinent organisations
		Guatemala. Foster collaboration and trust among artisanal fishers to have a joint voice in fisheries management and value chain improvement.
		Guatemala. Seek and engage partners (CSOs, public, international cooperation) to provide long-term support to artisanal fishers.
		Guatemala. Build capacities and develop skills of artisanal fishers to engage in FIPs.
		Guatemala. Annual meetings of the artisanal fishers to promote fisher-to-fisher learning exchange.
		Guatemala. Annual review of progress in the development of governance and co-management skills of artisanal fishers.
		Guatemala. Document and disseminate experience and lessons of the development of skills of artisanal fishers.
		Panama. Development of participatory governance and fisheries co-management skills of artisanal shrimp fishers' organisations of the Pacific coast.
		Panama. Assessment of social, economic, labour and working conditions of Panamanian artisanal shrimp fishers.
		Panama. Baseline analysis of the conditions of Emberá-Wounaan shrimp fishers, their families, and organisations. (e.g., number of artisanal fishers, conditions of their families, women participation in the shrimp supply chain, use - dependency on the fishery´s resources, actual

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		and past levels of organisation, interests and views to be organised as fishers for this activity), This will include engaging directly with Emberá-Wounaan shrimp fishers to understand and document their concerns and vision.
		Panama. Assess capacity needs of key artisanal shrimp fishers' organisations[108] to engage into participatory governance and fisheries co-management.
		Panama. Prepare and implement workplan to support the development of governance and co-management skills of key artisanal shrimp fishers' organisations.
		Panama. Build capacities and develop skills to enable effective engagement of key artisanal shrimp fishers' organisations in FIPs.
		Panama. Affirmative action to support organisation process of Emberá-Wounaan artisanal fishers to have a voice and participate in the governance platform
		Panama. Annual meetings of key artisanal shrimp fishers' organisations to analyse the condition of the fishery and exchange lessons.
		Panama. Annual review of progress in the development of governance and co-management skills key artisanal shrimp fishers' organisations
		Panama. Identify opportunities for scale-up and long-term support to artisanal shrimp fishers' organisations.
		Senegal. Support strengthening of the national CLPA network.
		Senegal. Assessment of the characteristics of operation of the CLPAs and the CLPA network.
		Senegal. Prepare and implement a workplan to strengthen the CLPA coordination network.
		Senegal. Develop and implement an online platform to facilitate storing and exchanging key information (e.g., acts) among CLPAs
		Senegal. Seek partnerships for long-term hosting and operation of the CLPAs online information platform.
		Senegal. Prepare and implement a strategy to operationalise the Support Fund for the Operation of CLPAs.
		Senegal. Strengthen the Joal CLPA.
		Senegal. Assessment of capacity needs of the Joal CLPA.
		Senegal. Prepare and implement a workplan to support the development of governance, co-management and administrative skills of the Joal CLPA.
		Senegal. Prepare a resource mobilisation strategy for the Joal CLPA.
		Senegal. Seek allies for long-term support of the resource mobilisation strategy.
		Senegal. Semestral review of progress in the capacities of the Joal CLPA.
		Senegal. Empowerment of women processors of the Joal area.
		Senegal. Assessment of social, economic, labour and working conditions of women that process small pelagic fish in the Joal area
		Senegal. Prepare workplan to empower women processors.
		Senegal. Foster collaboration and trust among women processors to have a voice in fisheries governance and value chain improvement.
		Senegal. Support improvements in fish processing facilities and processes.
		Senegal. Support the development of capacities of women processors to build alliances to sustain long-term support to their work.

[108] Including inactive organisations of Emberá-Wounaan fishers.

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Outcome 2.2. Increased supply of seafood products that demonstrate improved social responsibility.	2.2.1. Two sets of guidelines to mainstream social responsibility into fisheries governance and seafood supply chains.	Prepare a review document with current status, trends, tools and initiatives to integrate social responsibility into fisheries governance and supply chains.
		Prepare evaluation tool and guidelines to integrate social responsibility into fisheries governance processes.
		Disseminate and provide support to key actors of the target fisheries on the use of the self-evaluation tool and guidelines to integrate social responsibility into fisheries governance processes.
		Evaluate the performance of the self-evaluation tool and guidelines to integrate social responsibility into fisheries governance processes.
		Prepare updated version and disseminate worldwide of the self-evaluation tool and guidelines to integrate social responsibility into fisheries governance processes.
		Prepare self-evaluation tool and guidelines to integrate social responsibility into seafood supply chains.
		Disseminate and provide support to key actors of the target fisheries on the use of the self-evaluation tool and guidelines to integrate social responsibility into seafood supply chains.
		Evaluate the performance of the self-evaluation tool and guidelines to integrate social responsibility into seafood supply chains.
		Prepare updated version and disseminate worldwide of the self-evaluation tool and guidelines to integrate social responsibility into seafood supply chains.
	2.2.2. Nine fisheries management instruments that integrate social and economic objectives and targets.	*Global. Training on Regulatory Impact Assessment in fisheries.*
		Global. Prepare training course.
		Global. Implement national training courses in Morocco, Mauritania, and Senegal.
		Global. Implement national training courses in Guatemala, Panama, and Ecuador.
		Global. Publish and disseminate guidelines to conduct RIA in fisheries.
		Regional. South-South cooperation for the preparation and implementation of fisheries action plans (PACA).
		Systematise and distil the Ecuadorian experience with fisheries action plans.
		Organise workshop on preparation and implementation of fisheries action plans.
		Foster a community of practice to support the preparation and implementation of fisheries action plans in Ecuador, Guatemala, and Panama.
		Document and disseminate experience and lessons.
		Regional. Learning exchange on management plans for small pelagic fish and octopus (CCLME).
		Systematise and distil the national experience on formulation and implementation of management plans for small pelagic fish and octopus in Morocco, Mauritania, and Senegal.
		Organise workshop to exchange experience and lessons.
		Foster a community of practice to address the challenges in implementing management plans for small pelagic fish and octopus in Morocco, Mauritania, and Senegal.
		Document and disseminate experience and lessons.
		[1] Ecuador. Update the PAN pomada 2028 - 2034
		Ecuador. Test Regulatory Impact Assessment in the pomada fisheries management framework
		Ecuador. Apply social responsibility risk assessment to the pomada governance process and supply chain.
		Ecuador. Develop and test impact mitigation strategies to protect the most vulnerable groups (bolso fishers and women pomada peelers).
		Ecuador. Assessment of labour and working conditions in pomada shrimp trawlers.

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		Ecuador. Prepare and implement an action plan to address labour and working condition gaps in the pomada shrimp trawlers applying regulatory impact assessment.
		Ecuador. Investigate illegal fishing and catch laundering in the pomada value chain.
		Ecuador. RIA of options to eliminate illegal fishing and catch laundering in the pomada value chain.
		Ecuador. Prepare and implement an action plan to eliminate illegal fishing and catch laundering in the pomada value chain (based on the results of RIA).
		Ecuador. Assessment of PAN pomada 2022 – 2027 implementation.
		Ecuador. Participatory process to prepare the new PAN pomada 2028 – 2032.
		Ecuador. Prepare fisheries management plan for pomada (harvest strategy, reference points and harvest control rules).
		Ecuador. Adopt PAN pomada 2028 – 2032.
		[2] Ecuador. Prepare the PAN large pelagic fish.
		Ecuador. Assessment of labour and working conditions in longline vessels.
		Ecuador. Prepare fisheries management plan for large pelagic fish based on Regulatory Impact Assessment.
		Ecuador. Participatory process to prepare the PAN large pelagic fish.
		Ecuador. Integrate actions into PAN large pelagic fish to address labour and working condition gaps in the longline vessels applying regulatory impact assessment.
		Ecuador. Adopt PAN large pelagic fish.
		Ecuador. Mid-term assessment of implementation of PAN large pelagic fish.
		[3] Guatemala. Support implementation and update of PAN sharks 2021 – 2026.
		Guatemala. Assessment of implementation of PAN sharks.
		Guatemala. Participatory process to update the PAN sharks.
		Guatemala. Undertake Regulatory Impact Assessment of draft PAN sharks.
		Guatemala. Adopt PAN sharks. 2027 – 2031.
		Guatemala. Detailed analysis of the domestic consumption and value chain for shark meat, parts, and products and their contribution to food security, livelihoods, and income.
		Guatemala. Facilitated intersectoral dialogue on implications of shark consumption on conservation and management measures (e.g., food security, employment).
		Guatemala. Implement registry of shark fishers and traders in the main ports of the Pacific coast of Guatemala.
		Guatemala. Prepare and adopt conservation and management measures for sharks caught on the Pacific coast of Guatemala.
		Guatemala. Undertake Regulatory Impact Assessment of proposed conservation and management measures.
		Guatemala. Evaluate effectiveness of conservation and management measures for sharks caught on the Pacific coast of Guatemala.
		Guatemala. Adjust, as pertinent, the conservation and management measures for sharks caught on the Pacific coast of Guatemala.
		Guatemala. Undertake Regulatory Impact Assessment of proposed measures.
		[4] Guatemala. Prepare the action plan for the dorado and sharks fishery.
		Guatemala. Participatory process to prepare the action plan for the dorado and sharks fishery based on Regulatory Impact Assessment.
		Guatemala. Adopt the action plan for the dorado and sharks fishery.

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		Guatemala. Mid-term assessment of implementation of the action plan for the dorado and sharks fishery.
		[5] Panama. Prepare the shrimp management plan.
		Panama. Apply Regulatory Impact Assessment to the current shrimp fisheries management framework.
		Panama. Assessment of labour and working conditions in shrimp trawlers.
		Panama. Participatory process[109] to prepare the shrimp management plan based on RIA.
		Panama. Adopt the shrimp management plan.
		Panama. Mid-term assessment of implementation of the shrimp management plan.
		[6] Panama. Prepare the large pelagic fish management plan.
		Panama. Assessment of labour and working conditions in industrial longliners.
		Panama. Apply Regulatory Impact Assessment to the current longline large pelagic fisheries management framework
		Panama. Participatory process to prepare the longline large pelagic fish management plan based on RIA.
		Panama. Adopt the large pelagic fish management plan.
		Panama. Mid-term assessment of implementation of the large pelagic fish management plan.
		[7] Senegal. Integrate Regulatory Impact Assessment into management framework of the fishery for small pelagic fish.
		Senegal. Apply Regulatory Impact Assessment to the management framework of the fishery for small pelagic fish.
		Senegal. Social performance risk assessment of the small pelagic fish governance process and supply chain.
		Senegal. Facilitated intersectoral dialogue to develop key measures to address the gaps identified in RIA and social responsibility analysis.
		[8] Senegal. Update the octopus management plan.
		Senegal. Assessment of octopus management plan implementation.
		Senegal. Participatory process to update the octopus management plan.
		Senegal. Adopt updated octopus management plan.
		Senegal. Moroccan technical assistance for the development of the octopus management plan (2016 memorandum of understanding)
		[9] Mauritania. Update the octopus management plan
		Mauritania. Apply Regulatory Impact Assessment to the current octopus fisheries management framework
		Mauritania. Assessment of octopus management plan implementation.
		Mauritania. Participatory process to update the octopus management plan.
		Mauritania. Adopt updated octopus management plan.
		[10] Mauritania. Support the implementation of the small pelagic fish management plan of 2022.
		Mauritania. Prepare a strategic plan to potentiate added value small pelagic fish products.
		Mauritania. Estimates of present and forecast employment and economic contribution of small pelagic fish value chains.

[109] The participatory process will ensure, as appropriate, the involvement of Emberá-Wounaan artisanal shrimp fishers.

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		Mauritania. Study visits and knowledge exchange with Morocco on the production of small pelagic fish added value products and use of fish waste and residues to produce fish meal and oil and other products.
		Mauritania. Participatory process to discuss and agree upon a strategic plan to develop the value chains for added value small pelagic fish.
		Mauritania. Design a national programme to promote seafood consumption (mainly small pelagic fish).
		Mauritania. Study on the current national fish and seafood consumption and consumer habits.
		Mauritania. Study visit to learn from a successful programme of seafood consumption promotion[110].
		Mauritania. Participatory process to design a national programme to promote seafood consumption (emphasis on small pelagic fish).
		Mauritania. Mid-term assessment of the PAP-PP.
		Mauritania. Mid-term external independent assessment of the implementation of the PAP-PP.
		Regional. Integrate social considerations and targets in COREMAHI´s code of conduct.
		Motivate integration of Guatemalan and Panamanian producers and processors.
		Develop social responsibility targets for COREMAHI´s code of conduct.
		Update COREMAHI´s code of conduct to incorporate social responsibility targets and reporting.
		Implement updated COREMAHI´s code of conduct (funded by the committee members).
		Annual self-assessment of the effectiveness of COREMAHI´s code of conduct.
		External independent assessment of the performance and effectiveness of the social responsibility measures and targets of COREMAHI´s code of conduct.
		Disseminate results of the effectiveness and performance of COREMAHI´s code of conduct (funded by COREMAHI).
Outcome 2.3. Increased supply of seafood products that demonstrate reduced bycatch and environmental impact.	2.3.1. Three fisheries management instruments that integrate objectives and targets to reduce ecosystem impacts and bycatch.	*[1] Ecuador. Mainstream shark market considerations into PAT-Ec and PAN large pelagic fish.*
		Ecuador. Detailed analysis of the domestic consumption market for shark meat and parts (contribution to food security, income and livelihoods).
		Ecuador. Facilitated intersectoral dialogue on implications for shark conservation and management measures.
		Ecuador. Integrate measures and targets on shark bycatch into PAT-Ec, PAN large pelagic fish and pertinent regulations.
		[2] Guatemala. Implement measures to reduce bycatch of sharks in longline fisheries.
		Guatemala. Prepare and adopt regulations to reduce bycatch of sharks in longline fisheries (based on lessons from FIP field tests).
		Guatemala. Undertake Regulatory Impact Assessment of proposed measures.
		Guatemala. Evaluate effectiveness of regulations to reduce bycatch of sharks in longline fisheries.
		Guatemala. Adjust, as pertinent, the regulations to reduce bycatch of sharks in longline fisheries.
		Guatemala. Undertake Regulatory Impact Assessment of proposed measures.
		[3] Panama. Implement measures to reduce bycatch in longline fisheries.

[110] The initial choice is the Peruvian national programme "A comer pescado" ("Let's eat fish") which includes the promotion of direct human consumption of the Peruvian anchovy (*Engraulis ringens*) (https://www.gob.pe/acomerpescado). However, the specific programme to visit will be selected during project implementation.

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		Panama. Prepare and adopt regulations to reduce bycatch in longline fisheries (based on lessons from FIP field tests).
		Panama. Undertake Regulatory Impact Assessment of proposed measures to reduce bycatch in longline fisheries.
		Panama. Evaluate effectiveness of regulations to reduce bycatch in longline fisheries.
		Panama. Adjust, as pertinent, the regulations to reduce bycatch in longline fisheries.
		Panama. Undertake Regulatory Impact Assessment of proposed measures.
		[4] Regional. Strengthen capacities to prepare Non-Detriment Finding Reports for shark species.
		Regional meeting to identify barriers and challenges for assessing risks on transboundary shark species.
		Intersectoral training workshops in Guatemala, Panama, and Ecuador to improve preparation of NDFs (emphasis on risk assessment).
		Support to strengthen the national procedures to prepare NDFs for shark species in Guatemala, Panama, and Ecuador.
		Bimonthly online regional coordination and experience exchange meetings among national teams in charge of NDFs for shark species.
		In person regional meetings to exchange lessons and experience on the preparation of NDFs for shark species.
		[5] Regional. Active role of COREMAHI in the reduction of environmental impact of the longline fishery.
		Active engagement of COREMAHI in IATTC SAC meetings and processes (e.g., conservation measures of dorado, sharks and ETP species, dorado scientific regional research plan).
		Issue position statements and technical documents to national authorities and IATTC (bycatch issues, conservation measures for dorado, sharks and ETP species).
		Annual self-assessment of the effectiveness of COREMAHI´s code of conduct.
		External independent assessment of the performance and effectiveness of the bycatch reduction and ETP conservation measures and targets of COREMAHI´s code of conduct.
		Disseminate results of the effectiveness and performance of COREMAHI´s code of conduct (funded by COREMAHI).
		Update COREMAHI´s code of conduct to strengthen bycatch reduction and ETP conservation measures and targets and reporting.
		Implement updated COREMAHI´s code of conduct (funded by the committee members).
	2.3.2. Four FIPs that implement actions to reduce ecosystem impacts and bycatch.	*[1] Ecuador. Incorporate and implement actions to reduce ecosystem impacts and bycatch into the ASOAMAN FIP (funded by the FIP).*
		[2] Guatemala. Incorporate and implement actions to reduce ecosystem impacts and bycatch into the dorado and sharks FIP (funded by the FIP).
		[3] Panama. Large pelagic fish FIP.
		Panama. Field test of methods to reduce bycatch in the longlines of the large pelagic fish fishery.
		Panama. Design and initial implementation of bycatch reduction measures in the longlines of the large pelagic fish fishery (funded by the FIP).
		Panama. Document and systematise lessons from field test and deployment of bycatch reduction measures in the longlines of the large pelagic fish fishery (funded by the FIP).
		[4] Mauritania. Octopus FIP.

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		Mauritania. Improve monitoring of bycatch and incidental captures of ETP species[111].
		Mauritania. Root cause analysis of marine litter produced by plastic octopus pots.
		Mauritania. Field test of measures to prevent marine litter from plastic octopus pots.
		Mauritania. Publish and disseminate the results of the field test of methods to reduce marine litter caused by plastic octopus pots.
		Mauritania. Scale-up most viable options to reduce marine litter in the fleet associated to the FIP (funded by the FIP).
		Mauritania. Prepare, publish, and disseminate a technical document with the results and lessons of the application of the most viable options to reduce marine litter in the fleet associated to the FIP (funded by the FIP).
Outcome 3.1. Reliable and verifiable information of sustainability performance of target marine commodities is available to supply chain partners and the public to drive their purchasing decisions.	3.1.1. The sustainability assessment profiles of all project target fisheries are maintained in FishSource.	Initial training of project stakeholders on the use of FishSource and their indicators and scores.
		Repeat training as required
		Assess current status of the profiles of the target fisheries in FishSource.
		Update or develop full profiles in FishSource of project target fishery.
		Update FishSource profiles of target fisheries.
	3.1.2. The profiles and progress evaluations of all project related FIPs are publicly available.	Initial training of project stakeholders on the use of Fishery Progress and their indicators.
		Repeat training as required
		Review status of target FIP profiles and reports in FishSource and FisheryProgress.
		Update the profiles and rating of ongoing target FIPs in FishSource.
		Facilitate that implementers of ongoing target FIPs have updated reports and information in FisheryProgress.
		Develop profiles and ratings of new FIPs in FishSource.
Outcome 3.2. Lessons about mainstreaming ecological and social sustainability into seafood supply chains are available worldwide.	3.2.1. Project lessons documented and disseminated.	Form communications working group with partners´ communication officers
		Prepare project´s communication strategy and multi-year action plan
		Implement project´s communication strategy
		Launch and maintain project website and social networking sites
		Prepare project´s knowledge transfer strategy
		Initiation workshop with national stakeholders on each country.
		Onsite meetings for self-assessment with key stakeholders on each country (midterm and final).
		Prepare and distribute project´s learning documents
		Prepare and distribute project memoirs
		Closing workshop with national stakeholders on each country
		Participation in IWC2025 y 2027
	3.2.2. Project monitoring and evaluation plan.	Adjust monitoring and evaluation plan based on outcomes of inception workshop
		Project board meetings
		Annual measurement of project indicators
		Prepare annual GEF PIR
		Annual financial audits
		Independent mid-term review
		Independent final assessment.

[111] As part of improving the monitoring system of the three fleets, see 2.1.2 above.

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Project closure		Operational closure
		Prepare final project report

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Annex 2 - Overview of national legal and institutional frameworks

Given the particularity of the project being implemented in six different countries (Ecuador, Guatemala, Panama, Morocco, Mauritania, and Senegal), these tables provides a brief overview of these countries relevant institutional and legal framework. Further detail and information can be found in the Country Profiles (PRODOC annex 17), Fishery Profiles (PRODOC Annex 15), and Gender Action Plan (PRODOC Annex 9). Morroco's framework was no included as the project will have not direct implementation activities in the country. This initial identification will be completed during project implementation when targeted assessments (on indigenous peoples, on labour and working conditions) and impact assessments (RIA, SRA) are implemented and require in depth reviews.

Ecuador

Fishery specific legislation and institutions	**Environmental legislation**	**Gender**	**Indigenous Peoples and Minorities**	**Social and Environmental impact assessment**
- The Undersecretary of Fishery Resources (Subsecretaría de Recursos Pesqueros, SRP) is the governing body of the fisheries sector, responsible for enacting and implementing policies, regulations and strategies. There is also the SRP's Fisheries Control Directorate, the Ecuadorian Navy, as the national maritime authority (NMA), the Regulatory, Control and Surveillance National Agency (Agencia Nacional de Regulación, Control y Vigilancia Sanitaria-ARCSA), the Ministry of Production, Foreign Trade, Investment and Fisheries and the Vice Ministry of Aquaculture and Fisheries (oversees CITES implementation	- Ecuador has specific regulations, policies, and plans for fisheries activities in protected areas, focusing on the categories of national parks and marine reserves. These measures ensure that subsistence, commercial, and tourism fishing practices within these areas are sustainable and compatible with the conservation objectives of protected areas. - Fisheries management measures will be established under the principle of governance, sustainability and sustainability of hydrobiological resources, obtaining greater social,	- Ecuador's 2008 Constitution recognizes the Principle of Equality and Non-Discrimination and establishes that "all persons are equal and shall enjoy the same rights, duties and opportunities". The "right to personal integrity", which includes a life free of violence in the public and private sphere, is also guaranteed by the Constitution. - In 2007, Ecuador enacted a National Plan for the Eradication of Gender Violence (Presidential Decree 620 of 2007) and established an inter-institutional committee to coordinate public policies on this issue. In 2014, the National Council for Gender Equality was established by	- The 2008 Constitution recognizes "indigenous peoples, communities and nationalities" according to international agreements and human rights instruments, including FPIC. - The Organic Law of Jurisdictional Guarantees and Constitutional Control establishes that the authorities of the Indigenous nationalities, peoples and communities shall enjoy a maximum of autonomy and a minimum of restrictions in the exercise of their jurisdictional functions, within their territorial sphere, in accordance with their own Indigenous law. -ILO Convention 169 - Indigenous and Tribal peoples Convention (1989)	- 2008 Constitution Guarantees active and permanent participation of affected / impacted persons, communities, peoples and nationalities by activities that cause environmental impacts. - Environmental Management Law (Codificación 19, Registro Oficial Suplemento 418, 2004): - All public/private investment projects that may cause environmental impact must go through impact and risk assessments. They will also need to have management plans, risk Management plans, monitoring systems and closure plans. Environmental impact assessments will assess effects

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Fishery specific legislation and institutions	Environmental legislation	Gender	Indigenous Peoples and Minorities	Social and Environmental impact assessment
- Fisheries resources are considered part of the national patrimony and are owned by the State. - Fisheries and Fisheries Development Law. - Exclusive zones for artisanal fishing (Ministerial Agreement No. 2305/06-08-1984) - Protected areas (Ministerial Agreement No. 134/24-07-2007), - Technical characteristics of fishing gear (Ministerial Agreement No. 019/09-03-2010) - Ban on trawling except for Titi shrimp (Ministerial Agreement No. 020/13-03-2012). - Management, Regulation and Control Measures (Ministerial Agreement No. 426-A/05-10-2012 and 019/06-02-2013). Measures include an annual closed season ("veda") and the establishment of "permitted fishing activity zones" for the industrial titi shrimp fleet. - National Action Plan for the Conservation and Management of the Titi Shrimp Resource in the Gulf of Guayaquil (PAN-Pomada) - Organic Law for the development of Aquaculture and Fisheries (Ley Orgánica para el desarrollo de la Acuicultura y la Pesca - LODAP)). It establishes	economic and environmental benefits, with an ecosystem approach (LODAP). - The fishing activity may only be carried out using fishing gear and gear expressly authorized by the national authority (LODAP). - Ecuador has implemented the following Registries within the sector: Vessel Registry, Fisher's Register, Trader's Register, and Processors Register. Satellite Monitoring Center and onboard monitoring implemented by SRP. - Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES	the Organic Law of the National Councils for Equality. - In the employment and labor context, the Organic Law for Labor Justice, and Recognition of Work at Home was approved in 2015. This Law also recognizes unpaid household work and incorporates it into the social security system. Regarding access to resources, the Organic Law of Rural Lands and Ancestral Territories (2016) includes the obligation of the State to guarantee the validity of the principle of social, gender and generational equity in its policies for access to rural land (Art. 7, literal l). - The Organic Law to Promote the Violet Economy (2023) seeks to strengthen, promote, guarantee and mainstream gender and a multicultural approach. The law promotes incentives for women preferentially in the agricultural, poultry, livestock, and fishing sectors. - In the fisheries sector, the Program for Strengthening the Capacities of the Artisanal Fishing Sector implemented by the MPCEIP, seeks to include women in artisanal fishing, and derived activities. - Finally, the National Action Plan for the Management and Conservation of the Pomada	- UN Declaration on the Rights of Indigenous Peoples (2007)	on population, biodiversity , soil, air, water, landscape and ecosystems. - Persons, communities and companies have the right to participate in natural resources' environmental management through consultation, public Audiences or initiatives. They have the right to be informed timely and sufficiently on any projects/activities that may cause environmental impact.

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Fishery specific legislation and institutions	Environmental legislation	Gender	Indigenous Peoples and Minorities	Social and Environmental impact assessment
the legal framework for the management, conservation, and sustainable use of fisheries resources. - National Action Plan for the Management of the Pelagic Drift Longline Fishing Fleet. - National Action Plan for the Conservation and Management of Sharks of Ecuador (PAT-Ec 2020-2024) - National Action Plan for the Conservation and Management of 'Dorado' Ecuador (PAN Dorado) 2019-2024.		Shrimp Resource (*Protrachypene precipua*) was updated in 2021 to include gender considerations and includes gender considerations (although it lacks a structured Action Plan and indicators). - UN Convention on the Elimination of All Forms of Discrimination Against Women "CEDAW" and its Optional Protocol. - ILO Convention No. 100 on equal remuneration for men and women - ILO Convention No. 111 on Discrimination in terms of employment and occupation - ILO Convention No. 122 on Employment Policy - ILO Convention No. 156 on Workers with Family Responsibilities. - OAS Inter-American Convention on the Prevention, Punishment and Eradication of Violence against Women "Convention of Belém Do Pará".		

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Guatemala

Fishery specific legislation and relevant institutions	Environmental legislation	Gender	Indigenous Peoples and Minorities	Social and Environmental impact assessment
- Under the Ministry of Agriculture, Livestock and Food the National fisheries authority is the Office of Fishing and Aquaculture Norms (Dipesca), responsible for the administration of hydrobiological resources, assessing fish stocks and the enforcement of the Fisheries and Aquaculture General Law (LGPA) and its regulations. - National Council for Protected Areas (Conap), responsible for planning, coordinating, and implementing policies and conservation models necessary for the preservation of various species. - Enforcement: Guatemalan Navy and Diprona National Civil Police (surveillance, inspections, patrolling, monitoring). - Ministry of National Defense of Guatemala - General Law of Fisheries and Aquaculture (Decree 80-2002) and its Regulations (government agreement 223-2005). - The Fishing Law specifies regulations regarding fishing gear, zones, permitted species, and fishing, bycatch regulations,	- The Constitution states that the conservation, protection and improvement of the natural heritage of the Nation is of national interest. The State will promote the creation of national parks, reserves and natural sanctuaries which are inalienable. The law will guarantee their protection, including the fauna and the flora that exists within them. - Plant and Animal Health Law, which ensures the protection and health of plants, animals, forest species, and hydrobiological resources (Congreso de la República de Guatemala, 1998, Decreto 36-98); - Protected Areas Law, which aims to ensure the optimal functioning of ecological processes, achieve the conservation and sustainable use of biological diversity, defend and preserve the nation's natural heritage, and establish the necessary protected areas for the national territory (Congreso de la República de Guatemala, 1989, Decreto 4-89);	- Guatemala's National Constitution establishes that the State will protect all rights and duties derived from maternity as well as working women, specifically the conditions in which they must provide services. - The Law for the Dignity and Comprehensive Promotion of Women, 7-99, establishes actions and regulations for the development of women, the recognition of Guatemalan women's rights and their participation at all levels of the economic, political, and social life. In the area of workplace rights, Articles 147, 152 and 153 of the Civil Code set out protections for women's work, especially regarding working mothers. - The Social Development Law, 42-2001, institutionalized actions conducive to equality, and to eradicate and punish all types of violence, abuse, and individual and collective discrimination against women. - Guatemala's public policies on gender include: the National Policy for the Comprehensive Development of Women (PNPDIM) and the 2008-2023 Plan for Equal Opportunities (PEO).	- According to Guatemala's Constitution, the country is formed by diverse ethnic groups. The State recognizes, respects, and promotes their forms of life, customs, traditions, forms of social organization, the use of the indigenous attire by men and women, as well as their languages and dialects. - Indigenous communities and others that hold lands that historically belong to them and which they have traditionally administered in special form, will maintain that system. - In terms of co-management arrangements, Guatemala have specific mechanisms in place to involve stakeholders, including local communities and indigenous peoples, in fisheries management. These arrangements aim to foster collaboration, shared decision-making, and the involvement of local knowledge and traditional practices in sustainable fisheries management. - ILO Convention 169 - Indigenous and Tribal peoples Convention (1989)	- Law on protection and Improvement of the Environment (Decrees 68-86 and 1-93) establishes that it is mandatory to assess the environmental impact of any project, industry or activity that may cause harm/impact to natural resources (renewable/non renewable). The same law establishes that the term 'environment' comprises both natural and cultural resources. - According to the Law on Protected Areas (Decree 4-89), public/private companies that develop any commercial activities (including fishing), will prepare an Environmental Impact Study before signing the corresponding contract with the competent authority and start operations. - The Regulations on Environmental Evaluation and Control (Acuerdo Gubernativo 137-2016) foresee the need for a Social Impact Assessment to evaluate the social and cultural impacts of a project/industry or activity.

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Fishery specific legislation and relevant institutions	Environmental legislation	Gender	Indigenous Peoples and Minorities	Social and Environmental impact assessment
and bans/restrictions. The law permits small-scale, medium-scale, and large-scale fishing operations. - National Action Plan for the Management and Conservation of Sharks, Rays, and Chimaeras in Guatemala - Ministerial Agreement No. 418-2021. - National Action Plan for the Conservation and Management of Sharks in Guatemala. - There are several specific measures implemented to enforce the national fisheries regulatory framework. These measures include licensing and permits, as well as technical measures such as the use of fishing gear and specific fishing zones (Dipesca, 2002, Decreto 80-2002; Iniciativa de Ley General de Pesca y Acuicultura, 2018). - Specifically, regarding fisheries, Guatemala has signed and ratified only the United Nations Convention on the Law of the Sea ((Unclos) also known as Conmevar in Spanish), on February 11, 1997 (United Nations, 2015). - Regional Regulation to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated	- Convention on International Trade in Endangered Species of Wild Fauna and Flora (Cites); it regulates the trade of threatened species of wild fauna and flora in the country (Comisión Centroamericana de Ambiente y Desarrollo [CCAD], 2010). - Policy for the Comprehensive Management of Guatemala's Coastal and Marine Areas, which ensures the preservation of marine ecosystems and the equitable development of the population in coastal areas (Acuerdo Gubernativo No. 328-2009); - the Policy for the Integration of Fisheries and Aquaculture in the Central American Isthmus, which establishes a common regional system to contribute to the appropriate and sustainable use of fishing resources and aquaculture products (SICA and Ospesca 2005); and - the Policy for the Development of Hydrobiological Resources, which aims to establish guidelines for achieving sustainable and responsible development of national fisheries and aquaculture (Ministerio de Agricultura,	Gender equality is also addressed in the National Development Plan: K'atun Our Guatemala 2032, General Government Policy 2020-2024 and the Social Development and Population Policy. Furthermore, government's strategies to combat inequality and discrimination against indigenous women are addressed in the Public Policy for the Elimination of Racism and Racial Discrimination. - UN Convention on the Elimination of All Forms of Discrimination Against Women "CEDAW" - ILO Convention No. 100 on equal remuneration for men and women ILO Convention No. 111 on Discrimination in terms of employment and occupation - OAS Inter-American Convention on the Prevention, Punishment and Eradication of Violence against Women "Convention of Belém Do Pará".	- UN Declaration on the Rights of Indigenous Peoples (2007)	

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Fishery specific legislation and relevant institutions	Environmental legislation	Gender	Indigenous Peoples and Minorities	Social and Environmental impact assessment
Fishing in the Member Countries of Sica	Ganadería y Alimentación [Maga] & Unidad de Políticas e información Estratégica [Upie], 2002). - Protected Areas Law prohibits fishing, of endangered species of fauna and flora listed by Conap. Law establishes the requirement of fishing licenses and rights per specimen. It also outlines the process for issuing licenses and describes actions considered illegal, including fishing within any duly declared protected area (Congress of the Republic of Guatemala, 1989, Decree 4-89). - Convention on the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stock.			

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Panama

Fishery specific legislation and relevant institutions	Environmental legislation	Gender	Indigenous Peoples and Minorities	Social and Environmental impact assessment
- National Fisheries Authority (Autoridad de los Recursos Acuáticos de Panamá - ARAP), is the main regulatory and administrative body for fisheries and aquaculture activities. It is responsible for issuing fishing licenses, enforcing fishing regulations, and promoting sustainable fishing practices - Fisheries Surveillance and Control: illegal, unreported, and unregulated (IUU) fishing activities. Panamanian Coast Guard, under the authority of the National Maritime Authority (Autoridad Maritima de Panama -AMP-). - Ministry of Health (MINSA) and the Ministry of Agricultural Development (MIDA). These entities set standards, conduct inspections, and enforce regulations related to the safety, hygiene, and labeling of fishery products.MIDA plays a role in regulating and promoting the fisheries sector, including fish trading. - Fisheries Law (Ley de Pesca No. 204, 2023): This law establishes regulations pertaining to fishing gear, permitted species, fishing efforts, and licensing requirements for different scales of fishing operations.	- The Constitution establishes that fisheries resources are owned by the State. - The Fisheries Law delimits restricted areas (special marine protected areas) rather than indicating specific fishing areas for large pelagic species and/or shrimp. - The Policy on the Integration of Fisheries and Aquaculture: This policy aims to promote the sustainable integration of fisheries and aquaculture activities, emphasizing responsible resource management and economic development. - Policy on Aquatic Resources of Panama for Fisheries and Aquaculture: provides guidelines and strategies for the sustainable utilization and conservation of aquatic resources, ensuring their long-term viability. - Pact for Agriculture of the Republic of Panama: This pact includes commitments and measures to support the agricultural sector, including fisheries and aquaculture,	- UN Convention on the Elimination of All Forms of Discrimination Against Women "CEDAW" - ILO Convention No. 100 on equal remuneration for men and women - ILO Convention No. 111 on Discrimination in terms of employment and occupation - Beijing Declaration and Platform for Action -OAS Inter-American Convention on the Prevention, Punishment and Eradication of Violence against Women "Convention of Belém Do Pará"	- The General Law on the Environment (Ley 41) mentions that the State will respect and protect traditional knowledge of local and indigenous communities related to the conservation and sustainable use of biological diversity. - Indigenous peoples rights are recognized in the Constitution and they have the right to economic benefits derived from projects developed in their land. - Law 37 (2009) establishes FPIC - Specific law organise each Comarca - ARAP recognises indigenous peoples/ethnic groups and communities that are actively engaged in fishing practices. - Indigenous Peoples, Ethnic Groups, or Communities: Panama recognizes the rights of indigenous peoples, ethnic groups, and local communities in the fisheries sector. These groups often have fishing territories or traditional fishing rights that are respected and	- The General Law on the Environment (Law 41) establishes that Environmental Impact assessments will include citizen participation for their consideration and feedback. - Regulations on Chapter II of Law 41 (Executive Decree 123, 2009) defines “environmental impact” and provides 3 different categories according to their level of impact (non significant, significant and very significant - cumulative). - Fishfarms/hatcheries’ operations are subject to Environmental Impact Assessments. Competent authorities may require EIA when they consider a project poses environmental risk or may have negative impacts [Regulations on Chapter II of Law 41 (Executive Decree 123, 2009)] - EIA are mandatory when a project may have the following social impacts: resettlement, reduced access/obstruction to natural resources used for livelihoods, change in lifestyle of

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Fishery specific legislation and relevant institutions	Environmental legislation	Gender	Indigenous Peoples and Minorities	Social and Environmental impact assessment
- Shrimp fisheries activities are subject to closed seasons ("vedas") [Executive Decree 158, 31.12.2003]. Specific regulations on shrimp have been enacted for conservation purposes. - Since 2005, all shrimp trawl vessels are required to be equipped with Turtle Exclusion Devices (TEDs). Additionally, all shrimp trawlers must depart from and land at accredited ports to improve regulatory compliance. Failure to comply with these regulations can result in substantial fines, particularly for repeat offences. - Fisheries Law, the fishing areas for shrimp fishery are subject to regulations established by the Panamanian Aquatic Resources Authority (ARAP). While the law does not provide a specific list of fishing areas, it sets restrictions and conservation measures to ensure the sustainability of fisheries. - Management measures include: the issuance of licenses for different types of fishing (artisanal and industrial), satellite monitoring for industrial vessels, and closed periods ("vedas"), establishment of forbidden areas for fishing, reduction of effort (size of the fleet and fishing days) and restrictions on fishing gears (size and number of hooks, quantity of nets used) and utilisation of the turtle excluder device (TED) (ARAP, 2018). - Fishing Law provides specific guidelines regarding fishing gear, permitted species, and fishing efforts based on the scale of exploitation. This law establishes the following fisheries artisanal/small-	promoting its growth and competitiveness. - Code of Conduct for Responsible Fisheries: Panama adheres to the Code of Conduct for Responsible Fisheries, developed by the Food and Agriculture Organization (FAO), which provides principles and guidelines for sustainable fishing practices. - Aichi Biodiversity Targets: These targets, developed under the Convention on Biological Diversity, are aimed at conserving biodiversity and ecosystems, including those related to fisheries and aquaculture. - National Dialogue for Sustainable Fisheries (ARAP initiative): This dialogue involves stakeholders from the fisheries sector to discuss and develop strategies for sustainable fishing practices and resource conservation. - CITES: Panama is a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which regulates the international trade of endangered or threatened fish species. - The General Environmental Law establishes that marine-coastal resources are national heritage subject to the provisions of the Panama Aquatic Resources Authority (ARAP) (Article 94 and 95 of Law No. 41 of 1998, modified by Law No. 44		considered in fisheries management and decision-making processes. Specific regulations, policies, or plans may be in place to address their specific needs and aspirations, although further research or consultation is necessary to obtain specific details. - ARAP has used the ecosystem approach in fisheries (EAF), integrating stakeholders in all fisheries management decisions and regulations (ARAP, 2018; Ley de Pesca No. 204, 2023). UN Declaration on the Rights of Indigenous Peoples (2007)	ethnic groups [Regulations on Chapter II of Law 41 (Executive Decree 123, 2009)]. - EIA must provide a Plan for public participation.

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Fishery specific legislation and relevant institutions	Environmental legislation	Gender	Indigenous Peoples and Minorities	Social and Environmental impact assessment
scale, medium-scale, large-scale fishing, and international service fishing (Ley de Pesca No. 204, 2023). - International Labour Organization (ILO) Instruments: Panama has ratified the Work in Fishing Convention of 2007 (C188) and the Work in Fishing Recommendation of 2007 (R199) adopted by the ILO. These instruments aim to improve the working conditions and welfare of fishers. - Agreement on Port State Measures (PSMA): Panama has signed and ratified the PSMA, an international treaty aimed at preventing, deterring, and eliminating illegal, unreported, and unregulated fishing.	of 2006). On the Pacific coast of Panama, there are 20 marine protected areas (AMPs) located along the coastal zone, each under different management categories. These AMPs have specific regulations and management plans in place to ensure the conservation and sustainable use of marine resources within their boundaries. - United Nations Convention on the Law of the Sea (UNCLOS) of 1982: Panama has signed and ratified the UNCLOS, which establishes the rights and responsibilities of countries regarding the use and conservation of marine resources.			

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Senegal

Fishery specific legislation and relevant institutions	Environmental legislation	Gender	Indigenous Peoples and Minorities	Social and Environmental impact assessment
- The fisheries sector has been managed by the Secrétariat d'Etat de la Pêche maritime. It was only in 1993 that the fisheries sector entrusted to a full Ministry: The Ministry of Fisheries and Maritime Transport. This Ministry became the Ministry of Maritime Economy in 2004. Under Decree 2004-572 of April 30, 2004, the Ministry of the maritime economy is responsible, among other things, for the implementation of government policy in the field of fisheries, aquaculture, merchant marine management and exploitation of the seabed. - The Directorate of Maritime Fisheries (DPM) is responsible for designing and implementing policies for the development of maritime fisheries - Decree no. 2000-833 of 16 October 2000, which organises the Ministry of Fisheries, establishes the DPSP, which replaces the former Senegal Fisheries Protection and Surveillance Project. - The 2015 Fisheries Code establishes areas of coverage of the law and the provisions of management plans and technical management measures. Since	- Law n° 2001-01 from 15 January 2001 on the Environment Code[112]: The Code recognizes the environment as national and international patrimony, establishing that all citizens have the right to live in a healthy environment, but are also responsible for its protection[113]. Thus, environmental conservation must be integrated in national policies addressing socio-economic development and cultural issues. - Senegal has created marine protected areas in the framework of international environmental treaties, mainly the Convention on Biological Diversity (CBD). All CCLME countries have adopted a policy for the creation of MPAs to better preserve vulnerable habitats. - Senegal created five MPAs in 2004 by decree 2004-1408 of November 4, 2004. These MPAs are Saint-Louis, Kayar, Joal-Fadiouth, Abéné and Bamboung, covering a total area of 1,030 km².	- Senegal's 2001 Constitution guarantees equality between women and men in its article 7: "All human beings are equal before the law. Men and Women are equal in rights". The Constitution also prohibits all employment, wage or tax discrimination between men and women. - Also under the Constitution, women have the right to purchase and own land as well as the right to own property and to manage their property themselves. The Family Code provides equal rights to married and unmarried women over the ownership, use, decision-making power, and use of land and non-land assets as collateral to apply for financial loans. Likewise, married, and unmarried women have equal rights as men to open a bank account at a formal institution (Civil Code). - The Labour Code indicates that in equal working conditions, professional qualification and performance, payment should be the same for all workers, whatever their origin, sex, age and condition.	- Senegal does not have specific legislation on minorities or indigenous peoples. However, it has ratified UNDRIP. Moreover, official declarations have stated the government's will to protect minorities. - The Local Artisanal Fisheries Councils (CLPA, set up by the Maritime Fishing Code (Law 98-32 of 14 April 1998), with the aim of promoting the participation of professionals and their involvement in discussions and initiatives concerning the planning and development of fishing. These local councils must bring together local representatives of the administration, local authorities, artisanal fishers, processors, fishmongers and fish farmers. - Artisanal sea fishing professionals are brought together in groups, the most prominent of which are the Fédération Nationale des Groupements d'Intérêt Economique de Pêcheurs	- Environmental and social assessment and the tools that make it up are not the subject of a specific law. In fact, taking into account of environmental and social considerations in decision-making with a view to sustainable development is envisaged under a general law on the environment. This is the Senegalese Environmental Code of January 15, 2001, which defines the national policy on environmental management and sustainable development. This text on the environment is the subject of a decree and orders of April 12, 2001 implementing the code. - While Senegal's general environmental policies and the Environmental Code deal with EIAs, SEAs, public inquiries, public hearings, and environmental audits (diagnostic with or without a baseline), they do not address issues related to ESIAs, EIAs, EICs, indigenous consultations, Eds, LCAs, and compliance and enforcement analyses

[112] https://www.sec.gouv.sn/code-de-l%E2%80%99environnement

[113] Therefore strengthening what is already established in Article 8 of the Constitution.

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Fishery specific legislation and relevant institutions	Environmental legislation	Gender	Indigenous Peoples and Minorities	Social and Environmental impact assessment
2005, artisanal fishing is subject to obtaining fishing permits. - Given the economic and social importance of artisanal pelagic fishing, Senegalese law provides it with a certain form of protection, partially protecting it from competition from industrial fishing. Article 47 of the Decree implementing the Maritime Fishing Code restricts the areas authorised for industrial activities: coastal pelagic trawlers are prohibited from fishing in the entire "central zone" of the EEZ, corresponding to the Cape Verde peninsula (Dakar), the "Petite Côte", the main traditional artisanal fishing areas (6-7 nautical mile strip) and the spawning grounds of the Sine Saloum (estuarine mangrove area). - Management measures have been introduced by both the government and the local co-management committees. Article 39 of the draft decree implementing the Maritime Fisheries Code prohibits the capture, transport and sale of fish below the size and weight limits. There are yet no government restrictions on the number of pirogues or on the quantity of fish landed. Also noteworthy are the creation of Marine Protected Areas (MPAs), no-fishing zones and the dumping of artificial reefs. All these measures and management tools contribute to the preservation of biodiversity, the maintenance of essential ecological processes (e.g. enrichment of the coastal marine environment by mangroves), the protection of a natural wonder, the conservation of important environments for living beings in the sea,		- In 2014, Senegal adopted the Senegal Emerging Plan (PSE), which is based on three strategic pillars namely: (i) structural transformation of the economy and growth; (ii) human capital, social protection and sustainable development; and (iii) governance, institutions, peace, and security. All these key priorities have gender and social inclusion aspects. - The National Strategy for Gender Equity and Equality (SNEEG 2016-2026) seeks to achieve equity and equality between women and men. - The 2022 Gender Strategy for the Environment and Sustainable Development (SEGGD) covers the fishing sector. - The United Nations Convention on the Elimination of All Forms of Discrimination Against Women "CEDAW" The International Labor Organization (ILO) Convention No. 100 on equal remuneration for men and women Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa (Maputo Protocol).	(FENAGIE-PECHE) and the Fédération Nationale des Groupements d'Intérêt Economique de Mareyeurs du Sénégal (FENAMS), the Collectif National des Pêcheurs artisanaux du Sénégal (CNPS), the Union Nationale des GIE de Mareyeurs du Sénégal (UNAGIEMS), the Fédération Nationale des Femmes Transformatrices de Produits halieutiques et Micro-mareyeuses (FENATRAMS). These organisations are represented in the regions, departments and maritime localities. In 2003, these umbrella organisations came together to form a consultation body known as the Conseil National Interprofessionnel de la Pêche au Sénégal (CONIPAS). - Since 2005, the State of Senegal has adopted a new approach to monitoring and controlling artisanal fisheries, called participatory surveillance. It is a system in which fishers have the mission of controlling activities together with local administrative agents.	- Ministerial Order 9468 MJEHP-DEEC (2001) provides requirements regarding public consultation during the EIA approval process. - Ministerial Order 9471 MJEHP-DEEC (2001) specifies the compulsory content of the terms of reference for an EIA and Ministerial Order 9472 MJEHP - DEEC specifies the compulsory content of an EIA report.

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Fishery specific legislation and relevant institutions	Environmental legislation	Gender	Indigenous Peoples and Minorities	Social and Environmental impact assessment
the preservation of threatened species, the safeguarding of cultural and historical values, etc. - United Nations Convention on the Law of the Sea of 1982 (signed 1982 and ratified in 1984). - Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing and - The International Labour Organisation instruments: Work in Fishing Convention of 2007 (C188) (Member since 04.11.1960), and				

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Mauritania

Fishery specific legislation and relevant institutions	Environmental legislation	Gender	Indigenous Peoples and Minorities	Social and Environmental impact assessment
- Ministère des Pêches et de l'Économie Maritime (MPEM) - The Maritime Fisheries Code recognizes that "the right to fish belongs to the State, which may concede its use in accordance with the provisions of this law and the regulations adopted for its application" (Law N° 2015-17 on July 29, 2015 and its amendments of 2018. - Fisheries legal framework in Mauritania determines TACs, allocation and renewal of fishing concessions, licenses,minimum weight at landing, zoning, etc. - Licensing: All fishing vessels in Mauritania must be licensed, including artisanal, coastal and industrial vessels (Order 28 of 13 Jan. 2016). - Competent authorities monitor vessels and landings as well as onboard monitoring. - Management Plan in Mauritania (2018) Cephalopods fisheries are administered by a Management Plan based on the limitation of the TAC and other measures: biological rest, mesh size, fishing zones, minimum marketable size, etc.	- The Fishing Code prohibits targeting of marine mammals, seabirds and turtles. - Mauritanian Strategy for the establishment and management of a representative network of protected areas seeks to protect key areas to protect endangered species.	- Article 1 of the Mauritanian Constitution, stating that "the Republic guarantees equality before the law to all of its citizens without distinction as to origin, race, sex or social condition". (Mauritanian legislation does not define 'discrimination' though). - By the Constitution (Art. 15) and the Land Reform Act (1983), women and men are guaranteed equal rights to own property and land. - Yet, under Civil Law, women cannot purchase or transfer land without the authorization of a third party, generally her guardian or a male family member (CEDAW, 2014). - With regard to marriage, the Personal Status Code (Art. 58) ensures that women can manage their property, but only to a certain extent. Should a married woman give away more than a third of her property, her husband has the right to intervene.	United Nations Declaration on the Rights of Indigenous Peoples (United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)	- *Titre* II of the Environment Law comprises a section on EIA. - Decree 2004-094 (amended by Decree 2007-105) relating to the Environmental and Social Impact Study (ESIA) provides details on the legal regime applicable to EIAs. - Activities requiring a notice or a comprehensive EIA are identified as well as the expected content of such documents. Activities likely to have significant direct or indirect impacts on the environment are classified into two (2) categories, namely Category A: activities subject to an environmental impact study environment and Category B: activities subject to an environmental impact notice.

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Fishery specific legislation and relevant institutions	Environmental legislation	Gender	Indigenous Peoples and Minorities	Social and Environmental impact assessment
- The Octopus Fishery Development Plan approved by (Order No. 764/MPEM/2018). - Small Pelagic Management Plan in the Mauritanian EEZ (2022) - UN Convention on the Law of the Sea (1982. Ratified in 1996). - Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing instruments: Work in Fishing Convention of 2007 (C188) (Member since 20.06.1961), - ILO Work in Fishing Recommendation of 2007 (R199).		- The National Plan of Action for Rural Women 2009 - 2012, sets out specific actions to promote savings in rural communities, strengthen and develop microfinance structures, establish financial tools and financial management training programs for rural women. - The country adopted the National Strategy for the Promotion of Women for the period 1995-2000, updated later for the period 2005-2008 (however this document is not available publicly). - 2015-2025 National Gender Institutionalization Strategy which seeks over a period of ten years to ensure the success of the process of mainstreaming gender issues in all development sectors with a view to promoting gender equality and equity and to guarantee the advancement of women. - The Labour Code prohibits gender discrimination in employment and mandates equal pay for work of equal value. (However, women are prohibited to work in occupations that are likely to affect their health and physical integrity or injure their morality (Labour Code, Art. 247). - Women are prohibited from working night hours in specific		

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Fishery specific legislation and relevant institutions	Environmental legislation	Gender	Indigenous Peoples and Minorities	Social and Environmental impact assessment
		environments, including in factories, plants or mining quarries (Labour Code, Art. 166). - If married, a woman may pursue a profession outside of the marital home, yet she is bound to those professions that are considered appropriate under Sharia law (Personal Code, Art. 57). - UN Convention on the Elimination of All Forms of Discrimination Against Women "CEDAW" - ILO Convention No. 100 on equal remuneration for men and women - ILO Convention No. 111 on Discrimination in terms of employment and occupation - The Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa (Maputo Protocol).		

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Annex 3– Indigenous Peoples Plan Structure

Please refer to the UNDP SES Guidance Note: Standard 6: Indigenous Peoples for additional information.

The IPP is to be elaborated and implemented in a manner consistent with the UNDP Social and Environmental Standards and have a level of detail proportional to the complexity of the nature and scale of the proposed project and its potential impacts on indigenous peoples and their lands, resources and territories.

With the effective and meaningful participation of the affected peoples, the IPP shall be elaborated and contain provisions addressing, at a minimum, the substantive aspects of the following outline:

1. Executive Summary: Concisely describes the critical facts, significant findings, and recommended actions

2. Description of the Project: General description of the project, the project area, and components/activities that may lead to impacts on indigenous peoples.

3. Description of Indigenous Peoples: A description of affected indigenous people(s) and their locations, including:
   a) description of the community or communities constituting the affected peoples (e.g. names, ethnicities, dialects, estimated numbers, etc.);
   b) description of the lands, territories and resources to be affected and the affected peoples connections/ relationship with those lands, territories and resources; and
   c) an identification of any vulnerable groups within the affected peoples (e.g. uncontacted and voluntary isolated peoples, women and girls, persons with disabilities, elderly, others).

4. Summary of Substantive Rights and Legal Framework: A description of the substantive rights of indigenous peoples and the applicable legal framework, including:
   a) An analysis of applicable domestic and international laws affirming and protecting the rights of indigenous peoples (include general assessment of government implementation of the same);
   b) Analysis as to whether the project involves activities that are contingent on establishing legally recognized rights to lands, territories or resources that indigenous peoples have traditionally owned, occupied or otherwise used or acquired. Where such contingency exists (see Standard 6 Guidance Note, sections 5.1., 5.2), include:
      i. identification of the steps and associated timetable for achieving legal recognition of such ownership, occupation, or usage with the support of the relevant authority, including the manner in which delimitation, demarcation, and titling shall respect the customs, traditions, norms,

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values, land tenure systems and effective and meaningful participation of the affected peoples, with legal recognition granted to titles with the full, free prior and informed consent of the affected peoples; and

ii. list of the activities that are prohibited until the delimitation, demarcation and titling is completed.

c) Analysis whether the project involves activities that are contingent on the recognition of the juridical personality of the affected Indigenous Peoples. Where such contingency exists (see Standard 6 Guidance Note, section 5.2):

i. identification of the steps and associated timetables for achieving such recognition with the support of the relevant authority, with the full and effective participation and consent of affected indigenous peoples; and

ii. list of the activities that are prohibited until the recognition is achieved.

5. Summary of Social and Environmental Assessment and Mitigation Measures
   a) A summary of the findings and recommendations of the required prior social and environmental impact studies (e.g. targeted assessment, ESIA, SESA, as applicable) – specifically those related to indigenous peoples, their rights, lands, territories and resources. This should include the manner in which the affected indigenous peoples participated in such study and their views on the participation mechanisms, the findings and recommendations.
   b) Where potential risks and adverse impacts to indigenous peoples, their lands, territories and resources are identified, the details and associated timelines for the planned measures to avoid, minimize, mitigate, or compensate for these adverse effects. Include where relevant measures to promote and protect the rights and interests of the indigenous peoples including compliance with the affected peoples' internal norms and customs.

6. Participation, Consultation, and FPIC Processes
   a) A summary of results of the culturally appropriate consultation and, where required, FPIC processes undertaken with the affected peoples' which led to the indigenous peoples' support for the project.
   b) A description of the mechanisms to conduct iterative consultation and consent processes throughout implementation of the project. Identify particular project activities and circumstances that shall require meaningful consultation and FPIC (consistent with section 4 of the Standard 6 Guidance Note).

7. Appropriate Benefits: An identification of the measures to be taken to ensure that indigenous peoples receive equitable social and economic benefits that are culturally appropriate, including a description of the consultation and consent processes that lead to the determined benefit sharing arrangements.

8. Capacity support: Description of measures to support social, legal, technical capabilities of indigenous peoples' organizations in the project area to enable them to better represent the affected indigenous peoples more effectively. Where appropriate and requested, description of steps to support technical and legal capabilities of relevant government institutions to strengthen compliance with the country's duties and obligations under international law with respect to the rights of indigenous peoples.

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9. Grievance Redress: A description of the procedures available to address grievances brought by the affected indigenous peoples arising from project implementation, including the remedies available, how the grievance mechanisms take into account indigenous peoples' customary laws and dispute resolution processes, as well as the effective capacity of indigenous peoples under national laws to denounce violations and secure remedies for the same in domestic courts and administrative processes.

10. Institutional Arrangements: Describe schedule and institutional arrangement responsibilities and mechanisms for carrying out the measures contained in the IPP, including participatory mechanisms of affected indigenous peoples. Describe role of independent, impartial experts to validate, audit, and/or conduct oversight of the project.

11. Monitoring, Reporting, Evaluation: Describe the monitoring framework for the project and key indicators for measuring progress and compliance of requirements and commitments. Include mechanisms and benchmarks appropriate to the project for transparent, participatory joint monitoring, evaluating, and reporting, including a description of how the affected indigenous peoples are involved. Indicate process for participatory review of IPP implementation and any necessary modifications or corrective actions (including where necessary consent processes).

12. Budget and Financing: Include an appropriately costed plan, with itemized budget sufficient to satisfactorily undertake the activities described.

Annex 4– Livelihood Action Plan Structure

Please refer to the UNDP SES Guidance Note: Standard 5: Displacement and Resettlement for additional information.

A Livelihood Action Plan (LAP) details the procedures and actions that will be undertaken in order to ensure that 1) the capacity, production levels, and standards of living GMC2 stakeholders are improved or at least restored, 2) the beneficiaries are compensated adequately for the opportunity cost, and 3) that payments do not displace livelihood activities or trigger adaptive practices that have adverse environmental or social impacts. The LAP reflects the commitment made by the Implementing Partner and UNDP to affected people and communities to meet obligations arising from economic displacement.

This outline has been adapted from the UNDP Guidance to fit the purpose of the GMC2 project. The LAP will cover the following elements:

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Introduction

- Briefly describe the project and specific measures
- Describe project components requiring economic displacement; give overall estimates of resources to which access has been restricted.
- Provide explanation of how economic displacement is necessary to achieve the project objectives, how the project is in the 'public interest' and how displacement is proportional to project outcomes.
    -

Minimizing Displacement

- Describe the justification for the displacement. Please also discuss alternative project designs, including the "no project" scenario and if they may have avoided or reduced the resettlement. This can be based on results from RIA.
- Describe efforts and measures to minimize displacement, and expected outcomes of these efforts and measures.

Baseline Assessment of Fishing based Livelihoods of Affected Stakeholders

- Provide an assessment of the relevant fishing activities.
- Identify the various stakeholders who may be impacted.
- Describe the livelihood systems of project affected stakeholders.
- Describe the range of fishing activities used by individuals, households, and communities impacted by the project. Include post-harvest processing and sale, including the value chain of produce.
- Assess the different livelihood activities, participation rates, relative contributions to household income and welfare, and key issues, such as the nutritional contribution of fisheries and the role of fisheries in promoting stability and resilience (or reducing the vulnerability) of livelihoods.
- Conduct a vulnerability assessment and outline what determines vulnerability (i.e., which criteria need to be met to consider someone vulnerable).
- Quantify the project's potential impacts on fishing and associated activities and fishing-based livelihoods;
- Provide results of the census, assets inventories, natural resource assessments, and socioeconomic surveys and briefly describe how these were performed, i.e., techniques used, individuals interviewed, etc.

Legal Framework

- Describe all relevant international, national, local, and community laws and customs that apply to displacement activities, with particular attention to laws and customs relating to tenure rights and highlight any potential conflicts e.g., between UNDP's SES and national or regional law.
- Describe project-specific mechanisms to address conflicts.

Definition of Eligibility Criteria and Entitlement Matrix for Directly Affected Stakeholders

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- Describes the principles and policies that the Project will use to determine eligibility and define entitlements,
- Define who and what is eligible for compensation, and conversely who and what is not.
- Define compensation (cash, in kind) and/or restoration measures (equipment, food, alternative livelihood projects, capacity building/training, infrastructure development, access to credit, market development, etc.).

Determining Mitigation and/or compensation strategies.

- Outline management measures and options, focusing on the restoration and development of fisheries activities of project-affected households, fishermen groups, and/or communities and also consider interventions related to improving opportunities for other non-fishing livelihood activities.
- Define compensation (cash, in kind) and/or restoration measures (equipment, alternative livelihood projects, capacity building/training, infrastructure development, access to credit, market development, etc.)
- Describe how affected people whose livelihoods are natural resource-based have been involved in a participatory process to identify resources they can access with equivalent livelihood-earning potential and accessibility.
- Describe how affected people whose access to legally designated parks and protected areas has been restricted have been involved in identifying and choosing measures to mitigate impacts.
- Describe the feasibility studies conducted to determine the suitability of chosen natural resources described above, including natural resource assessments and environmental and social impact assessments.
- Give calculations relating to resource availability.
- If circumstances made it difficult to provide resources as described above, provide evidence of mutual agreement with affected people/communities on alternative measures.

Income Restoration

- Are compensation entitlements sufficient to improve livelihoods and income streams for each category of impact? Attach independent review of opportunities to enhance incomes/livelihoods. What additional economic rehabilitation measures are necessary?
- Briefly spell out the restoration strategies for each category of impact and describe their institutional, financial, and technical aspects
- Describe the process of consultation with affected populations and their participation in finalizing strategies for income restoration.
- How do these strategies vary with the area of impact?
- Provide a transparent methodology/formula that is understandable to project-affected people and can be verified for each case.
- Does income restoration require change in livelihoods, development of alternative farmlands or some other activities that require a substantial amount of training, time for preparation, and implementation?
- How are the risks of impoverishment to be addressed?
- What are the main institutional and other risks for the smooth implementation of the resettlement programs?
- Describe the process for monitoring the effectiveness of the income enhancement/restoration measures.
- Describe any social or community development programs currently operating in or around the project area. If programs exist, do they meet the development priorities of their target communities? Are there opportunities to support new programs or expand existing programs to meet the development priorities of communities in the project area?

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Institutional Arrangements

- Describe the institution(s) responsible for delivery of each item/activity in the entitlement policy; implementation of income restoration programs; and coordination of the activities associated with and described in the livelihood action plan.
- State how coordination issues will be addressed where displacement is spread over a number of jurisdictions or where displacement will be implemented in stages over a long period of time.
- Identify the agency that will coordinate all implementing agencies. Does it have the necessary mandate and resources?
- Describe the external (nonproject) institutions involved in the process of income restoration (land development, land allocation, credit, training) and the mechanisms to ensure adequate performance of these institutions.
- Discuss institutional capacity for and commitment to displacement.
- Describe mechanisms for ensuring independent monitoring, evaluation, and financial audit of the LAP and for ensuring that corrective measures are carried out in a timely fashion.

-

Implementation Schedule

- List the chronological steps in implementation of the LAP, including identification of agencies responsible for each activity and with a brief explanation of each activity.
- Prepare a month-by-month implementation schedule of activities to be undertaken as part of resettlement implementation.
- Describe the linkage between resettlement implementation and initiation of civil works for each of the project components.

Participation and Consultation

- Describe the various stakeholders.
- Describe the process of promoting consultation/participation of affected populations and stakeholders in resettlement preparation and planning. Be specific about which kinds of documentation will have to be collected (photos, reports, attendance lists, etc.)
- Describe the process of involving affected populations and other stakeholders in implementation and monitoring.
- Describe the plan for disseminating LAP information to affected populations and stakeholders, including information about compensation for lost assets, eligibility for compensation, displacement assistance, and grievance redress.

Grievance Redress

- Describe the step-by-step process for registering and addressing grievances and provide specific details regarding a cost-free process for registering complaints, response time, and communication modes.
- Describe how the mechanism ensured unrestricted access, transparency, accountability, how it documents cases and keeps the complainants informed and the institutional setup.
- Describe the mechanism for appeal.

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- Describe the provisions for approaching civil courts if other options fail.

Monitoring and Evaluation

- Describe the internal/performance monitoring process. Ensure monitoring program seeks to measure whether displaced enjoy at least a standard of living and access to livelihoods equal to what they enjoyed before displacement.
- Define key monitoring indicators derived from baseline survey. Provide a list of monitoring indicators that will be used for internal monitoring, including number and location of displaced persons.
- Describe institutional (including financial) arrangements.
- Describe frequency of reporting and content for internal monitoring
- Describe process for integrating feedback from internal monitoring into implementation.
- Define methodology for external monitoring.
- Define key indicators for external monitoring.
- Describe frequency of reporting and content for external monitoring. Ensure monitoring program is regular and ongoing following project completion until durable solutions are reached.
- Describe process for integrating feedback from external monitoring into implementation.
- Describe arrangements for final external evaluation.
- Describe need for updates to census, assets inventories, resource assessments, and socioeconomic surveys, if necessary, as part of LAP monitoring and evaluation

Costs and Budgets

- Provide a clear statement of financial responsibility and authority.
- List the sources of funds for displacement and describe the flow of funds.
- Identify displacement costs, if any, to be funded by the government and the mechanisms that will be established to ensure coordination of disbursements with the LAP. Prepare estimated budget, by cost and by item, for all displacement costs including planning and implementation, management and administration, monitoring and evaluation, and contingencies.
- Describe the specific mechanisms to adjust cost estimates and compensation payments for inflation and currency fluctuations.
- Describe the financial arrangements for external monitoring and evaluation including the process for awarding and maintenance of contracts for the entire duration of displacement.

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Annex 5: Cultural Heritage Management Plan Outline

For more information, refer to the UNDP SES Standard 4 targeted guidance[114]

Indicative outline of a Cultural Heritage Management Plan (CHMP) should address the following as relevant to the project (see WB ESS8 Guidance Note):

- A review of the legal and institutional framework applicable to cultural heritage
- Present results of the cultural heritage impact assessment and inventory
- Roles and responsibilities of the different project and other interested parties
- The steps to identify and manage cultural heritage throughout the project life cycle
- Proposed mitigation measures to be undertaken
- Steps for incorporating relevant requirements relating to cultural heritage into project procurement documents, including chance find procedures
- Implementation schedule and budget; and
- Monitoring and reporting requirements.

[114] https://sestoolkit.info.undp.org/sites/g/files/zskgke446/files/SES%20Document%20Library/Uploaded%20October%202016/UNDP%20S4%20Cultural%20Heritage_Targeted%20Guidance_17Oct2021.pdf

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Annex 9: Gender Analysis and Gender Action Plan

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GENDER ANALYSIS AND GENDER ACTION PLAN

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ACRONYMS

ARAP	Aquatic Resources Authority of Panama
CEDAW	The Convention on the Elimination of All Forms of Discrimination Against Women
COMFISH	Collaborative Management for Sustainable Fisheries Project
CONAP	National Council of Protected Areas of Guatemala
COVID-19	Coronavirus Disease 2019
DIPESCA	Directorate of Fisheries and Aquaculture Regulations
ECOWAS	Economic Community of West African States
EEZ	Exclusive Economic Zone
ENEI	National Employment and Income Survey (by its Spanish acronym)
FAO	Food and Agriculture Organization of the United Nations
FENAPESCA	National Federation of Artisanal Fishermen of Guatemala (by its Spanish acronym)
GA	Gender Analysis
GAP	Gender Action Plan
GDI	Gender Development Index
GDP	Gross domestic product
GEF	The Global Environment Facility
GEM	Global Entrepreneurship Monitor
GII	Gender Inequality Index
GMC2	Global Marine Commodities project, phase 2
HDI	Human Development Index
ICRAM	Concerted Initiative for the Strengthening of the Achievements of Moroccan Women (by its French acronym)
IFAD	The International Fund for Agricultural Development
ILO	International Labour Organization
INEC	National Institute of Statistics and Censuses (by its Spanish acronym)
MAATE	Ministry of the Environment, Water and Ecological Transition (by its Spanish acronym)
MARN	Ministry of the Environment and Natural Resources of Guatemala (by its Spanish acronym)
MiAMBIENTE	Ministry of the Environment of Panama (by its Spanish acronym)
MPCEIP	Directorate of Artisanal Fishing of the Ministry of Production, Foreign Trade, Investment and Fisheries of Ecuador (by its Spanish acronym)
MPEM	Ministry of Fisheries and Maritime Economy
MPM	The Multidimensional Poverty Rate
MPM	Ministry of Agriculture, Maritime Fisheries, Rural Development and Water and Forests (by its French acronym).
NGO	Non-Governmental organization
OECD	Organization for Economic Cooperation and Development

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OSPESCA	Organization of the fishing and aquaculture sector of the Central American Isthmus (by its Spanish acronym)
PEO	Plan for Equal Opportunities (by its Spanish acronym)
PoU	Prevalence of undernourishment in total population
REFEPAS	Women's Network of Artisanal Fisheries in Senegal
ESCWA	United Nations Economic and Social Commission for West Asia
SDG	Sustainable Development Goal
SEGGD	Gender Strategy for the Environment and Sustainable Development
SICOM	Commercial Intelligence System (by its Spanish acronym)
SIGI	OECD Development Centre's Social Institutions and Gender Index
SNEEG	National Strategy for Gender Equity and Equality (by its Spanish acronym)
ToR	Terms of Reference
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFPA	United Nation Population Fund
UNICEF	the United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organization
WWF	World Wide Fund for Nature

GENDER ANALYSIS

Introduction

While gender inequalities are context specific and vary across geographies, from the global environment's perspective three specific gender inequalities and gaps are particularly relevant to GEF's work and programming strategy, including *unequitable access to and control of natural resources*, *unequal opportunities in environmental decision-making and leadership; and uneven access to socio-economic benefits and services* (GEF, 2018)[115], therefore, this analysis considers and expand on these issues.

[115] GEF. (2018). *GEF Gender Implementation Strategy*. Global Environment Facility (GEF). Recovered from: Strategy and Action Plan to Address Gender Equality for GEF-7 (thegef.org)

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This gender analysis (GA) is the result of a research and consultation[116] process aimed at identifying, understanding, and describing gender differences, and the relevance of gender roles and power dynamics in the context of the GMC2 countries and target fisheries, to ensure that women and men exercise their equal rights to have access, participation and take part in decision making of the actions, development and benefits of the project.

The gender analysis[117] was developed following the *UNDP*[118]*and the GEF*[119] *guidelines*, and explores three specific dimensions. Each dimension addresses a series of specific aspects in each country and target fisheries:

i. Analysis of the regulatory framework on gender equality in beneficiary countries→ Macro Level
ii. Factors and trends (demographic, social and economic context) and situational analysis of the fishery sector (gender roles, access/control and decision making in target fisheries value chains)→Micro level
iii. Institutional capacity analysis to mainstream the gender approach→Intermediate level

The analysis concludes with a summary of the ***barriers and the opportunities (entry points)*** and project responses to address gender gaps and contribute to gender equality and women empowerment in the targeted fisheries value chains that will be supported by the GMC2, through its components (expected outcomes) detailed in a gender action plan.

This GA has been prepared at a time when two notable aspects have had a significant influence on the socioeconomic context of the GMC2 countries, to which women are more vulnerable: **The COVID-19 pandemic and the war in Ukraine**. The COVID-19 was expected to push an estimated 47 million additional women and girls into extreme poverty and further widen the gender poverty gap (UN WOMEN, n.d.[120]). The pandemic has deepened a trio of interlocking crises that threaten women and girls around the world: spiking levels of gender-based violence, steep losses in employment and an unmanageable increase in unpaid care work. (UN WOMEN, 2022)[121]. On the other hand, the ongoing war in Ukraine is disrupting supply chains and further affecting prices of grain, fertilizer and energy, resulting in multiple implications for global agricultural markets through the channels of trade, production and prices, casting a shadow over the state of food security and nutrition for many countries (FAO, IFAD, UNICEF, WFP and WHO [122], 2022). The ongoing war in Ukraine poses an additional challenge for achieving

[116] Limited to the UNDP country offices, some executing agencies, and some stakeholders in the fishery sector relevant to the target fisheries. 17 consultations were conducted by zoom interviews or online questionnaires, **covering 23 informants.**

[117] ***Gender Analysis*** *means a critical examination of how differences in gender norms, roles, power structures, activities, needs, opportunities and rights affect men, women, girls and boys in a certain situation or context. It includes collection and analysis of sex-disaggregated data and gender information to understand gender differences, determine gender differentiated impacts and risks, to identify measures to avoid adverse gender impacts, and to uncover and act on opportunities to address gender inequality relevant to the activity (GEF, 2018).* GEFPolicySeries_Gender_r4.pdf (thegef.org)

[118]UNDP. (2016). How to conduct a gender analysis- a guidance note for UNDP staff. Recovered from: https://info.undp.org/sites/bpps/SES_Toolkit/SES%20Document%20Library/Uploaded%20October%202016/UNDP%20Guidance%20Note%20how%20to%20conduct%20a%20gender%20analysis.pdf

[119] GEF. (n.d). Guidance to Advance Gender Equality in GEF projects and programs. Global Environment Facility (GEF). Recovered from: https://www.thegef.org/sites/default/files/publications/GEF%20Guidance%20on%20Gender.pdf and GEF. (2017). Policy on gender equality. . Global Environment Facility (GEF). Recovered from: https://www.thegef.org/council-meeting-documents/policy-gender-equality

[120] UN WOMEN. (n.d). COVID-19: Rebuilding for Resilience. Recovered from: https://www.unwomen.org/en/hq-complex-page/covid-19-rebuilding-for-resilience?gclid=EAIaIQobChMI4P6K0JHe_AIVB7SGCh0QHQ5bEAAYASAAEgJT4vD_BwE

[121] UN WOMEN. (2022). UN Women and UNDP report: Five lessons from COVID-19 for centering gender in crisis. Recovered from: https://www.unwomen.org/en/news-stories/feature-story/2022/06/un-women-and-undp-report-five-lessons-from-covid-19-for-centering-gender-in-crisis

[122] FAO, IFAD, UNICEF, WFP and WHO. 2022. *The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable. Rome*, FAO. https://doi.org/10.4060/cc0639en

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the SDG 2 targets of ending hunger by 2030. According to UN WOMEN[123], systemic inequality makes women more vulnerable to crises. Globally, shortages and price hikes are leaving women and girls behind and putting them in increasing danger.

It is important to highlight that the fishery and aquaculture sector in all beneficiary countries (and globally) is characterized by a lack of gender studies or data disaggregated by sex. There is a paucity of information regarding women's participation in fisheries and value chains among the six countries where the project will operate. Some variables of analysis (especially quantitative) were not possible to obtain (because they are not generated or are not accessible in certain countries), consequently, this gender analysis used and cross-checked available information that best reflected the conditions and situation of women and men in specific contexts. Including qualitative information, case studies and examples. Some information from other sectors was also considered, for example, access to land was used as an indicator to understand the limitations of women in terms of access to resources, such as credit in informal businesses for seafood processing (in countries or fisheries where self-employment in this activity predominates).

The available information and the stakeholders' consultations revealed that women make significant contributions to fishery-related activities other than fishing. They play the major role in processing fish and fishery products, as well as in marketing. Although these roles are often very different to those of men, they are integral parts of the industry (WWF, 2012). The generalized perception of a sexual division of labor has also made fisheries governance blind to women's other valuable inputs to the sector (Lentisco, Ulric, 2015). Furthermore, women usually lack representation in fisheries associations and fisheries management bodies, thus they are commonly excluded from decision-making, particularly for the types of decisions that directly affect the resource they depend on (Lentisco, Ulric, et al., 2015).

The intersectional approach used in this GA to identify women constrains within the value chains has also revealed that women in all three Muslim countries in Africa face greater barriers and limitations than women in the Latin American countries targeted by the GMC2, although the gender gaps in the six countries are extensive and there is still a long way to go for the full exercise of women's rights to participation, access to resources and decision-making in the value chain of the target fisheries. Thus, the findings of this GA, will be used as basis to contribute to gender equality and women empowerment through this GMC2 project in the fisheries sector of the six beneficiary countries on a differentiated basis.

Analysis of the regulatory framework on gender equality in beneficiary countries

The six GMC2 countries have made important progress in terms of adherence to international and regional commitments on gender equality, as summarized in table 1.

Table 1. International and regional agreements signed and ratified by the GMC2 countries-

	Latin America			Africa		
	Ecuador	**Panama**	**Guatemala**	**Senegal**	**Mauritania**	**Morocco**
International agreements						

[123] UN WOMEN. (2022). Ukraine and the food and fuel crisis: 4 things to know. Recovered from: https://www.unwomen.org/en/news-stories/feature-story/2022/09/ukraine-and-the-food-and-fuel-crisis-4-things-to-know?gclid=EAIaIQobChMIseKcqNbe_AIVVsKGCh0sUgAhEAAYASAAEgJ_y_D_BwE

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	Latin America			Africa		
	Ecuador	**Panama**	**Guatemala**	**Senegal**	**Mauritania**	**Morocco**
The United Nations Convention on the Elimination of All Forms of Discrimination Against Women ***"CEDAW"***[124]	√	√	√	√	√	√
The International Labor Organization (ILO) ***Convention No. 100*** *on equal remuneration for men and women*	√	√	√	√	√	√
The International Labor Organization (ILO) ***Convention No. 111*** *on Discrimination in terms of employment and occupation*	√	√	√	√	√	√
The ***Beijing Declaration and Platform for Action***[125]	√	√	√	√	√	√
At a regional level						
OAS Inter-American Convention on the Prevention, Punishment and Eradication of Violence against Women ***"Convention of Belém Do Pará"***.[126]	√	√	√	NA	NA	NA
*The Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa (****Maputo Protocol****)*[127]	NA	NA	NA	√	√	-

Despite the significant progress in adhering to international agreements and strengthening national regulations on gender equality, the social and cultural norms, segregation, and the discrepancy between legislation and reality, create obstacles for women to exercise their full rights, especially in African countries.

ECUADOR

Ecuador has adopted and ratified international regional commitments in the area of human rights, equality and non-discrimination, of which those indicated in **Table 1** stand out. Ecuador's ***2008 Constitution***, in its Article 11, recognizes the Principle of Equality and Non-Discrimination, which establishes that "all persons are equal and shall enjoy the same rights, duties and opportunities". The "right to personal integrity", which includes a life free of violence in the public and private sphere, is also guaranteed by the Constitution.

[124] The primary goal of CEDAW is to eliminate discrimination against women and to promote the rule of law and respect for human rights around the world. It obligates state parties to condemn discrimination in all forms and to ensure a legal framework that provides protection against discrimination and embodies the principle of equality.
[125] The Beijing Declaration and Platform for Action is a global commitment to achieving equality, development, and peace for women worldwide. It was adopted in September 1995 at the Fourth World Conference on Women. It builds upon consensus and progress made at earlier UN conferences, particularly the Conference on Women in Nairobi in 1985.
[126] The Convention of Belém do Pará is an international human rights instrument concluded within the Organisation of American States (OAS), which calls for the establishment in the Americas of mechanisms for protecting and defending women's rights, and for combating violence against women's physical, sexual, and psychological integrity, whether in the public or the private sphere.
[127] The Maputo Protocol is an international human rights instrument established by the African Union that went into effect in 2005. It guarantees comprehensive rights to women including the right to take part in the political process, to social and political equality with men, improved autonomy in their reproductive health decisions, and an end to female genital mutilation.

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In 2014, the ***Organic Law of the National Councils for Equality*** was approved. Through this law, the ***National Council for Gender Equality*** was created. The ***Organic Law to Prevent and Eradicate Violence against Women*** was approved in 2018, with the aim of eradicating gender-based violence, transforming the socio-cultural patterns and stereotypes that naturalize, reproduce and perpetuate gender-based violence. In the labor context, the ***Organic Law for Labor Justice, and Recognition of Work at Home*** was approved in 2015. This Law also recognizes unpaid household work and incorporates it into the social security system. Regarding access to resources, the ***Organic Law of Rural Lands and Ancestral Territories*** (2016) includes the obligation of the State to guarantee the validity of the principle of social, gender and generational equity in its policies for access to rural land (Art. 7, literal l). In relation to the redistribution of rural land, it provides that priority be given to women and mothers who have assumed the maintenance of the home (Article 15. paragraph b).
The ***Law of Labor Protection for Women*** was approved in 1997, and established the mandatory integration of at least 20% women into the Superior Courts of Justice, Notaries and Registries. In addition, in 2009 the ***Electoral Organic Law and Political Organizations of the Republic of Ecuador, Code of Democracy*** was approved, through which the application of parity between men and women in candidacies for multi-personal elections is regulated. In January 2023, the ***Organic Law to Promote the Violet Economy*** was approved, and its main objective is to strengthen, promote, guarantee and execute the mainstreaming of the gender and multicultural approach through the generation of incentives and public policies that encourage the civil population to the empowerment of women in their diversity. The law promotes incentives for women preferentially in the agricultural, poultry, livestock, and fishing sectors. it also promotes co-responsibility and joint coordination of the public and private sectors.

Ecuador promotes gender equality from various public policy instruments such as the ***Plan for the Creation of Opportunities 2021-2025; National Agenda for Gender Equality (2021-2025[128])*** and the ***National Plan for the Eradication of Gender Violence (Presidential Decree 620 of 2007).*** This latter plan addresses gender-based violence and establishes an inter-institutional committee to coordinate public policies related to this issue.

The ***National Action Plan for the Management and Conservation of the Pomada Shrimp Resource (Protrachypene precipua)*** in Ecuador, was updated in 2021, and includes gender considerations, but not specifically structured in an action plan, or with gender-responsive indicators. The ***National Action Plan for The Conservation and Management of the Dorado (mahi-mahi) Resource in Ecuador (Plan Dorado)*** **2019-2024** formulated in 2019, completely lack of gender considerations in its different components. However, the **Program for Strengthening the Capacities of the Artisanal Fishing Sector** implemented by the MPCEIP, has (as one of its objectives) the insertion of women in the productive activities of artisanal fishing, and derived actions.

PANAMA

Panama has signed international conventions that guarantee equal rights and human dignity for women and men as shown on Table 1. Panama has also put in place a basic legal framework to promote the human rights of women, but many indicators still need to be improved. The ***Political Constitution of the Republic of Panama*** calls on authorities to ensure the effectiveness of individual and social rights and duties (Article 17) and establishes that there will be no jurisdiction or privileges, or discrimination based on race, birth, disability, social class, sex, religion, or political ideas (Article 19).

The Act on Women's Equality of Opportunity Law No. 4 of January 29, 1999, is the legal framework of reference in the country for gender issues, since it establishes a series of mechanisms for the development of public policies against gender discrimination, aimed at achieving the full integration of Panamanian

[128] Consejo Nacional para la Igualdad de Género/ONU MUJERES. 2022. Agenda Nacional Para la Igualdad de Género 2021-2025. , This is a technical-political tool whose main objective is to make effective the fulfillment of rights and the mainstreaming of gender equality in the country, through the link with the governing and executing entities for the implementation of public equality policies. https://www.igualdadgenero.gob.ec/wp-content/uploads/2023/01/221129-AGENDA-CNIG-ONU_V6-2_compressed.pdf2025/#:~:text=La%20Agenda%20Nacional%20para%20la%20Igualdad%20de%20G%C3%A9nero%2C,para%20la%20implementaci%C3%B3n%20de%20pol%C3%ADticas%20p%C3%BAblicas%20de%20igualdad.

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women in the political, economic, social, and cultural development of the country. It is worth noting that, political participation of women in Panama still faces significant deficiencies. Even though **Law No. 4 established the obligation to guarantee the participation of at least 30% of women in the different positions of political and governmental authority, this goal has not been achieved**[129]**,** with only 22.5% of seats in Parliament held by women. Other advances in regulations regarding women and gender issues in Panama are the ***Executive Decree No 31 (2001)*** by which the ***National Gender Training System*** was created; the ***Law No 38 (2001)*** which reforms and adds articles to the ***Criminal*** and ***Judicial Code*** on ***domestic violence and child and adolescent mistreatment and abuse***; the ***Law No 71 (2008)*** which creates the ***National Institute for Women***; and the ***Law No 82 (2013)*** which adopts prevention measures against violence against women, and reforms the Criminal Code to classify femicide and punish acts of violence against women.

The ***Public Policy on Equal Opportunities for Women*** **(*PPIOM*** by its Spanish acronym**)** published in 2012, seeks to end inequality, and to contribute to a society of women and men with equal access to economic, social, political, and environmental resources.

In the fisheries sector, Panama has an outdated legal framework. The ***Policy on Aquatic Resources of Panama for Fisheries and Aquaculture*** is currently being formulated, and a preliminary draft of the ***Fisheries Law*** is being discussed. In 2017, the government of Panama approved the ***Action Plan for Sustainable Fishing*** **which had an average of 24% of women participation in the consultation's forums for its formulation and includes gender considerations within its strategic guidelines.**

GUATEMALA

International conventions and accords signed and ratified by Guatemala are shown on **Table 1**. Since 1996, after the signing of the Peace Accords, several mechanisms specifically for women were created in the form of new laws and national policies. Moreover, some articles of the ***National Constitution*** are specifically aimed at protecting women's rights, confirming as guarantees: the protection of the family (art. 47); maternity (art. 52); and the protection of working women and regulation of the conditions in which they must provide their services (art. 102, sub. K).
Regarding specific legislation on gender and women issues, the ***Law for the Dignity and Comprehensive Promotion of Women, 7-99***, establishes actions and regulations for the development of women, the recognition of Guatemalan women's rights and their participation at all levels of the economic, political, and social life. In the area of workplace rights, Articles 147, 152 and 153 of the **Civil Code** set out protections for women's work, especially regarding working mothers. The ***Social Development Law, 42-2001,*** institutionalizes actions conducive to equality, and to eradicate and punish all types of violence, abuse, and individual and collective discrimination against women. The **Law to Prevent, Punish and Eradicate Domestic Violence, 97-96**, regulates the presentation of complaints, and the application of necessary protection measures to guarantee the lives of the victims.

Guatemala has also put in place public policy instruments designed to promote gender equality in the country, such as the ***National Policy for the Comprehensive Development of Women*** (***PNPDIM*** by its Spanish acronym), and the ***Plan for Equal Opportunities*** (***PEO*** by its Spanish acronym) ***2008-2023***. Gender equality is also addressed in the National Development Plan: ***K'atun Our Guatemala 2032***, ***General Government Policy 2020-2024*** and the ***Social Development and Population Policy***. Furthermore, government's strategies to combat inequality and discrimination against indigenous women are addressed in the ***Public Policy for the Elimination of Racism and Racial Discrimination***.

[129] PNUD. (2021). Estudio sobre Mitos y Percepciones sobre la Participación Política de las Mujeres y la Intención de Voto para Mujeres Políticas de Panamá. Recovered from: *https://www.undp.org/es/panama/publications/estudio-sobre-mitos-y-percepciones-sobre-la-participaci%C3%B3n-pol%C3%ADtica-de-las-mujeres-y-la-intenci%C3%B3n-de-voto-para-mujeres-pol%C3%ADticas*

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In the fisheries sector, Guatemala has a ***General Law on Fisheries and Aquaculture***, **80-2002**, but does not include provisions to achieve gender equality in activities related to fishing and aquaculture, likewise, the ***Policy for the Development of Hydrobiological Resources (2002)*** does not contain gender considerations. A draft for a new General Law on Fisheries and Aquaculture was introduced to the National Congress in 2022, **this bill considers gender equality as one of its principles[130].**

SENEGAL

Senegal has adopted and ratified international and regional commitments in the area of human rights, equality and non-discrimination, of which those indicated in **Table 1** stand out. Over the years, important steps have been taken to strengthen the legal framework for gender equality in Senegal. However, there is still a huge discrepancy between what the law states and the reality for the Senegalese women (Borgen Project, 2018[131]). ***Senegal's 2001 Constitution*** guarantees equality between women and men in its article 7: "*All human beings are equal before the law. Men and Women are equal in rights".* The ***2001 Constitution*** prohibits all employment, wage or tax discrimination between men and women (Art. 25, paragraph 2), but does not specify gender mainstreaming requirements on job advertisements, selection criteria, recruitment, hiring, terms and conditions, promotions, training, assignments, and termination (OECD,2019[132]).

The ***Labour Code***, Art.105 indicates that in *equal working conditions, professional qualification and performance, payment should be the same for all workers, whatever their origin, sex, age and condition.* There is currently **no law on violence against women (VAW)**, domestic violence or sexual harassment in Senegal. Consequently, women are not fully protected against the various forms of violence they may be victims of. In the absence of a law specifically targeting VAW, clauses within the ***Penal Code*** are used to criminalize various forms of violence, but with no recognition of gender-based violence. ***The Penal Code (Art. 297 bis***) addresses physical violence (but not sexual, psychological or economical) against a spouse with applicable criminal penalties. If an act of domestic violence causes death, the law prescribes life imprisonment (OECD, 2019).

The ***2001 Constitution*** *marked a crucial turning point, since it recognizes that women have a number of rights regarding land and non-land assets, some of which, although they had previously existed, were specifically described therein for the first time (CEDAW, 2013[133]); such as the right of women to purchase and own land* ***(Constitution, Art. 15, paragraph 2),*** as well as the right to own property, as their husbands do, and to manage their property themselves ***(Constitution, Art. 19; Family Code, Art. 371).*** The law also provides equal rights to married and unmarried women over the ownership, use, decision-making power, and use of land and non-land assets as collateral to apply for financial loans (***Family Code, Art. 371***). Likewise, married, and unmarried women have equal rights as men to open a bank account at a formal institution (***Civil Code, Art. 371***). However, despite efforts to protect women's rights, socio-cultural barriers and customs prevent women from being treated equally regarding access to land (OECD, 2019). The default marital regime is the separation of property (***Civil Code, Art. 368***) where each partner administers its original property.

The ***2001 Constitution*** (amended in 2016) in its article 7 mentions the equal access of women and men to all mandates and functions. Furthermore in 2010, Senegal introduced a ground-breaking law instituting full gender parity in all fully or partially elected bodies (***Act No. 2010-11 of 28 May 2010***). The law on parity has ensured a major step forward in female political participation in the country.

[130] Congreso de la República Guatemala, C. A. (2022). *Iniciativa que dispone aprobar Ley General de Pesca y Acuicultura*. Recovered from: https://www.congreso.gob.gt/assets/uploads/info_legislativo/iniciativas/38b2a-6075.pdf

[131] Borgen Project. (2018). *Women's Rights in Senegal*. Recovered from: https://borgenproject.org/what-is-being-done-and-needs-to-be-done-to-improve-womens-rights-in-senegal/

[132] OECD, SIGI. (2019). *Senegal report*. Organization for Economic Cooperation and Development (OECD) and OECD Development Centre's Social Institutions and Gender Index (SIGI).

[133] CEDAW. (2013). *Consideration of reports submitted by States parties under article 18 of the Convention, Combined third to seventh periodic reports due in 2010 : Senegal*. Committee on the Elimination of Discrimination against Women (CEDAW).

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In 2014, Senegal adopted the ***Senegal Emerging Plan (PSE)*** as its new development strategy and economic policy reference framework, which is based on three strategic pillars namely: (i) structural transformation of the economy and growth; (ii) human capital, social protection, and sustainable development; and (iii) governance, institutions, peace, and security. All these key priorities have ***gender and social inclusion*** aspects. Senegal also adopted the **National Strategy for Gender Equity and Equality** (SNEEG 2016-2026) which stands as a relevant tool for achieving equity and equality between women and men and for the achievement of a united society and sustainable development without discrimination in Senegal.

The Ministry of Environment and Sustainable Development has recently launched (2022) a **Gender Strategy for the Environment and Sustainable Development (SEGGD),** supported by the UNDP, **which covers the fishing sector**. However, no specific regulation for the sector that encompasses gender considerations was found.

MAURITANIA

Most relevant international and regional commitments on gender equality and human rights (as presented in **table 1**) have been ratified by Mauritania. According to the World Bank, although progress has been made over the past decade, women in Mauritania are still subject to discrimination in the legal realm (WB, 2021)[134]. Gender equality is enshrined in ***Article 1 of the Mauritanian constitution***, stating that "*the Republic guarantees equality before the law to all of its citizens without distinction as to origin, race, sex or social condition*". The Mauritanian legislation does not contain a precise definition of discrimination. (OEDC, 2019[135]). ***Under the Constitution***, women and men have equal rights to hold public office. In addition, the government has instituted several measures to ensure and increase the participation of women in the public and political space. Despite these measures, women are still underrepresented in public service, especially in the ministerial, judiciary and foreign service (CEDAW, 2014[136]; MPDF, 2014[137]).

The Labour Code prohibits gender discrimination in employment and mandates equal pay for work of equal value (US Department of State, 2016[138]; WB, 2015[139]). **However, women are prohibited to work in occupations that are likely to affect their health and physical integrity or injure their morality** (***Labour Code, Art. 247***). Moreover, women are prohibited from working night hours in specific environments, including in factories, plants or mining quarries (***Labour Code, Art. 166***). If married, a woman may pursue a profession outside of the marital home, yet she is bound to those professions that are considered appropriate **under Sharia law** (***Personal Code, Art. 57***). At national level, **there is no law to date that comprehensively addresses violence against women**. Individual laws address specific forms of violence, such as rape and female genital mutilation. Yet, with regard of other forms of violence, including spousal abuse and sexual harassment, there is no legal protection or remedy for women. The lack of a comprehensive legal framework to protect women and combat violence, combined with a cultural acceptance of practices that are harmful to women, have both enabled the perpetuation of violence against women in the country (CEDAW, 2014[140]).

[134] The World Bank. (2021). *Mauritania Economic Update: Why it is Essential to Enable Women to Participate Fully in Economic Activity? Recovered from:* https://www.worldbank.org/en/country/mauritania/publication/mauritania-economic-update-why-it-is-essential-to-enable-women-to-participate-fully-in-economic-activity

[135] OECD, SIGI. (2019). *Mauritania report*. Organization for Economic Cooperation and Development (OECD) and OECD Development Centre's Social Institutions and Gender Index (SIGI)

[136] CEDAW. (2014). *Concluding observations on the combined second and third periodic reports of Mauritania*. Committee on the Elimination of Discrimination against Women (CEDAW)

[137] MPDF. (2014). *Parallel Report to the Government's Report*. Mauritanienne pour les Droits des Femmes (MPDF).

[138] U.S Department of State. (2016). *2015 Report on International Religious Freedom – Mauritania*. United States Department of State.

[139] WB. (2015).*Women, Business and the Law 2016: Getting to Equal*. The World Bank (WB),

[140] CEDAW. (2014). *Concluding observations on the combined second and third periodic reports of Mauritania*. Committee on the Elimination of Discrimination against Women (CEDAW)

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Information relative to women's access to land and non-land assets is limited. *By the* ***Constitution (Art. 15)*** *and* **the** ***Land Reform Act (1983)***, women and men are guaranteed equal rights to own property and land. Yet, under ***Civil Law***, women cannot purchase or transfer land without the authorization of a third party, generally her guardian or a male family member (CEDAW, 2014). With regard to marriage, the ***Personal Status Code (Art. 58)*** ensures that women can manage their property, but only to a certain extent. Should a married woman give away more than a third of her property, her husband has the right to intervene. Therefore, women's access to land ownership is limited, particularly in the rural regions of the country where land is a key source of income (Human Rights Council, 2015[141]; GI-ESCR, 2014[142]).

In terms of women's **access to financial services**, specific regulations were not found during the research. However, the government developed a ***National Plan of Action for Rural Women 2009 - 2012***, which laid out specific actions to promote savings in rural communities, strengthen and develop microfinance structures, establish financial tools and financial management training programs for rural women (OECD, 2019[143]). And, according to the World Bank, women, regardless of marital status, have equal rights as men to open a bank account, access a line of credit, or register a business (WB, 2015[144]).

In 1995, the country adopted the ***National Strategy for the Promotion of Women*** for the period 1995-2000, updated later for the period 2005-2008[145]. A strategy for the 2015-2019 period was identified, but there is not public access to this version. It was not possible to identify if there is any current strategy at the time of preparing this gender analysis.

In 2018 the Ministry of Fisheries and Maritime Economy updated the ***Octopus Management Plan in Mauritania***, without including any gender consideration. The ***Small Pelagic Management Plan in the Mauritanian EEZ issued in 2022*** has just a reference of a breakdown by sex of the indicators related to employment in factories and fish processing. However, the plan does not encompass any concrete actions to mainstream gender in the value chain.

MOROCCO

As presented in table 1, Morocco has ratified the main international and regional commitments on gender equality and human rights. The ***2011 Constitution*** established the principle of equality between men and women and the equal enjoyment of civil, political, economic, social, cultural, and environmental rights and freedoms, according to conventions and international covenants duly ratified by Morocco (USAID, 2020[146]). Women and men have equal rights to run for elections and hold public and political office in the legislature and executive positions (***Constitution, Art. 6 & 17; Law 27-11, Art. 3***). However, women's access to decision-making positions at the national, regional and local levels remain low (OECD, 2019).

In the employment and occupation context, article 9 of the ***2003 Labour Code[147]*** prohibits discrimination in recruitment on the grounds of sex or marital status, and in its article 346 prohibits discrimination in remuneration between men and women. Women and girls are protected by the ***Law on Combating all Forms of Violence against Women, Law No. 103-13.*** However, it does not address marital rape. The Law could be strengthened by criminalizing marital rape as a form of

[141] Human Rights Council. (2015). *Universal Periodic Review Twenty-third session 2-13 - Mauritania*. Human Rights Council Working Group.
[142] GI-ESCR. (2018). *Parallel Report to the United Nations Committee on the Elimination of Discrimination against Women Mauritania, 58th Session*. Global Initiative for Economic, Social and Cultural Rights (GI-ESCR).
[143] OECD, SIGI. (2019). *Mauritania report*. Organization for Economic Cooperation and Development (OECD) and OECD Development Centre's Social Institutions and Gender Index (SIGI)
[144] WB. (2015). *Women, Business and the Law 2016: Getting to Equal*. The World Bank (WB)
[145] Just the strategy for the period 2005-2008 is public on the website of the Ministry of Social Action, Children and Family. https://masef.gov.mr/sites/default/files/2022-06/strategienationalepromotionfemininefr.pdf
[146] USAID. (2020). *Morocco Gender Analysis Final Report 2020*. United States Agency for International Development (USAID).
[147] Law No. 65-99 establishing the Labour Code by Decree No. 1-03-194 of 11 September 2003.

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violence against women and by clarifying the definition of domestic violence (UNDP et al, 2018[148]). In terms of access to resources, women and men have equal rights to own property, irrespective of their marital status (***Family Code Art. 49, and 207-208***). ***Article 35 of the Constitution*** guarantees the right to property and does not specify differences between men and women´s rights. In 2019, three laws were adopted (***Law 62-17*** *related to administrative supervision over Soulaliyate communities and the management of their properties;* ***Law 63-17*** *related to the administrative delimitation of the Soulaliyate lands and* ***Law 64-17*** *amending and supplementing Dahir n° 1-69-30 related to collective lands located in irrigated perimeters),* enabling the tribal Soulaliyate[149] women to receive the same economic benefits as men when their collective lands are sold or divided. Traditionally lands of these tribes, which are excluded from modern Moroccan land tenure laws, had been passed down only to male relatives (USAID, 2020[150]). When it comes to accessing bank loans or any other form of financial credit***, The Penal Code (Art. 431-432)***, prohibits discrimination by creditors on the basis of gender or marital status. ***The Code of Commerce (Art. 17)*** provides women with the same rights as men to sign a contract, whether married or not (OECD, 2019[151]). Nevertheless, *de facto* access to credit and formal savings shows a significant gap between women and men. In practice, married women tend to be required to provide the guarantee of their husband to secure a loan (WB, 2015).

The Government Plan for Equality (ICRAM[152]) constitutes the frame of reference for the convergence of interventions of government sectors regarding equality. ***The ICRAM II 2017-2021*** aims to achieve gender equality and empower all women and girls, based on a human rights-based approach. In march 2023, The Head of Government chaired the first meeting of the National Committee for Gender Equality and the Advancement of Women, for the presentation and adoption of the strategic framework of the government plan for equality **2023-2026**[153], which includes the women's economic empowerment program.

Morocco has also other national instruments that incorporate gender considerations, such as: ***the National Action Plan for Democracy and Human Rights (NAPDHR) (2018-2021),*** which ultimate goal is to attain further progress in terms of respect for human rights, rule of law, equality, equity, non-discrimination, equal opportunity, implementation of the gender approach, promotion of the human rights' culture and values, and consolidation of national achievements in economic, social, cultural, environmental and solidarity rights; ***the 3rd phase of the National Human Development Initiative (INDH) (2019-2023)*** that seeks to secure sustainable social and human development in order to ensure equality through among others, improving income and the economic integration of youth; and ***the National Moroccan Employment Strategy 2015–2025*** which main objectives are: 1) ensure the creation of jobs for youth that are sufficient in number and satisfactory in quality; and 2) reduce gender gaps and regional disparities in employment.

In 2019, The Department of Marine Fisheries adopted the ***Halieutis Strategy for the period 2009-2020[154]***, which promotes the fishing activity preservation, its resources, and the improvement of the sector, as well as the strengthening of its contribution to the economic and social development of the country. This strategy is based on the three dimensions of sustainable development; it integrates the economic, social, and environmental dimensions at the same time. In the social aspect, this strategy incorporates in particular, the improvement of the working and living conditions of fishermen and the ***promotion of women's work***. (MPM, 2020[155]).

[148] UNDP, UN WOMEN, UNFPA, ESCWA. (2018). *Morocco Gender Justice & The Law*. The United Nations Development Programme (UNDP), the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women), the United Nations Population Fund (UNFPA) and the United Nations Economic and Social Commission for West Asia (ESCWA).
[149] The Soulaliyate ethnic communities cover an area of nearly 15 million hectares and represent 10 million people, spread over 4,563 communities represented by 8,500 delegates (USAID, 2020).
[150] USAID. (2020). *Morocco Gender Analysis Final Report 2020*. United States Agency for International Development (USAID).
[151] OECD, SIGI. (2019). *Morocco report*. Organization for Economic Cooperation and Development (OECD) and OECD Development Centre's Social Institutions and Gender Index (SIGI)
[152] ICRAM: Initiative Concertée pour le Renforcement des Acquis des Marocaines
[153] https://lematin.ma/express/2023/plan-gouvernemental-legalite-2023-2026-lance/387807.html
[154] The renewed strategy for the period 2020-2030 was not available.
[155] MPM. (2020). *Projet de loi de finances* [finance bill] 2020. Ministry of Agriculture, Maritime Fisheries, Rural Development and Water and Forests (MPM in French).

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Despite a structural progress in terms of laws, social norms are prevalent, preventing women to fully exercise their rights.
Women in Morocco continue to face obstacles in social, economic, and political participation. These obstacles are a result of discriminatory legislative frameworks, social norms that restrict legal rights, and limited economic participation (WB, 2015[156]).

Factors, trends and the situational analysis of the target fishery value chains

ECUADOR *(Large Pelagic and Pomada Shrimp)*

Analysis of factors and trends

Ecuador has an estimated population of more than 17.5 million people, of which approximately 50.5% are women and 49.5 men (INEC, 2020[157]). The **GDP per capita in 2021 was USD 5,965.13[158]** (higher than Guatemala but lower than Panama). Ecuador is suffering the impact of COVID 19 particularly intensely, both due to some structural weaknesses in the country, as well as due to temporary circumstances[159]. According to WDI-World Bank data, the services sector contributed with more than half of the GDP (53.4%) in 2021, while the other sectors' contribution **was 9.4% agriculture/forestry/fishing**, 31.2% industry and 16.8% manufacturing.

The country **ranked 85 of 170 countries in 2021 with a GII**[160] **(Gender inequality index) of 0.362[161].** Ecuador shows a lower gender gap in the positions held by women in parliament with 39.4%, compared to the other GMC2 target countries in LA. However, the gap in the labor market participation remains relevant, with a 53.3% rate for women and 76.5% for men. **The country had a GDI**[162] **(Gender Development Index) of 0.980[163] in 2021,** corresponding to one of the highest values of the GMC2 targeted countries. While most of the GDI indicators have favorable values to gender equality, the *estimated gross national income per capita* (*PPP $) shows a significant gender gap and* still represents a great challenge to the advance of women in the country (women $ 7,451 and men $ 13,180). **In 2021, Ecuador ranked 95[164] of 191 countries with an HDI (Human Development Index) of 0.740,** classified in the *High Human Development category*, having the second highest value of the 3 GMC2 Latin American countries. **The multidimensional poverty rate (MPM) in Ecuador was 4.3%[165] in 2021 (lower than Guatemala (22.2%).** According to the World Bank [166], **by May 2021, 16% percent of all workers went from formal jobs before the pandemic to informal ones.**

[156] WB. (2015). *Empowering Women for a More Open, Inclusive and Prosperous Society. Morocco*. The World Bank (WB).
[157] https://www.ecuadorencifras.gob.ec/proyecciones-poblacionales/
[158] https://databank.worldbank.org/source/world-development-indicators
[159] https://www.oecd.org/dev/Impacto-macroeconomico-COVID-19-Ecuador.pdf
[160] The Gender Inequality Index (GII) is a composite measurement that assesses gender-based inequalities and disparities within a country. It is used to gauge gender disparities in three key dimensions: reproductive health, empowerment, and economic status.
[161] https://hdr.undp.org/data-center/documentation-and-downloads
[162] The GDI is calculated based on the same dimensions used for the Human Development Index (HDI), which is a composite measure of life expectancy, education (mean years of schooling and expected years of schooling), and per capita income. These dimensions are then adjusted to account for gender disparities. The GDI essentially provides insight into the average achievements of both women and men in a country in terms of health, education, and income.
[163] https://hdr.undp.org/gender-development-index#/indicies/GDI
[164] https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf
[165] https://www.worldbank.org/en/topic/poverty/brief/multidimensional-poverty-measure750588BF00QA/current/Global_POVEQ_ECU.pdf
[166] https://databankfiles.worldbank.org/data/download/poverty/987B9C90-CB9F-4D93-AE8C-750588BF00QA/current/Global_POVEQ_ECU.pdf

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Women, especially those with children, young adults, and people with less education, have been more negatively impacted by job losses. Ecuador had 36.8% of prevalence of moderate or severe **food insecurity in the population** in the 2019-2021 period (FAO, IFAD, UNICEF, WFP and WHO. 2022) [167].

Gender roles and sexual division of labor

According to the INEC, **women in Ecuador spend an average of four times more on unpaid work than men** (INEC, 2012[168]). Unemployment and Underemployment of the September 2020 round, there are 3,300,000 women who make up the Economically Active Population (EAP) of the country; of which only 26.4% have full employment, 21.8% are underemployed, 8% are unemployed, 14.8% earn less than men without prejudice to carrying out work of equal value; and, 27% have less access to adequate employment than a man (National Assembly Republic of Ecuador, 2023[169]).

Women have a crucial role in marine ecosystems, usually in small-scale sectors such as artisanal fisheries, however, there are persistent inequities and their contribution is often not recognized or financially rewarded. Women generally occupy tasks that are less valued and pay less, furthermore, there are limitations of disaggregated data to understand the roles and contributions of women in fisheries (UNDP et al, n.d[170]).

The GMC1 gender strategy formulation process had access to the Commercial Intelligence System (SICOM in Spanish), and reported that in the first quarter of 2019, 48,120 jobs were registered in the ***fishing sector*** (not including shrimp farming), of which approximately 96.7% were men and only 3.3% were women. It is important to point out that in the case of women, 78.4% of these jobs were classified as inadequate employment[171]. In the same quarter, in the ***sector of processing and conservation of shrimp, fish and other processed aquatic products***, 50,754 jobs were registered, of which approximately 44% were women and 56% men. Of the registered women's jobs in this sector, 27% were considered inadequate employment.

As of **August 2021, the number of artisanal fishers registered in the Integrated Aquaculture and Fisheries System** corresponded to 27,125[172], of which just **15% were women**. Information provided by the MPCEIP in December 2022 (generated by the SIAP[173]), shows that to the date, 31,598 permits were issued to fishers (**85% to men and 15% to women**), 3,025 permits to wholesalers (79% to men, 21% to women) and 5,107 permits to retailers (23% to women and 77% to men).

[167] FAO, IFAD, UNICEF, WFP and WHO. 2021. The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable Rome, FAO. https://www.fao.org/documents/card/en/c/cc0639en

[168] INEC. (2012). *Encuesta de Uso del Tiempo 2012* [2012 Time Use Survey]. Instituto Nacional de Estadística y Censos (INEC)

[169] National Assembly Republic of Ecuador. (2023). Organic Law of Violet Economy. Recovered from: https://nmslaw.com.ec/wp-content/uploads/2023/01/oficio_no._pan-sejv-2023-009.pdf

[170] UNDP, MPCEIP, SFP, GEF (n.d). *Mujeres y hombres en pesquerías- Cadenas Mundiales Sostenible de productos del mar* [Women and men in Fisheries-Sustainable World Chains of Seafood]. United Nations Development Programme (UNDP), Ministerio de la Producción, Comercio Exterior, Inversiones y Pesca (MPCEIP), Sustainable Fisheries Partnership (SFP) and The Global Environment Facility (GEF).

[171] Inadequate employment: Persons with employment who do not meet the minimum conditions of hours or incomes and during the week of reference, they receive labor incomes below the minimum wage and / or they work less than 40 hours a week and may or may not wish be available to work additional hours. (INEC, 2015)

[172] Coello, S., Rosero, O., Pazmiño, A. & Mosquera, G. (2021). *Análisis rápido de la gobernanza de las pesquerías marinas en el Ecuador continental. Informe preparado para WWF-Ecuador* [Quick analysis of the governance of marine fisheries in continental Ecuador. Report prepared for WWF-Ecuador. USAID Project Strengthening the Governance of Natural Resources in Ecuador.

[173] Integrated Aquaculture and Fisheries System of Ecuador

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The pomada shrimp fishery has been developed in Ecuador for more than 60 years, offering an employment alternative for men and women in the coastal zone of Ecuador, based on the activities of industrial and artisanal fishing in this area (Viceministerio de Acuacultura y Pesca del Ecuador, 2021)[174]. **The most visible aspect of women's participation in pomada shrimp fishery is their role in processing the catch**. Women are known to work in artisanal and communal peelers and in processing plants, however, there are no precise and up-to-date figures on the number of women linked to this activity (Coello et al., 2021[175]).

Although there is no available data to make visible the role of women in large pelagic value chain, according to Coello et al. (2021), it is known that in the dorado (mahi-mahi) fishery, **women participate mainly in white fish processing plants** in the evisceration and filleting of animals, and in initiatives to transform fishing to add value (hamburgers, sausages). The same source points out that there is also evidence of women who manage boats (ship owners).

Access and control over resources

According to Flores (2017[176]), there were common characteristic in several geographic locations targeted by a GEF Fishery Project in Ecuador that revealed the invisible role of women in the fishing sector, as well as empirical learning due to **lack of access to training opportunities** for women, and the **lack of women participation in local and national dialogue spaces**.

Financial opportunities in the post-harvesting activities of the fishing sector are limited. At the same time, **women's access to higher-paid fishing jobs** is restricted because they are often not able to take on a more important role in the sector (Ross, 2019[177]).

From the experience of women's fishing associations in Ecuador, it has been highlighted that women often lack the technical and commercial skills to develop and undertake fishing projects. The lack of capacity in commercial practices, such as business planning and commercialization, makes it practically impossible for women to attract the necessary financing for fishing businesses to start up and remain sustainable (Ross, 2019[178]).

Power and Participation in decision making

The limited presence of women in decision-making spaces linked to economic policies and the biased vision of markets as the only economical setting and source of wealth, have triggered that the economic organization responds to functional logics with a system that has relegated women and has subjected them to subordination and dependency within the labor market, while they achieve a key upkeep role in other non-mercantile settings, particularly caring for others (UN WOMEN, n.d.[179]). According to Flores (2017) marked gender roles in households in Ecuador limit women's empowerment and leave sequels limiting their ability to participate and exercise leadership in artisanal fishing organizations.

[174] Viceministerio de Acuacultura y Pesca del Ecuador. (2021). *Plan de Acción Nacional para el Manejo y la Conservación del Recurso Camarón Pomada (Protrachypene precipua)* [National Action Plan for the Management and Conservation of the Pomada Shrimp Resource (Protrachypene precipua)]. Coastal Fisheries Initiative Project. United Nations Development Program (UNDP) and WWF-Ecuador.
[175] Coello, S., Rosero, O., Pazmiño, A. & Mosquera, G. (2021). *Análisis rápido de la gobernanza de las pesquerías marinas en el Ecuador continental. Informe preparado para WWF-Ecuador* [Quick analysis of the governance of marine fisheries in continental Ecuador. Report prepared for WWF-Ecuador]. USAID Project Strengthening the Governance of Natural Resources in Ecuador.
[176] Flores, K. (2017). *Gender Strategy of the GEF project "Coastal Fisheries Initiative for Latin America*". The Global Environment Facility (GEF).
[177] Ross, J. (2019). *Making it possible for women to thrive in artisanal fisheries in Ecuador*. CESOSACO. https://www.ceso-saco.com/making-it-possible-for-women-to-thrive-in-artisanal-fisheries-in-ecuador/
[178] Ross, J. (2019). *Making it possible for women to thrive in artisanal fisheries in Ecuador*. CESOSACO. https://www.ceso-saco.com/making-it-possible-for-women-to-thrive-in-artisanal-fisheries-in-ecuador/
[179] UN WOMEN (n.d). Ecuador. Recovered from: https://lac.unwomen.org/en/donde-estamos/ecuador

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Flores (2017) gathered information from eight artisanal and small-scale fishing cooperatives in Ecuador and demonstrated that the distribution of income and household decision-making between men and women are determined by basic family needs such as food, education of children and sometimes health care. However, some experiences described by women who belong to these organizations in the same study, consider that "*machismo*"[180] in the household is the most significant contributing factor that maintains a patriarchal division of labor in which women must focus solely on family and household chores.

PANAMA *(Large pelagic and shrimp)*

Analysis of factors and trends

Panama has an estimated population of more than 4.3 million people, of which approximately 50 % are women and 50% men (INEC, 2021)[181]. The **GDP per capita of Panama was USD 14,617.60**[182] in 2021 (the highest value compared to Ecuador and Guatemala), which places it as a high-income country. Panama has been one of the fastest growing economies in the world in the past decade. Services sector represented 66.0% of GDP in 2021, while **agriculture, forestry and fishing sectors contributed to 2.6%**, industry 27.7%, and manufacturing 14.0% (WDI-World Bank data[183]). **Trade and capture fisheries production in Panama have been reduced in the last two decades. In 2020 fisheries accounted for 0.30% of GDP**[184].

In 2021, Panama ranked 96 of 170 countries with a GII (Gender inequality index) of 0.392[185]**.** Adolescent birth rate remains high at 69.9 (births per 1,000 women ages 15–19)**,** and there is still a large gap in the **share of seat in parliament (22.5% held by women)**. In the same year of reference**, the country had a GDI (Gender Development Index) of 1.017**[186]**,** corresponding to the highest value of the GMC2 countries in Latin America. **Panama ranked 61**[187] **of 191 countries with a HDI (Human Development Index) of 0.805 in 2021** (higher for women 0.812 than men 0.798), classified in the *Very High Human Development* category. Along with the economic growth, the middle class has been expanding in Panama, however, **in 2017**[188] **the Multidimensional Poverty Headcount Ratio (% of total population) amounted to 19.1%.** Panama has one of the highest levels of inequality in the Latin American region**.** Rural areas are disproportionally poor, with a rate of extreme poverty six times higher than in urban areas. According to UNICEF[189], although Panama has made significant progress in reducing malnutrition rates; population in rural areas are vulnerable and could be particularly affected by inflation and rising prices of food in the current context.

Gender roles and sexual division of labor

[180] Machismo: Latin America's myth-cult of male supremacy.
[181] https://www.inec.gob.pa/publicaciones
[182] https://databank.worldbank.org/source/world-development-indicators
[183] https://databank.worldbank.org/source/world-development-indicators
[184] https://www.fao.org/3/cb9798en/cb9798en.pdf
[185] UNDP.(2022). The 2021/2022 Human Development Report. United Nations Development Programme (UNDP). Recovered from: https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf
[186] https://hdr.undp.org/gender-development-index#/indicies/GDI
[187] UNDP.(2022). The 2021/2022 Human Development Report. United Nations Development Programme (UNDP). Recovered from: https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf
[188] Most recent year available.
[189] UNICEF. (2020). Country programme document Panama. United Nations Children's Fund. Recovered form: https://www.unicef.org/executiveboard/media/3176/file/2021-PL9-Panama_CPD-EN-ODS.pdf

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Women in Panama have a higher total workload (paid and unpaid) per week, equivalent to 68.2 hours, compared to men who work an estimate of 59.4 hours. The average time devoted to unpaid work for women, according to the latest Measurement of the Time Use Survey in 2011, is 29.9 hours, while men dedicate 14.2 hours.[190].

Even when there have been advances in reducing gender gaps at a national level, disparities still remain. **Labour market rate participation for women represents 41% of total, while participation of men is 59%**[191]. The 2014 Labor Market Survey showed that **men received a monthly average of 577.80 dollars versus 570.30 dollars received by women**[192]. The sexual division of labor in the labor market and in household chores, as well as social patterns and norms, follows the patriarchal tradition which overloads the role of women, limit their access to goods and resources and their opportunities for development. The economic activities carried out by men and women are related to the sexual division of labor and the gender roles historically assigned, which is reflected on lesser formal participation of women in certain sectors and activities. **According to national statistics female employment in the agriculture, forestry and fisheries sector is only 8%**[193]**.**

Although there aren´t national statistics on the participation of women in the fisheries' value chain, a ***Structural Survey of Artisanal Fisheries and Aquiculture in Central America 2009-2011***[194] carried out by the regional fisheries advisory body of the Central American Integration System (SICA) reports a total of 20,300 people who participate in the artisanal fishing activity in Panama, of which the equivalent to **3.4% are women**. However, it is possible that this estimate is understated. The survey report describes the sexual division of labor in artisanal fisheries, asserting that **men are generally responsible for preparing and carrying out the fishing trips, as well as the maintenance of boats, motors, and gear, while women tend to be more involved in processing and selling**. There is also evidence of the participation of women in the fisheries value chain[195] **as intermediaries, boat owners and restaurant managers.** The same survey results estimate that **around 62% of the women that are involved in the artisanal fishing activity directly participate in catching activities, on a permanent or sporadically basis**. Women also participate in preparation activities such as **conditioning and repair of the fishing gear**. On the other hand, in communities where tourism is widespread, women are also involved in processing, commercialization and product transformation for the tourist industry.

Regarding jobs generated in the fishing value chain[196], it is estimated that around **21,665 jobs are generated in the catching phase, of which 86% correspond to artisanal fishing and 14% to industrial fishing**. **As for processing and marketing, 12,110 jobs are estimated**. This means that in the fishing value chain, 64% of job sources correspond to capture, 19% to processing plants and 17% to retail sales. In artisanal fisheries, there is a greater participation of women in commercialization compared to other activities in the production chain. On average, in Central America 2 out of 5 point of sale workers are female and 70.6% of

[190] INEC. (2011). *Encuesta de Uso del Tiempo 2011*. Instituto Nacional de Estadística y Censo (INEC) https://www.inec.gob.pa/publicaciones/Default3.aspx?ID_PUBLICACION=515&ID_CATEGORIA=5&ID_SUBCATEGORIA=63 f
[191] https://databank.worldbank.org/source/world-development-indicators
[192] INAMU. (2016). *VII Informe Nacional "Situación de la Mujer en Panamá* 2014-2016. Instituto Nacional de la Mujer (INAMU)
[193] Employment in agriculture, female (% of female employment) (modeled ILO estimate) - Panama | Data (worldbank.org)
[194] OSPESCA. (2009-2011). *Encuesta Estructural de la Pesca Artesanal y la Acuicultura en Centroamérica 2009-2011*. Organización del sector pesquero y acuícola del Istmo Centroamericano. Recovered from: http://www.sica.int/busqueda/busqueda_archivo.aspx?Archivo=renc_75461_2_12032013.pdf
[195] The survey considers continental and marine artisanal fisheries, including small and large pelagic fish, and shrimp, among other varieties.
[196] Information considers artisanal and industrial fishing and aquaculture products.

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all of them work full time[197]. According to a representative of an NGO working in the sector[198], **in shrimp artisanal fisheries women are mainly involved in processing, marketing, and selling of products** including the commercialization to restaurants and other businesses in the tourist industry. Moreover, OSPESCA (2009-2011) estimates that in Central America, more than 95% of the people that work in the processing and packaging of the fishing exporting products are women, which was corroborated in the interviews conducted to sectorial representatives in Panama.

Access and control over resources

In Panama, an estimated **29% of women are heads of household, compared to 71% of households where the head of the family is a man[199]**. There is a large gap between men and women in land ownership: **62.4% of farming lands belong to men and only 38.6% to women**[200]. According to a representative of a women leaders' network[201], in fishing communities, men still hold control over monetary resources, even when women oversee processing and selling of fishing products.

Access to credit and other resources is the main obstacle to women's entrepreneurship in Panama[202]**.** According to a representative of the Aquatic Resources Authority of Panama[203], the institution provide training to women from fishing communities aimed at adding value to the catch and creating women entrepreneurial groups. However, women in the fisheries sector face barriers such as **lack of access to protection services, justice, education, and decent employment** conditions**.** Women have **limited access to funding sources, technical assistance,** as well as **access to traditional markets, technology and connectivity**. Nonetheless, there is also evidence from past projects in the Central American region, that women who have adequate technologies and financing are capable to work as small-scale entrepreneurs, owning boats, tools, and investment capital, which stimulates the economies and promotes the well-being of their families and community (SMT-COMMCA, 2021)[204].

Power and Participation in decision making

In Panama, in the last two decades, there has been a substantial improvement in the representation of women cooperatives, business organizations and sectorial associations, however, **there are still important gaps, especially in terms of attaining leadership positions** in these organizations. On the other hand, there is

[197] OSPESCA. (2009-2011). Encuesta Estructural de la Pesca Artesanal y la Acuicultura en Centroamérica 2009-2011. Organización del sector pesquero y acuícola del Istmo Centroamericano. Recovered from: http://www.sica.int/busqueda/busqueda_archivo.aspx?Archivo=renc_75461_2_12032013.pdf

[198] Consulted by the gender specialist of the GMC2 PPG team in December 2022.

[199] INAMU. (2016). VII Informe Nacional "Situación de la Mujer en Panamá" 2014-2016. Instituto Nacional de la Mujer (INAMU)

[200] PNUD. (2022). Acceso de las Mujeres a la Tierra y la Propiedad en Panamá. Programa de las Naciones Unidas para el Desarrollo (PNUD). Recovered from: https://www.undp.org/es/panama/publicaciones/acceso-de-mujeres-la-tierra-y-la-propiedad-en-panama

[201] Interviewed in December 2022 during the development of the GMCII Gender Strategy.

[202] OIT/CoNEP/ENRED. (2022). *Las Mujeres en el Desarrollo Empresarial*. Informe WED Panamá. Lima: OIT, Oficina Regional para América Latina y el Caribe https://www.conep.org.pa/wp-content/uploads/2022/09/Informe-WED-CERALC-Panama%CC%81.pdf

[203] Questionnaire completed on December 2022 during the development of the GMC II Gender Strategy.

[204] STM-COMMCA. (2021). *Guía para la Reactivación Económica de las Mujeres Rurales en el Sector de la Pesca y Acuicultura para los Ámbitos Regionales y Nacionales en los Países de la Región SICA, pos- COVID-19*. https://www.sica.int/download/?odoc_128510_1_15102021.pdf

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also a territorial inequality in the participation of women in associations, **occurring to a much lesser degree in rural than in urban areas** (OIT/CoNEP/ENRED (2022)[205].

According to a representative of a women leaders' network[206], women working in the commercialization phase aren't typically organized in associations, as these are mainly comprised by fishermen and are mostly created to deal with permits and authorizations. Fishing associations in general at the national level have little leverage and influence for advocacy and decision-making.

In recent years there has been an increase in the participation of women in fishing organizations, and although there are no precise data, there are indications of **public and private efforts to promote the associativity of women, and through them the channeling of training transfer and access to resources**. Particularly in Southern Panama, in the Azuero Peninsula and the Gulf of Montijo[207], projects have been executed aimed at promoting sustainability and the empowerment of local communities with a gender approach through the promotion of women associativity in the fisheries sector, with a focus on training and capacity building for product transformation. These efforts have managed to increase the presence of women in local fishing organizations in decision-making positions, and even the creation of associations of women that work in the catching phase. However, according to the UNDP Gender Focal Point[208], although there is participation of women, and women leadership in fishing organizations, they still have lesser representation and control over decision making than their male counterparts.

GUATEMALA *(Large pelagic)*

Analysis of factors and trends

Guatemala had an estimated population of more than 17.6 million people[209] in 2023, of which approximately 51% are women and 49 men (INE, 2023). Guatemala is the largest economy in the Central American region. The Gross Domestic Product **(GDP)** of Guatemala was **USD 85.9 billion [210]** in 2021, with an **8% annual growth**. **Agriculture, forestry and fishing** is the most labor-intensive sector in Guatemalan economy, which **employs around 31% of the workforce**. However, the **role of the fishing sector is considered small in the national economy, possibly less than 1% of GDP** (*FAO*[211]). **The GDP per capita of Guatemala was USD 5,025.54[212]** in 2021 (the lowest compared to Ecuador and Panama) which places it as an upper middle-income country.

[205] OIT/CoNEP/ENRED (2022). Las Mujeres en el Desarrollo Empresarial. Informe WED Panamá. Lima: OIT, Oficina Regional para América Latina y el Caribe https://www.conep.org.pa/wp-content/uploads/2022/09/Informe-WED-CERALC-Panama%CC%81.pdf
[206] Consulted by the gender specialist of the GMC2 PPG team in December 2022.
[207] During the information gathering phase at least (2) projects were identified: *Fortalecimiento de OSC pesqueras como actores de gobernanza y desarrollo para la inclusión social, la sostenibilidad marina y la prosperidad equitativa en Golfo de Montijo, Panamá* (Unión Europea) and *Azuero Sostenible conservación y uso sostenible de la biodiversidad en las zonas de producción marino-costeras (UNDP).*
[208] Interviewed in November 2022 during the development of the GMC II Gender Strategy.
[209] https://www.ine.gob.gt/ine/proyecciones/
[210] https://databank.worldbank.org/source/world-development-indicators
[211] https://www.fao.org/fishery/en/facp/gtm
[212] https://databank.worldbank.org/source/world-development-indicators

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According to the 2021 Gender Inequality Index (GII), Guatemala ranked 121st out of 170 countries with a GII of 0.481[213]. Besides a high maternal mortality ratio and adolescent birth rate**,** Guatemala exhibits large gaps in the **share of seat in parliament (19.4% held by women)** and the **female labour force participation rate (37.4%)**. In the same year of reference**, the country had a GDI (Gender Development Index) of 0.917[214],** corresponding to the lowest value of the GMCII target countries in Latin America. This value also indicates large social gaps between men and women and a significant gender gap in the *estimated gross national income per capita* indicator (Women USD 4,909 and Men USD 12,614). **In 2021, Guatemala ranked 135[215] of 191 countries with a HDI (Human Development Index) of 0.627** (higher for men 0.650 than women 0.596), classified in the *Medium Human Development* category. **The Multidimensional Poverty Rate (MPM) registered in Guatemala was 22.2%** in 2014[216]. The World Bank Macro Poverty Outlook[217] highlighted that the impact of the pandemic increased extreme poverty in 2020. According to the latest report on the *State of Food Security and Nutrition in the World 2022[218]***, Guatemala had a 55.9%** ***of prevalence of moderate or severe food insecurity in the population*** **in the 2019-2021 period** and **16 % of** ***prevalence of undernourishment in total population (PoU)***, higher than Ecuador (15.4%) and Panama (5.8%) in the same period.

Gender roles and sexual division of labor

Women are in disadvantage in Guatemalan society as gender gaps impact women's participation in the formal economy, the exercise of political and social leadership, and access to goods, resources, services, and safety.[219]. In average, **women in Guatemala dedicate 6.1 hours of their day to non-compensated labor** and 7.5 hours to paid labor; in contrast, men dedicate 2.6 hours to non-compensated labor and 8.6 hours to paid labor (ENCOVI, 2011[220]). **In 2019**, **women worked mainly in the services sector (73%[221]), and in less proportion in the agriculture, forestry, and fisheries sector (10%[222])**. **Women's wages represent 74% of the men's wage average** (INE, 2022[223]). In many cases, women's work in agricultural, forestry and fisheries activities is not monetarily compensated, as it is considered a part of the men's income[224].

The ***Structural Survey of Artisanal Fisheries and Aquiculture in Central America 2009-2011***[225] reported a total of 18,600 people who participate in the **artisanal fishing activity in Guatemala**, of which 1,600 are women, equivalent to 8.6%. However, it is possible that this estimate is understated, as the participation of women is often informal, and many of the fishing related activities they develop are considered housework. In Guatemala, there is no information disaggregated

[213] https://hdr.undp.org/data-center/documentation-and-downloads
[214] https://hdr.undp.org/gender-development-index#/indicies/GDI
[215] https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf
[216] WB. (2018). Multidimensional Poverty Measure (4th edition, circa 2018). World Bank, Recovered from: https://www.worldbank.org/en/topic/poverty/brief/multidimensional-poverty-measure
[217] WB. (n.d). *GUATEMALA*. The World Bank. Recovered from: https://thedocs.worldbank.org/en/doc/e408a7e21ba62d843bdd90dc37e61b57-0500032021/related/mpo-gtm.pdf
[218] FAO, IFAD, UNICEF, WFP and WHO. 2022. The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable. Rome, FAO. https://www.fao.org/documents/card/en/c/cc0639en
[219] https://www.usaid.gov/guatemala/women
[220] INE. (2014). Encuesta Nacional de Condiciones de Vida 2014 bwc7f6t7asbei4wmuexonr0oscpshkyb.pdf (ine.gob.gt)
[221] Employment in services, female (% of female employment) (modeled ILO estimate) - Guatemala | Data (worldbank.org)
[222] Employment in agriculture, female (% of female employment) (modeled ILO estimate) - Guatemala | Data (worldbank.org)
[223] INE. (2022). Encuesta nacional de Empleos e Ingresos ENEI 2022. Instituto Nacional de Estadística (INE)
[224] UN WOMEN. (s.f). Guatemala. Recovered from: https://lac.unwomen.org/en/donde-estamos/guatemala
[225] OSPESCA (2009-2011) Encuesta Estructural de la Pesca Artesanal y la Acuicultura en Centroamérica 2009-2011 http://www.sica.int/busqueda/busqueda_archivo.aspx?Archivo=renc_75461_2_12032013.pdf

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by gender in the fisheries sector. There is also no reliable record of artisanal fisheries in the country. However, there is recognition from the sector of a high participation of **women in fishing activities, particularly in processing, marketing, and selling of products (in the formal and informal market), which is not visible enough due to lack of data**[226] (FAO, 2018).

According to Boix Morán et. al. (2016)[227] in the artisanal fishing communities **the domestic unit or household behaves like a fishing family business**. In general, members of the family group are involved in fishing related activities in different ways, according to their time and capacities. Domestic or reproductive tasks and economic or productive tasks are not clearly distinguished. **Women are responsible for domestic work. However, her participation in the family business can be significant as well as that of their children**[228].

In Guatemala, fishing for large pelagic is carried out by both artisanal and medium and large-scale industrial fisheries. The main target species of artisanal fisheries are mahi-mahi or dorado ***(Coryphaena hippurus)*** and various species of shark, some of which are sold for further industrial processing and exporting[229]. There isn't data on the participation of women in industrial scale fisheries for Guatemala. **OSPESCA (2009-2011) estimates that in Central America, more than 95% of the people that work in the processing and packaging of the fishery exporting products are women**[230], the same as in the collection centers established in some artisanal fishing communities[231]. However, during information gathering in the field[232], it was identified that participation of women in the large processing, particularly in the dorado or mahi-mahi (*Coryphaena hippurus*) could be in the minority due to minimum processing of product (gutted and headed). According to representatives of the Guatemalan Exporters Association (AGE-EXPORT)[233], there isn't precise data on women that work in the national fish processing industry, and they are not organized or represented in associations.

Access and control over resources

Although there are no legal restrictions on women's access and rights to land and non-land assets, the percentage of female landowners is extremely low (only 8%)(UNDP, 2017[234]). Women have equal rights as men to obtain credit. However, in practice, a considerable issue faced by women in Guatemala, especially in rural areas, is lack of documentation, which directly hinders their ability to access formal financial resources (CEDAW, 2008[235]).

[226] FAO. (2018). Diagnóstico del sector de la pesca y la acuicultura en Guatemala. https://funcagua.org.gt/wp-content/uploads/2020/04/2018.-Diagn%C3%B3stico-del-sector-de-la-pesca-y-la-acuicultura-en-Guatemala.-FAO.pdf

[227] Boix Morán J.L., Franco Arenales, I. Morales Molina S.E. (2016) Participación Social de las Mujeres dentro de las Unidades Productivas de la Pesca Artesanal en el Pacífico Suroriental de Guatemala, Universidad de San Carlos de Guatemala https://digi.usac.edu.gt/bvirtual/informes/puiah/INF-2016-22.pdf

[228] Boix Morán et. al. (2016) found that in artisanal fishing communities, children perform activities related to the fishing activities, as in the sell and distribution of product, condition of the fishing gear or they participate in fishing trips. These tasks can be eventual and are assigned according to the children's age and capacities.

[229] FAO. (2018). Diagnóstico del sector de la pesca y la acuicultura en Guatemala. https://funcagua.org.gt/wp-content/uploads/2020/04/2018.-Diagn%C3%B3stico-del-sector-de-la-pesca-y-la-acuicultura-en-Guatemala.-FAO.pdf

[230] OSPESCA. (2009-2011). Encuesta Estructural de la Pesca Artesanal y la Acuicultura en Centroamérica 2009-2011 http://www.sica.int/busqueda/busqueda_archivo.aspx?Archivo=renc_75461_2_12032013.pdf

[231] Boix Morán J.L., Franco Arenales, I. Morales Molina S.E. (2016) Participación Social de las Mujeres dentro de las Unidades Productivas de la Pesca Artesanal en el Pacífico Suroriental de Guatemala, Universidad de San Carlos de Guatemala https://digi.usac.edu.gt/bvirtual/informes/puiah/INF-2016-22.pdf

[232] Carried out in December 2022 during the Project Preparation Phase (PPG).

[233] Interviewed in December 2022 during the development of the GMCII Gender Strategy.

[234] UNDP. (2017). El derecho a la vida: Las mujeres y el acceso a la tierra http://www.gt.undp.org/content/guatemala/es/home/ourperspective/ourperspectivearticles/2017/ 02/16/el-derecho-a-la-vida-las-mujeres-y-el-acceso-a-la-tierra.html

[235] CEDAW. (2008). Consideration of reports submitted by States parties under article 18 of the Convention on the Elimination of All Forms of Discrimination against Women, Seventh periodic report of States parties, http://www.ohchr.org/EN/HRBodies/CEDAW/Pages/CEDAWIndex.aspx 2008

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In the artisanal fisheries, the level of **labour informality affects women and mainly female heads of household**. This informality is observed in the percentage of temporary work carried out without remuneration or underpaid, **lack of access to social protection and health services, lack of training, low capacity for association, lack of access to financial resources (loans and credit), and the limited access to goods and services** to assume administration and leadership roles in the family business, or to improve the techniques and processes in the activities that they already carry out.
W**omen in the fisheries sector have little access to training resources**, which greatly limits economic activity. It is also important to highlight that women maintain knowledge of the commercialized species and their value in the market. In artisanal fishing communities, women have control over the use of fishing products and their destination, whether for commercialization or for self-consumption (Boix Morán J.L., Franco Arenales, I. Morales Molina S.E. (2016)[236]. However, women don't usually control the monetary resources produced by their economic activity when they are not the head of household.

Power and Participation in decision making

Even though women contribute about half of the household income from activities related to fishing and supplementary jobs or businesses, **control of the household economy is exercised mainly by men.** On a survey conducted in 2020 to women of 5 fishing communities in Guatemala, 55% of the women mentioned that the main person in charge of managing the money and expenses of the family is the man (husband), 14% mentioned that it is the woman (wife) who manage the resources, while 28% indicate that it is a work that they carry together[237]. In the same way, in most families, the male head of household makes all major decisions concerning land-use[238].

According to Boix Morán et. al. (2016) in fishing communities there is often a division in household decision-making. Decisions regarding boats, equipment and fishing supplies are made by men, while decisions regarding the needs of the family and the domestic sphere are made by women or in consensus with men[239].

As has been mentioned, in Guatemala there is little association capacity in the fisheries sector, and for women's association especially, as the artisanal fishing activity is carried out individually within the family business unit. However, although no precise data was found, **there is presence of women and gender considerations in the main artisanal fishing trade association in Guatemala, FENAPESCA**[240].This represents an advance forward to make visible the role of women in the fisheries sector, even though men still tend to occupy the main leadership roles and govern the fishing cooperative and associations. The latest ENEI survey[241] carried out in 2022 by INE reflects that of the management positions in Guatemala, only 35% are women.

SENEGAL *(Small Pelagic Fish and Octopus)*

Analysis of factors and trends

[236] Boix Morán J.L., Franco Arenales, I. Morales Molina S.E. (2016) Participación Social de las Mujeres dentro de las Unidades Productivas de la Pesca Artesanal en el Pacífico Suroriental de Guatemala, Universidad de San Carlos de Guatemala https://digi.usac.edu.gt/bvirtual/informes/puiah/INF-2016-22.pdf
[237] Fundación Mundo Azul. (2020). *Women facing COVID-19 in the fishing communities of Guatemala*. Recovered from: *https://fundacionmundoazul.com/wp-content/uploads/2020/08/Women-facing-Covid.pdf*
[238] OECD. (2019). *Guatemala report*. Recovered from: https://www.genderindex.org/wp-content/uploads/files/datasheets/2019/GT.pdf
[239] Boix Morán J.L., Franco Arenales, I. Morales Molina S.E. (2016). P*articipación Social de las Mujeres dentro de las Unidades Productivas de la Pesca Artesanal en el Pacífico Suroriental de Guatemala*. Universidad de San Carlos de Guatemala. Recovered from: https://digi.usac.edu.gt/bvirtual/informes/puiah/INF-2016-22.pdf
[240] Blog de la Federación Nacional de Pescadores Artesanales de Guatemala. (s.f). Recovered from: *http://fenapescaguatemala.blogspot.com/2009/04/fsd.html*
[241] https://www.ine.gob.gt/sistema/uploads/2023/03/23/20230323214206 9Odm3oxU9mTY58hkborwzylm7MJop05q.pdf

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The estimated Population in Senegal by 2022 was 17,7 million[242] people, of which 50.2% are women and 49.8 men. The GDP per capita in 2021 was **USD 1,636.89**[243] (the lowest value compared to Morocco and Mauritania). The economy in Senegal is driven by traditional sectors such as **agriculture and fisheries**[244], where major products are fish, nuts, black-eyed peas, and cassava. This sector employs about 30% of the workforce, however, agricultural productivity is low. In 2021, the **agriculture/fishery/forestry sector contributed 15.3% to GDP**[245].

In 2021, Senegal ranked 131 of 170 countries with a GII (Gender Inequality Index) of 0.530[246]**.** In terms of maternal mortality, Senegal has among the highest ratios of the 6 GMCII countries (315 deaths per 100,000 live births), and a high adolescent birth rate of 66.4. The country has also the lowest percentage (within 6 countries) of women over 25 years with at least some secondary education (11.1%). However, it has the highest percentage of women in parliament (43%). In the same year of reference**, the country had a GDI (Gender Development Index) of 0.874**[247]**,** corresponding to the second lowest value of the GMC2 target countries. This value is influenced by a gender gap in the *mean years of schooling* (women 1.6 years and men 4.5 years) and in the *estimated gross national income per capita (PPP $*, female $ 2,258 and male $ 4,468). According to UNICEF[248], girls in Senegal have a lower rate of transition to secondary education due to gender and school-based violence and discrimination, including early marriage and pregnancy.

Senegal ranked 170[249] **of 191 countries with an HDI (Human Development Index) of 0.511** in 2021 and it was classified in the *Low Human Development* category, being the only one of the 3 GMCII African countries in this category. This is associated to a low expected and average schooling and the lowest per capita income level compared to the other two target countries of GMC2. Illiteracy is one of the main issues in Senegal. The UNESCO Institute for Statistics[250] reported an *Adult Literacy Rate of 51.9% in 2017* and a lower *Female Adult Literacy Rate of 39.8%* in the same year. *Youth Literacy Rate was 68.3%* in 2019, and *Female Youth Literacy Rate* was 64.7% in the same year. **The Multidimensional Poverty Rate (MPM)** in Senegal was 32.3%[251] in 2018 (higher than Morocco (5.8%) but lower than Mauritania (45.7%)). The 2022 Report of the *State of Food Security and Nutrition in the World*[252] indicates that **Senegal had 49.2% of *Prevalence of Moderate or Severe Food Insecurity in the Population* in the 2019-2021 period** and **7.5 % of *Prevalence of PoU.*** The country is frequently subjected to climate hazards, insufficient food production, droughts, land degradation, high food prices and low resilience that have further compounded food insecurity[253].

Gender roles and sexual division of labor

[242] Ministre de l'Economie, du Plan et de la Coopération Sénégal. (2021). Annuaire de la population du Séneégal. Recovered from: https://satisfaction.ansd.sn/ressources/publications/Rapport-%20annuaire%20population%20du%20Sngal%202021vf.pdf
[243] https://databank.worldbank.org/source/world-development-indicators
[244] BMZ. (2022). A strong role for small businesses- The impacts of Covid-19. BMZ. Recovered from: https://www.bmz.de/en/countries/senegal/economic-situation-48602
[245] https://databank.worldbank.org/source/world-development-indicators
[246] https://hdr.undp.org/data-center/documentation-and-downloads
[247] https://hdr.undp.org/gender-development-index#/indicies/GDI
[248] UNICEF. (n.d). *Children in Senegal.* The United Nations Children's Fund (UNICEF). Recovered from: https://www.unicef.org/senegal/en/children-senegal
[249] https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf
[250] https://en.unesco.org/countries/senegal
[251] https://www.worldbank.org/en/topic/poverty/brief/multidimensional-poverty-measure
[252] FAO, IFAD, UNICEF, WFP and WHO. 2021. The State of Food Security and Nutrition in the World 2021. Transforming food systems for food security, improved nutrition and affordable healthy diets for all. Rome, FAO. https://doi.org/10.4060/cb4474en
[253] WFP. (2022). WFP Senegal Country Brief. World Food Programme. Recovered from: https://docs.wfp.org/api/documents/WFP-0000140340/download/?_ga=2.102639880.884208179.1662980512-495170798.1662980512

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Senegalese gender relations are shaped by **socio-cultural norms and customs that establish hierarchical relationships in which males are dominant and females are subordinate**. Although the degree and dynamics of these relationships vary by urban/rural residence, ethnic group and religion, **Senegalese society mostly expects women to be wives and mothers,** performing (unpaid) household responsibilities such as housework, child rearing, and subsistence agricultural labor. Men are expected to be primary decision-makers, earn income through formal employment or entrepreneurship, and take active roles in public life, whether as leaders, public officials, or citizens (USAID, 2017[254]). **Women spend 37 hours per week doing unpaid care work compared to less than 5 hours for men** (UNWOMEN, 2021[255]).

In Senegal, 93% of women work informally (WB, 2019 and 2015) and 94% of women entrepreneurs operate in the informal sector (ILO, 2020), who were very affected by the COVID-19 crisis. According to UNDP data[256], the rate of labor force participation of women (over 15 years) is 33.5%, lower than men´s at 56.7%.

According to the SGEED[257], **the fishing sector occupies** an essential place in the family economy. For decades, women have played critical roles in Senegal's fishing industry, however, there is a noted difference in the gender roles, with **men specializing in capturing and wholesale commerce, and women in processing and retail trade** (fresh and processed products) (USAID, 2016[258]). In coastal Senegal, **women play key roles in processing and trading, making them central to their fishing communities** (USAID and UICN 2019[259]). In Africa, specifically in Senegal, **nine in every 10 post-harvest jobs are held by women** (Harper *et al.,* 2017). However, despite their valuable contribution, women lack recognition in fisheries and aquaculture (Williams, 2012).

Octopus is an important source of income for Senegalese fishers (men and women) due to its high value on international markets like Europe and Japan (Eurofish, 2020[260]). Octopus is mainly captured by traditional fishing methods, most of its catches come from the Petite Côte and using motorized wooden canoes, "pirogues", and a jig-style hook, "turlutte". This fleet employs 1,650 fishers and 720 people in the processing industry, **the majority of whom are women** (WWF, 2017[261]). **Senegalese women also participate in the production of clay pots which are submerged in local waters to form artificial reefs** that protect and shelter the octopuses. This generates significant revenues at the community level which benefit the local women making the clay pots, the artisanal fishers who have an abundant and high value octopus' stock to fish from, and the local fish merchants selling the octopus (Eurofish, 2020). According to the interviews carried out by the PPG fishery specialist in Senegal, the costs of the clay pots are not internalized in the product commercialization (octopus), which creates a strong dependency on contributions from development projects.

Coastal small pelagic are mainly exploited in Senegal by an artisanal fleet made up of purse seines and encircling gillnets (Diedhiou and Deme, 2022[262]). However, the abandonment of traditional key species in Senegal, such as the sardinella and the tarpon, in favour of the octopus, which is aimed at the international market, is weakening the local processing industry. This situation **produces negative effects, mainly for the women who work processing small**

[254] USAID. (2017). *Gender Analysis for the Follow-On USAID/Senegal CDCS (2019-2024)*. United States Agency for International Development (USAID).
[255] UNWOMEN. (2021). *Advocating for unpaid care reform in west and central africa 5 tips for un women country offices.* UNWOMEN.
[256] https://hdr.undp.org/data-center/documentation-and-downloads
[257] Ministère de l'Environnement du développement et du développement durable, UNDP (2022). *Stratégie Genre de l'Environnement et du Développement durable*. Senegal.
[258] USAID. (2016). *Gender Assessment in the Agricultural Sector*. United States Agency for International Development (USAID).
[259] USAID, UICN. (2019). *Advancing gender in the environment: gender in Fisheries-a sea of opportunities*. United States Agency for International Development (USAID) and International Union for Conservation of Nature(UICN).
[260] Eurofish. (2020). *Senegal: Produced pots provide protection*. Eurofish International Organisation. Recovered from: https://eurofish.dk/news/senegal-produced-pots-provide-protection/
[261] WWF. (2017). *Senegal: co-management in octopus and green lobster Fisheries.* World Wildlife Fund (WWF).
[262] Diedhiou, I., Deme, M. (2022). Coastal Small Pelagic in Senegal: What Strategies to Sustainably Improve the Added Value Generated. Dakar-Thiaroye Oceanographic Research Center, Senegal.

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pelagic fish using traditional techniques. This is due to a decrease in the volume of these species meaning these women are obliged to seek other work activities (WWF, 2017). A 2020 article of Europa Azul magazine[263], pointed out that after observing that fish is becoming increasingly scarce, Diaba Diop Niang (president of REFEPAS[264]) warns that the disappearance of fishery resources from Senegalese waters would also mean the disappearance of the activity of women processors, fishmongers, and other actors in artisanal fishing. A GMC2 PPG interview[265] with a local woman leader in a processing organization, also revealed this issue, but in addition pointed out that the problem women face in locations such as Barny (coastal municipality), is that there are fleets from other countries that come to fish in their area, and they set the prices, which also affects women.

Access and control over resources

Women especially those living in rural areas are highly active in the processing and marketing of agricultural, livestock and fishery products (FAO, 2016[266]). According to recent statistics, **women account for more than one quarter (27%) of the labour force in the fisheries and aquaculture sector in Senegal.** The vast majority of these women are engaged in post-harvest activities (91.5%) and contribute tremendously to the food security, livelihoods and income of households (USAID and URI-CRC, 2018[267]). However, women are confronted with several hurdles including constraints related to; access to land and land tenure security; access to financing mechanisms; access to factors of production and extension services; effects of climate change; and access to markets (UN Women, 2019[268]).

Senegal has the highest rate of female entrepreneurship in West Africa (GEM, 2017). **Although there are more and more women-led enterprises in high value-added sectors, many women-led MSMEs remain concentrated in low-productivity** sectors. These companies are fragile, find it difficult to access financing under normal conditions and have little margin to absorb economic shocks.

Despite a constitutional provision granting women equal access to land ownership, cultural and customary practices make this difficult to achieve in practice (FAO, 2022[269]). Most women still access land informally through their male relatives (IIED, 2020[270]). According to tradition, women cannot inherit land and husbands can oppose the acquisition of land by their wives (Africa 4 women's rights, n.d.[271]). Access to finance is also difficult in Senegal, but especially for women. Women represent 53% of active entrepreneurs, yet they only account for 29% of loan portfolios (USAID, 2017[272]), and in the fishery sector **they face important barriers to access credit to improve and expand their businesses.** (MANAUS and FHI360, 2022[273])

[263] Europa Azul. (2020). The women of the artisanal fisheries of Senegal offer solutions to avoid the youth exodus of fishermen. Recovered from: https://europa-azul.es/exodo-de-jovenes-senegal/
[264]Women's Network of Artisanal Fisheries in Senegal
[265] See list of ProDoc stakeholders consulted in Annex 19.
[266] FAO.(2016). *Action Against Desertification: Senegal.* Food and Agriculture Organization (FAO). Recovered from: http://www.fao.org/in-action/action-against-desertification/countries/africa/senegal/en/
[267] USAID, URI-CRC. (2018). *Empowering Women in Artisanal Processing of Fisheries Products*. United States Agency for International Development (USAID) and the University of Rhode Island (URI)-Coastal Resources Center (CRC).
[268] UN Women. (2019). *Africa*. https://africa.unwomen.org/en/where-we-are/west-and-centralafrica/senegal
[269] FAO. (2022). *More secure land tenure in Senegal lays the groundwork for agroecology and women empowerment*. The Food and Agriculture Organization (FAO) Recovered from: https://www.fao.org/fao-stories/article/en/c/1514035/
[270] IIED. (2020). *Can promotion groups help strengthen women's access and control over land?.* International Institute for Environment and Development (IIED)
[271] Africa 4 Women's Rights (n.d.), *Senegal Fact Sheet*. Recovered from: http://www.africa4womensrights.org/public/Dossier_of_Claims/SenegalENG.pdf
[272] USAID. (2017). *Gender Analysis for the Follow-On USAID/Senegal CDCS (2019-2024)*. United States Agency for International Development (USAID).
[273] MANAUS, FHI360. (2022). *Improving the lives of men and women in the Senegalese artisanal fishery value chain- Assessment of the WISE*. MANAUS, FHI360

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According to the SGEED, among the priorities of the sector are; to ensure access to training and safety equipment (life jackets, safety boots, canoe) for fish harvesters in maritime areas (mostly men); to promote the processing, conservation and marketing of fish products through access and use of "clean" ovens with less carbon dioxide emissions; and to consolidate the commitment of women in the conservation and preservation of mangrove resources through reforestation activities.

Power and Participation in decision making

Women represent more than 50% of Senegal's population and it is therefore crucial to ensure that decisions affecting women's lives reflect their priorities and views in all manners of development (GGGI, 2019[274]). It must be recognized that there is an absence of a single homogeneous status for women in Senegalese society. The status of women is in fact different according to the various ethnic groups and geographical zones. Their status is also determined by the social system depending on whether the model is matrilineal or patrilineal (Wayack and Sawadogo, 2017[275]).

Women account for less than 5% of those involved in fisheries governing bodies[276], as cultural factors hinder their ability to contribute to the decision-making process (URI-CRC, 2020[277]). Women's involvement in governing bodies is thought to be essential because they play critical roles in both the fisheries sector and in addressing household nutritional needs (USAID, n.d[278]). On the other hand, **women's representation in Local Artisanal Fisheries Councils (CLPA[279]) leadership averages 25%** (USAID and URI-CRC, 2018[280]).

MAURITANIA *(Small pelagic and octopus)*

Analysis of factors and trends

The estimated population in Mauritania by 2021 was 4,6 million people[281] (51% women and 49% men). The GDP per capita was **USD 2,166.05[282]** in 2021. **The economy is dominated by the service sector**, which contributed **40.4%** to the GDP in 2021 (latest data available[283]), followed by the **industry sector[284] 32.9%**.

[274] GGGI. (2019). *Senegal Social Review*. Global Green Growth Institute (GGGI).
[275] Wayack Pambè, M. & Sawadogo, N. (2017). *Dépasser le patriarcat pour mieux définir les féminismes africains ?[Going beyond patriarchy to better define African feminisms?].* Travail, genre et sociétés.
[276] During the investigation, the Women's Network of Artisanal Fisheries in Senegal (REFEPAS) was identified, which was created with the support of the Ministry of Fisheries. This network connects women transformers and wholesalers in the country and brings together women from different umbrella organizations (USAID, 2016), and also a relevant gender advocacy an women rights organization in Senegal.
[277] URI-CRC. (2020). *Bridging the gender and cultural gap in Senegal's fisheries sector*. University of Rhode Island (URI)-Coastal Resources Center (CRC). Recovered from: http://www.crc.uri.edu/stories_page/bridging-the-gender-and-cultural-gap-in-senegals-fisheries-sector/.
[278] USAID. (n.d). *The Importance of Wild Fisheries for Local Food Security: SENEGAL*. United States Agency for International Development (USAID).
[279] The establishment of CLPAs stems from the MPEM's willingness to reform the management of fisheries and related activities in an inclusive and participatory manner. Due to the differences between fishing sites, each CLPA is expected to clearly determine its co-management vision at local level. Hence, Senegalese fishing authorities had to adapt both the institutional and regulatory framework of CLPAs to enable them to fully play their role of spearheading the co-management of fisheries resources (USAID, 2018).
[280] USAID, URI-CRC. (2018). *Feed the Future (FTF) and Biodiversity COMFISH Plus Project*. United States Agency for International Development (USAID) and the University of Rhode Island (URI)-Coastal Resources Center (CRC).
[281] https://datos.bancomundial.org/indicator/SP.POP.TOTL.FE.IN?locations=MR
[282] https://databank.worldbank.org/source/world-development-indicators
[283] https://databank.worldbank.org/source/world-development-indicators
[284] Include value added in mining, manufacturing (also reported as a separate subgroup), construction, electricity, water and gas.

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The **agriculture, forestry and fishing sector** contributed **18.6%** to the GDP and the **manufacturing sector 5.03%**. According to the World Bank's fifth Economic Update on Mauritania[285], the country's economic recovery in 2021 was robust yet below pre-COVID-19 levels and growth potential.

Mauritania ranked 161 of 170 countries in 2021, with a GII of 0.632[286]. The country has the highest maternal mortality ratio (766 deaths per 100,000 live births), and the highest adolescent birth rate (78 births per 1,000 women ages 15–19) of the six GMC2 countries. Moreover, Women´s rate of participation in the labour is very low (27.4% in 2021). In the same year of reference**, the country had a GDI of 0.890[287].** This value and position are mainly influenced by a significant gender gap in the *estimated gross national income per capita* indicator (Women $ 2,604 and Men $ 7,650). According to the World Bank[288], women in Mauritania continue to face legal discrimination with unequal wages and restricted property rights, such as denied access to certain jobs, legal incapacity to be heads of household and inequalities in access to credit. **In 2021 Mauritania ranked 158[289] of 191 countries with a HDI (Human Development Index) of 0.556**. Mauritania is classified in the *Medium Human Development* category, its HDI value is above countries such as Senegal, but below Morocco. The HDI value in 2021 was 0.582 for men, and 0.518 for women.

The multidimensional poverty rate (MPM) in Mauritania was 45.7% in 2014 (the highest rate compared to Senegal and Morocco). An OCDE report issued in 2018 showed that 46% of the income distribution was concentrated in the richest quintile. According to the World Bank's Poverty and Equity Portal the projection for 2020 was an increase in poverty to 6.3% due to the COVID-19, with a projection to decline to 6.2% in 2022 as growth recovers.

According to the latest report on the *State of Food Security and Nutrition in the World 2022* **Mauritania had a 45.3%**[290] ***of prevalence of moderate or severe food insecurity in the population*** **for the 2019-2021 period,** and **10.1 % of *PoU***, corresponding to the highest PoU compared to Morocco and Senegal. The World Bank pointed out in its *Poverty and Equity Brief* by Country issued in 2022[291] that the new conflict between Russia and Ukraine has caused an increase in food and energy prices affecting food security in Mauritania.

Gender roles and sexual division of labor

Social norms, which tend to confine **girls and women to the roles of wife, mother, and housewife**, are often at the root of the disadvantages women face In Mauritania (WB, 2021[292]). Women's participation in the formal labour market is low and they face discrimination in the workplace (OECD, 2019[293]). The

[285] WB. (2022). *Mauritania Economic Update 2022: The private sector at the centre of economic transformation and job creation*. The World Bank. Recovered from: https://www.worldbank.org/en/country/mauritania/publication/afw-mauritania-economic-update-2022-the-private-sector-at-the-centre-of-economic-transformation-and-job-creation
[286] https://hdr.undp.org/data-center/documentation-and-downloads
[287] https://hdr.undp.org/gender-development-index#/indicies/GDI
[288] The World Bank. (2021). *Mauritania Economic Update: Why it is Essential to Enable Women to Participate Fully in Economic Activity? Recovered from:* https://www.worldbank.org/en/country/mauritania/publication/mauritania-economic-update-why-it-is-essential-to-enable-women-to-participate-fully-in-economic-activity
[289] https://hdr.undp.org/system/files/documents//hdr2020pdf.pdf
[290] FAO, IFAD, UNICEF, WFP and WHO. 2022. The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable. Rome, FAO. https://www.fao.org/documents/card/en/c/cc0639en
[291] WB. (n.d). *Poverty and Equity Briefs*. The World Bank https://www.worldbank.org/en/topic/poverty/publication/poverty-and-equity-briefs
[292] WB. (2021). *Mauritania Economic Update: Why it is Essential to Enable Women to Participate Fully in Economic Activity?,* The World Bank (WB). Recovered from: *https://www.worldbank.org/en/country/mauritania/publication/mauritania-economic-update-why-it-is-essential-to-enable-women-to-participate-fully-in-economic-activity*
[293] OECD, SIGI. (2019). *Mauritania report*. Organization for Economic Cooperation and Development (OECD) and OECD Development Centre's Social Institutions and Gender Index (SIGI)

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Mauritanian socio-cultural environment is strongly oriented by the patriarchal system, therefore domestic tasks are the exclusive domain of women (UNFPA et al., 2011[294]).

However, **women in Mauritania play a crucial role alongside men in the long chain values that go from fishing to the sale of production to the market**. Artisanal fishing is supported mainly by capture and commercial activities practiced upstream by men and strongly involving women. Women do not often go on fishing trips, but they are involved in **unloading of the catch, processing and commercialization** (FAO, 2021). According to a recent study, eighty percent of fish and other fishery products are sold by women in the West Africa Coast (ECOWAS and FAO, 2020[295]). But the tasks **women perform are poorly paid**; and their **relevant contributions to food security in households**, the **economy and employment are far less recognized** in Mauritania (FAO, 2021).

A 2015 UNDP[296] funded study indicated that small pelagic and octopus value chains involved nearly 2,000 processors, including nearly 250 women (Hamid and Braham, 2015).

According to the World Bank, **women play almost no role in the export sector.** They are only active in the local market where demand is limited, and the highest quality fish are reserved for wholesalers. Women often resort to selling their goods in smaller markets near their homes where fewer buyers pay lower prices (WB, 2017[297]).

Access and control over resources

According to ECOWAS and FAO, **Women in West African countries do not enjoy equal access to natural resources** and sometimes it is impossible for them to obtain land rights[298] due to sociocultural obstacles. Rural environment obstacles in Mauritania stand in the way of women's access to land ownership (AFD, 2016). More importantly women do not have fair access to the financial resources and competitive markets. Despite all the difficult conditions described above, women in the fishery sector continue to play a decisive role in household food security (ECOWAS and FAO, 2020[299]). The same source pointed out that **women´s technical capacities in the processing, transformation and distribution of fishery products need to be strengthened** to improve the performance of their activities. However, Information relative to women's **access to land** and **non-land assets** is relatively limited in Mauritania (OCDE, n.d[300]).

[294] UNFPA, MASEF. (2019). *Étude sur les stéréotypes et obstacles socioculturels basés sur le genre* [*Study on socio-cultural stereotypes and barriers based on gender]*. The United Nations Population Fund (UNFPA) and Ministère des affaires sociales, de l'enfance et de la famille (MASEF).
[295] ECOWAS, FAO. (2020). *Diagnostic on the effectiveness of national fishery and aquaculture policies and strategies for food and nutrition security in West Africa. Ecowas Member states and Mauritania*. Economic Community of West African States (ECOWAS) and *The Food and Agriculture Organization* (FAO).
[296] Hamid et Braham (2015). *Etude pour la mise en place d'un système de valorisation des produits de la pêche artisanale dans le cadre de la lutte contre la pauvreté*. PNUD.
[297] WB. (2017). *Supporting Women Fish Sellers in Mauritania*. The World Bank (WB) Recovered from: *https://www.worldbank.org/en/news/feature/2017/06/06/supporting-women-fish-sellers-in-mauritania*
[298] As crucial asset to access to credit.
[299] ECOWAS, FAO. (2020). *Diagnostic on the effectiveness of national fishery and aquaculture policies and strategies for food and nutrition security in West Africa. Ecowas Member states and Mauritania*. Economic Community of West African States (ECOWAS) and *The Food and Agriculture Organization* (FAO).
[300] OECD, SIGI. (n.d). *Mauritania report.* Organization for Economic Cooperation and Development (OECD) and OECD Development Centre's Social Institutions and Gender Index (SIGI).

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Because women do not fish themselves, they rarely enjoy direct access to the raw material, the fish (WB, 2017[301].) The poor working conditions of women, plus limited access to capital, land and equipment, force many women to reduce the number of days they work or to leave the fishing industry altogether.

A survey conducted by the AECID in 2019 highlighted the many difficulties encountered by women present in large numbers in the processing and sale of fishery products, since they lack equipment for the storage of products and means of transporting fish, altering the quality of the products and causing losses. In addition, women have little funds available **to regularly access products and lack collective organization** (Sahel Alliance, 2021[302]). Women organizations along the West African Coast in the artisanal fishery subsector particularly, **have also limited access to financial credit and market data**.

Limited access to new technologies in the artisanal fishery also affects men. Artisanal fishers work in harsh conditions **and with rudimentary tools** resulting in poor catches, poor quality of the end products and as a consequence obtain low incomes and cause overfishing (UNDP and UNEP, 2016[303]).

Access to benefits of development projects in the fishery sector have also been very limited for women in Mauritania. A recent Implementation Completion and Results Report of an Eco Seafood project financed by the World Bank in the country, revealed that the low disbursement of counterpart funding negatively affected implementation of structural project activities, notably those targeting women, thus the project was weak in following through on planned support for women in the fisheries sector (WB, 2022[304]).

The literature reviewed for this gender analysis revealed not only discriminatory practices towards women in terms of access to the benefits of development programs, but also the lack of statistics and monitoring of the effects generated by the segregation of the participation of women in the sector, and the lack of visibility of the role they play in the food security of Mauritanian households.

Power and Participation in decision making

Mauritanian society as a whole is governed by the patriarchal and patrilineal order. **According to UNFPA, whatever ethnic group, Mauritanian women live in a socio-cultural environment whose values and rules are strongly oriented by the patriarchal system**. The dynamics in household decisions are a reflection of how decisions are made in the public sphere. Women in Mauritania have low presence in political-administrative and economic decision-making spheres (UNFPA et al., 2011[305])

[301] WB. (2017). *Supporting Women Fish Sellers in Mauritania*. The World Bank (WB) Recovered from: https://www.worldbank.org/en/news/feature/2017/06/06/supporting-women-fish-sellers-in-mauritania

[302] Sahel Alliance. (2021). *En mauritanie, les jeunes se forment pour développer les emplois dans le secteur de la pêche* [*In mauritania, young people are training to develop jobs in the fisheries sector*]. Recovered from: https://www.alliance-sahel.org/actualites/promopeche-aecid-mauritanie/

[303] UNDP, UNEP. (2016). *Adding value to Mauritania's artisanal fishery sector with a particular focus on women*. United Nations Development Programme (UNDP) and United Nations Environment Programme (UNEP). Recovered from: *https://reliefweb.int/report/mauritania/adding-value-mauritania-s-artisanal-fishery-sector-particular-focus-women*

[304] WB. (2022). *Implementation completion and results report of the project nouadhibou eco-seafood cluster project* (P151058). The World Bank (WB)

[305] UNFPA, MASEF. (2019). *Étude sur les stéréotypes et obstacles socioculturels basés sur le genre* [*Study on socio-cultural stereotypes and barriers based on gender]*. The United Nations Population Fund (UNFPA) and Ministère des affaires sociales, de l'enfance et de la famille (MASEF)

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According to ECOWAS and FAO, along West African countries, **women's capacities to participate actively in decision-making on sector management at the local and national levels need to be improved and strengthened** (ECOWAS and FAO, 2020[306]).

MOROCCO *(Small pelagic)*

Analysis of factors and trends

The estimated population in Morocco for the year 2021 was 36,3[307] million people (52% women and 48% men). T**he GDP per capita was USD 3,795.40[308]** (the highest value compared to Senegal and Mauritania) in 2021. **The economy is dominated by the agricultural sector** (WDI-World Bank data[309]). The same source indicates that the GDP[310] contribution in 2021 by sector was 12% agriculture/forestry/fishing, 26.1% industry, 15.3% manufacturing and 51.6% services. According to the World Factbook of the CIA[311], the Moroccan economy has been characterized by macro-economic stability and low levels of inflation, relying mostly on exports, a boom in private investment and tourism. However, the COVID-19 shock has pushed the Moroccan economy into its first recession since 1995.

According to the 2021 Gender Inequality Index (GII), Morocco ranked 104th out of 170 countries with a GII of 0.425[312]. Although Morocco shows a positive scenario regarding the lowest adolescent birth rate (25.9 births per 1,000 women ages 15–19) of the six target countries in the GMCII, it presents the most unequal scenario with the **lowest rate of participation of women in the labour force (22%) in 2021, while men held 66%.** In the same year of reference**, the country had a GDI (Gender Development Index) of 0.861[313],** corresponding to the lowest value of the GMCII target countries. Although there are several indicators that make up this GDI, this value is highly influenced by a significant gender gap in the *estimated gross national income per capita (PPP $)* indicator (Women $ 3,194 and Men $ 11,356). This alarming gender gap represents a notable lack of socio-economic inclusion and representation for Moroccan women.

In 2021, Morocco ranked 123[314] of 191 countries with a HDI (Human Development Index) of 0.683. Morocco is classified in the *Medium Human Development* category. **The multidimensional poverty rate (MPM)** in Morocco, registered a very low value of 5.8%[315] in 2013 (far from Senegal (32.3%) and Mauritania (45.7%), although these rates do not correspond to the same reference year (latest available data)). However, an OCDE[316] report issued in 2018 revealed that 47.2% of the income distribution is concentrated in the richest quintile. **Morocco had a 31.6%** ***of Prevalence of Moderate or Severe Food Insecurity in the***

[306] ECOWAS, FAO. (2020). *Diagnostic on the effectiveness of national fishery and aquaculture policies and strategies for food and nutrition security in West Africa. Ecowas Member states and Mauritania*. Economic Community of West African States (ECOWAS) and *The Food and Agriculture Organization* (FAO).
[307] Haut-Commissariat au plan. (2014). *General Population and Housing Census - RGPH – 2014.* Recovered from: https://www.hcp.ma/Recensement-General-de-la-Population-et-de-l-Habitat-RGPH-2014_a2945.html
[308] https://databank.worldbank.org/source/world-development-indicators
[309] https://databank.worldbank.org/source/world-development-indicators
[310] No info available on the contribution to the 2021 GDP by sector.
[311] https://www.cia.gov/the-world-factbook/countries/morocco/
[312] https://hdr.undp.org/data-center/documentation-and-downloads
[313] https://hdr.undp.org/gender-development-index#/indicies/GDI
[314] https://hdr.undp.org/system/files/documents//hdr2020pdf.pdf
[315] https://www.worldbank.org/en/topic/poverty/brief/multidimensional-poverty-measure
[316] AUC/OECD (2018), Africa´s Development Dynamics 2018: Growth, Jobs and Inequalities, AUC, Addis, Adaba/ OECD Publishing Paris. https://read.oecd-ilibrary.org/development/africa-s-development-dynamics-2018_9789264302501-en#page180

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Population for **the 2019-2021 period** and **5.6% of *PoU***[317], lower than Mauritania (10.1%) and Senegal (7.5%) in the same period. According to the WB[318], a severe drought affecting domestic production and farmers revenues threatened Moroccan food security in 2022, compounded by imported inflation and supply chains disruptions caused by the conflict in Ukraine.

Gender roles and sexual division of labor

Over the past two decades, Morocco has passed landmark legislation on many aspects of gender equality, but this progressive wave has been matched by a rising tide of Islamic conservatism, **which supports more rigid framings[319] of gender roles** and responsibilities (UN WOMEN and PROMUNDO, 2017[320]). This scenario (combined with other factors) has resulted in low participation of women in the labor force, and a more predominant role in unpaid work. Income-generation activities are often undermined by unfavorable external market conditions and persisting stereotyped and unequal roles within the family, gender-based horizontal segmentation by sector and vertical segregation within workplaces further contributes to women's economic exclusion and vulnerability. (USAID, 2018[321]).

Women spend seven times as much time on unpaid domestic and care work than men in Morocco (WB, 2015). Women perform the majority of **domestic work,** while men make most of the household decisions, either on their own or jointly with their wives (UN WOMEN and PROMUNDO, 2017).

All along the coasts in Morocco, **women fulfill a crucial role in the fisheries sector**, particularly in artisanal and small-scale fisheries, but their work is not always recognized, and do not necessarily involve a pay. Women are responsible for numerous tasks that not only make them key players**, especially in post-harvesting activities**, but also **fundamental to their livelihoods and food security**. For many Moroccan women, fishing, farming seaweed and harvesting seafood serve as the only source of livelihoods (FAO, 2021[322]). According to the United Nations, approximately 10,000 fisherwomen collect shellfish and other seafood along the Moroccan coastline to make a living (UN WOMEN, 2022).

According to the High Commission for Planning of the Kingdom of Morocco[323], by 2021 the country had 10,772,000 active workers, of whom **just 22% were women**. According to the 2020 Department of Fishery ACTIVITY REPORT[324] of the Ministry of Agriculture, Maritime Fisheries, Rural Development and Water and Forests, to that year, jobs at sea totaled approximately 129,566 and on-land employment in the fishing industries totaled approximately 109,440. The new jobs created during the year 2020 drop of 31% compared to 2019. By type of activity on land, the new jobs concerned particularly canning, freezing, hulling and preparation of pâté. Despite the fact that there are no available statistics on the distribution by sex and the participation of women in the different links of the

[317] FAO, IFAD, UNICEF, WFP and WHO. 2022. The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable. Rome, FAO. https://www.fao.org/documents/card/en/c/cc0639en

[318] https://www.worldbank.org/en/topic/poverty/brief/multidimensional-poverty-measure

[319] Over 60 percent of the population in Morocco believes that men should have priority when jobs are scarce, and 71 percent believe that children suffer by having a working mother. (USAID, 2018).

[320] El Feki, S., Heilman, B. and Barker, G., Eds. (2017) *Understanding Masculinities: Results from the International Men and Gender Equality Survey (IMAGES) – Middle East and North Africa*. UN Women and Promundo-US.

[321] USAID. (2018). *Gender Analysis Morocco*. United States Agency for International Development (USAID).

[322] FAO. (2021). *Near East and North Africa Gender Newsletter, Issue #4*. Food and Agriculture Organization of the United Nations (FAO).

[323] HCP. (2021). *Note d'information du haut-commissariat au plan relative aux principales caractéristiques de la population active occupée en 2021* [Information note from the High Commission for Planning relating to the main characteristics of the active population employed in 2021]. Haut Commissariat au Plan du Maroc (HCP). Recovered from: *https://www.hcp.ma/Note-d-information-du-haut-commissariat-au-plan-relative-aux-principales-caracteristiques-de-la-population-active_a2825.html*

[324] Ministry of Agriculture, Maritime Fisheries, Rural Development and Water and Forests/Maritime Fisheries Department. (2020). ACTIVITY REPORT. Morocco.

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small pelagic value chain, from the consultations carried out in 2022 by the fisheries specialist of the PPG team, it was estimated that **women are more represented in the processing link, with a little more than 50% of the jobs generated by direct employment in the processing industry.**

Access and control over resources

Women's access to fundamental resources, from education to key economic assets, remains extremely limited in Morocco (WB, 2015[325]). Numerous provisions in national legislation hinder women's access to and control over assets and resources, depriving them of financial security and economic independence (USAID, 2018[326]).

Women's access to paying jobs in the independent fishing sector has been restricted due in part to lack of training. A recent study[327] carried out in 2021 in the port of Tanger pointed out that the **sector is dominated by men.** Previous projects carried out in the fisheries sector in Morocco have evidenced the **limited participation and access of women to the development benefits that this type of project could generate**. A 2015 report[328] on the *Portrait of The Marine Fisheries Sector in Morocco* issued by the Kingdom of Morocco, mentioned that as a result of the Millennium Challenge Corporation grant in the country between 2011 and 2013, it was possible to train 19,722 artisanal fishers, **but just 4% of these beneficiaries were women.**

The aforementioned 2020 Department of Fishery ACTIVITY REPORT, points out that from the overall number of graduates from maritime training[329], men represented 97% of the total against 3% of women. Despite the fact that the activity report presents information that reflects the low access of women to training and education, the report also reflects a continuous reference for the monitoring of the participation and promotion of women in the sector and the Impact of COVID-19 for both genders.

The GoM produces no official data on women's land ownership in Morocco, but anecdotal evidence suggests the level remains low, particularly in regards to agricultural land. (WB, 2015) Lack of control of lands is strongly associated to lack of access to credit. **Inheritance and marital property rules, combined with restrictive social norms, likely play a strong role in preventing women's increased control of land.** Financial literacy problems along with lack of financial and business planning skills, and cultural norms stigmatizing debt and defaming interest credit have been identified as major barriers to the use of microfinance. **Morocco's legal framework governing accumulation and transfer of economic assets is disadvantageous to women, leading to gender gaps in control of assets as compared to men** (WB, 2015).

Power and Participation in decision making

Unequal and gendered power dynamics related to decision-making and control over resources within families can present obstacles to women's economic independence and control over their income. (USAID, 2018).

[325] WB. (2015). *Empowering Women for a More Open, Inclusive and Prosperous Society. Morocco*. The World Bank (WB)
[326] USAID. (2018). *Gender Analysis Morocco*. United States Agency for International Development (USAID).
[327] Darasi, F., Aksissou, M., & Awadh, H. (2021). *Socioeconomic Study of Coastal Fishing at the Port of Tangier in Morocco*. International Journal of Sustainable Development and Planning,
[328] Ministere de L'education Nationale et de la Formation Professionnelle. (2015). *Portrait de secteur de pêche maritime au Maroc*. Royaume du Maroc.
[329] According to this report, vocational training in maritime fishing aims to provide the national fisheries sector with qualified personnel, with the necessary skills in the management, operation, and maintenance of fishing vessels, but also to provide it with executives specialized in the treatment and the promotion of fishery products.

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Despite some progress in reducing gender gaps, women in Morocco continue to face significant obstacles to social, economic, and political participation (WB, 2015). Although 2004 reforms to the Family Code eliminated previous legal provisions designating the man as the head of household and establishing women's duty of obedience to her husband, the code still maintain discriminatory provisions[330], and unequal and **asymmetric power relations** in the family persist (USAID, 2018)[331]. **The dynamics of power relations that exist in households are reflected in power relations in employment and decision-making in the fishery sector**. The pre-established gender roles, the limited participation of women in employment in the fishery sector value chains, are clear indicators that men also predominate when it comes to decisions at these levels.

The established social norms, added to the lack of access to training, credit and other assets, limit the organizational capacity of women in Morocco, to have greater influence in decision-making in the sector. The fishing cooperatives are dominated by men. The research process of this gender analysis only managed to identify **one cooperative[332] of fishing women** launched in 2018 and only two years later (2020) had their first government-recognized fishing trip. This cooperative highlighted lack of training as one of the main barriers for women in the sector. Through stakeholder consultations conducted by the PPG team's fisheries specialist, it was estimated that there are over 50 female-led processing cooperatives in Morocco.

Institutional capacity analysis

The result of the institutional capacity analysis revealed that GMC2 implementers and most of the executing institutions, have commitments to gender equality, experience and/or some tools to implement and scale-up actions under the GMC2 project framework and contribute to gender equality and empowerment of women in the fishery sector with an emphasis on target fisheries. However, there are some differences between countries or institutions in terms of progress, availability of resources, policies and guidelines, and human resources trained in aspects of gender equality to deliver on the challenges identified in this gender analysis.

- ➔ For the **United Nation Development Program (UNDP)**, Gender Equality is a priority and it is at the center of human rights; through its representation offices in the six target countries, the agency has the commitment, expertise, experienced human resources, policies and tools to promote gender equality and women empowerment in the project cycle. Through its 2022-2025 gender Equality Strategy, the UNDP confirms its commitment to eradicating poverty, reducing inequalities and exclusion, and supporting the empowerment of all women.

- ➔ **The Sustainable Fisheries Partnership (SFP)** is in the process of finalizing its *Gender Police*. SFP has already a gender focal point, 62% of employees are women, and 53% of leadership positions are occupied by women. According to SFP[333], under the GMC1, SFP developed a FishSource Score on Women's Participation in Decision Making in Fisheries which is planned to be made public in 2023, along with other new FishSource scores related to social issues.

[330] Such as underage marriage, polygamy, unequal access to divorce, unequal legal guardianships after divorce. Marital rape is not considered a crime.
[331] USAID. (2018). *Gender Analysis Morocco*. United States Agency for International Development (USAID).
[332] According to several national and international media, after decades working as net menders and yearning for an opportunity to start sea fishing, a group of women in a small town of Morocco has pushed forward initiatives to break down gender barriers in the fishing industry. After fighting for years to earn the right to work on a fishing boat in the Mediterranean, these women became the first Morocco's female fishing cooperative, who is pushing out its small boats into the sea. The Belyounech Cooperative.
[333] Consulted by the GMC2 PPG team.

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The initiative was tested in selected fisheries, and a discussion paper was developed and shared with independent experts for peer review. The SFP team has also participated in several trainings on gender and fisheries and has conducted processes to raise awareness on these issues.

- ➔ The **Directorate of Artisanal Fishing of the Ministry of Production, Foreign Trade, Investment and Fisheries of Ecuador (MPCEIP),** does not have a gender strategy or plan, nor a specific budget for gender actions; however, internally, it is a public policy to promote the associativity and strengthening of artisanal fishing organizations with a gender approach, supported by the Ministry of Women and Human Rights, which is the leading institution at the national level to strengthen the implementation of policies in favor of the protection of women and humans rights in all spheres. In addition, within the framework of other initiatives (such as the GMC1), MPCEIP has managed to train ministry officials on gender and fisheries issues and to contribute to gender equality in the sector. Currently, 40% of employees are women and more than 48% of MPCEIP leadership positions are occupied by women (MPCEIP, 2022) [334].

- ➔ **The Public Research Institute of Aquaculture and Fisheries of Ecuador (IPIAP)** has limited capacity to mainstream the gender approach. According to information provided[335] by the IPIAP, the institute does not have policies, plans, budget, or actions with a gender focus. The degree of participation of women in the institute (employment) and leadership positions is 35%.

- ➔ According to the website of the **Ministry of the Environment, Water and Ecological Transition (MAATE)**[336] **of Ecuador,** to fulfill the objective of creating more equal conditions for the men and women who collaborate in the ministry and contributing to the advancement of the SDGs of the 2030 Agenda in Ecuador, the institution signed an agreement with the UNDP in 2022, to implement the "Seal of Equality in Public Institutions". In addition, under the leadership of MAATE, the process of participatory construction of the Action Plan on Gender and Climate Change in Ecuador has begun to respond to international and national obligations in the field of human rights and assume the commitment to achieve gender equality and the empowerment of women (SDG5), as well as the consideration of people in vulnerable situations, gender issues, and fragile ecosystems in participatory and transparent processes to combat climate change (IPCC, 2015) [337].

- ➔ **The Directorate of Fisheries and Aquaculture Regulations (DIPESCA)** depends on the Vice Ministry of Agricultural Health and Regulations, of the Ministry of Agriculture, Livestock and Food of Guatemala. It was impossible to identify any strategy, plans, or practices for promoting gender equality, at DIPESCA or the ministry level.
- ➔ **The Ministry of the Environment and Natural Resources of Guatemala (MARN)** has an Institutional Policy for Gender Equality 2022-2026 (Gender Policy[338]) and its action plan. In addition, MARN's Gender, Multiculturalism and People with Disabilities Unit has a committee, which will be responsible for conducting the implementation of the policy.

[334] Information provided by the Ministry of Production, Foreign Trade, Investment and Fisheries – Vice Ministry of Aquaculture and Fisheries, to the GMC2 PPG team.
[335] Provided to the GMC2 PPG team in December 2022.
[336] MAATE. (2022). MAATE will promote more equitable working conditions with the implementation of the "Seal of Gender Equality". Ministerio del Ambiente, Agua y Transición Ecológica (MAATE). Recovered from: https://www.ambiente.gob.ec/maate-promovera-condiciones-laborales-mas-equitativas-con-la-implementacion-del-sello-de-igualdad-de-genero/
[337] IPCC. (2015). *IPCC will participate in the 21st Conference of the Parties (COP 21) to the United Nations Framework Convention on Climate Change (UNFCCC) in Paris.* The Intergovernmental Panel on Climate Change (IPCC). Recovered from: https://www.ipcc.ch/2015/
[338] According to info provided by MARN to the GMC2 PPG gender specialist in December 2022.

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- **The National Council of Protected Areas of Guatemala (CONAP)** has a Gender Equality Strategy[339] with Cultural Relevance 2018-2023, it also has a gender unit and promotes training processes applying methodologies that facilitate the mainstreaming of the gender approach in all the management instruments that govern the rectory of CONAP. However, the unit does not have a budget allocation for mainstreaming and institutionalizing the gender approach and related activities. According to CONAP, the achievements have been possible through strategic alliances, efforts made in conjunction with international cooperation donors, and others, due to participation in technical roundtables, cooperation agreements, and/or letters of understanding.

- According to the **Aquatic Resources Authority of Panama (ARAP)** [340], although they do not have a gender plan or strategy, within the activities of the Business Management department, particular emphasis has been placed on training women from fishing and rural communities (close to fish farming projects) in the transformation of value-added products and elaboration of cured products.

- **The Ministry of the Environment of Panama (MiAMBIENTE)** recently created the Office of Equal Opportunities and Gender Equality[341], this unit is a significant advance in both the internal and external structure, since it will offer adequate spaces for the attention of its human resources and will be able to promote and implement environment conservation and protection actions in more inclusively. In recent years, MiAMBIENTE has been strengthening the gender approach in the programs and projects it develops and has stood out in promoting gender equality and women's empowerment in the initiatives it leads or participates in, including in the international sphere. As a result of this effort, the institution recently received recognition for its participation in the Gender Equality Seal promoted by the National Institute for Women (INAMU), demonstrating MiAMBIENTE's interest in moving from commitment to action in terms of gender equality.

- The **Ministry of Fisheries and Maritime Economy of Mauritania**, has no information available on its website to identify any plan, gender strategy or a gender focal point within the ministry.

- **The Ministry of Environment and Sustainable Development of Mauritania** has recently appointed a woman as the Minister, whom a woman also precedes. Although the ministry does not have any public information on the existence of a gender strategy, gender action plan, or gender mainstreaming practices in programs or projects, there are evidence that the authorities have been using powerful platforms such as the *Council of Ministers of the Great Green Wall*[342], to create awareness and alarm about the particular vulnerability of zones where the population live in very precarious situations, characterized by poverty, food and nutritional insecurity, unemployment, forced migrations, and recurrent conflicts.

- **The Department of Marine Fisheries of the Ministry of Agriculture, Maritime Fisheries, Rural Development and Waters and Forests of Morocco** has the *Halieutis Strategy,* which incorporates, in particular, the improvement of fishermen's working and living conditions and the promotion of women's work. (MPM, 2020). Since 2001, the Department of Marine Fisheries created a structure dedicated to gender issues. This structure has carried specific

[339] According to info provided by CONAP to the GMC2 PPG gender specialist in December 2022
[340] Based on consultation with ARAP, in December 2022.
[341] MiAMBIENTE. (2023). MiAMBIENTE formalizes spaces for quality care in the equalization of opportunities and gender equality. Recovered from: https://www.miambiente.gob.pa/?s=g%C3%A9nero
[342] The Ministry of Environment and Sustainable Development. (n.d). *Opening in Nouakchott of the 7th session of the Council of Ministers of the Great Green Wall*. Recovered from: http://www.environnement.gov.mr/fr/index.php/accueil/actualite/305-tamourt-naaj-lancement-du-programme-de-gestion-durable-des-zones-humides-9

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actions regarding women operating in the sector for the promotion of their role, the improvement of their work and the improvement of their socioeconomic conditions through awareness, supervision, accompaniment, and technical and financial support for the economic and social empowerment of women within cooperatives.

➔ **The Ministry of Energy, Transition and Sustainable Development in Morocco** has been by a woman since 2021. Since 2020, the Ministry incorporated a nursery dedicated to the staff of the Department of the Environment, to reinforce the institutional measures to establish the principle of equality between men and women, encourage women to fill positions of responsibility within the civil service, and finally contribute to helping civil servants in the Department of the Environment reconcile work and private life (Ministre de la Transition Énergétique et du Développement Durable, 2020[343]). The Ministry´s webpage shows several articles promoting women's employment and participation in decision-making.

➔ **The Ministry of Environment and Sustainable Development of Senegal** has recently launched a Gender Strategy for the Environment and Sustainable Development (SEGGD). The SGEDD is an environmental policy orientation framework whose vision is to promote equity and equality between men and women to improve resilience to climate change and an ecological and sustainable development model. The SGEDD has a dual objective; on the one hand, to measure the existing gaps between men and women in the various sectors of the environment and sustainable development; and on the other hand, to design from this evidence the axes of orientation of the policies in their system of planning, budgeting, execution, monitoring and evaluation of the environment and sustainable development (The Ministry of Environment and Sustainable Development, 2022)[344].

➔ **The Ministry of Fisheries and Maritime Economy (MPEM) in Senegal** does not have an accessible (public on their website) gender strategy, policy, or plan. However, project partnerships with cooperation agencies (such as COMFISH and COMFISH PLUS) have demonstrated institutional support and commitment to promote women empowerment and women organizations in the fishery value chain processing link. Nevertheless, the final COMFISH PLUS report prepared in November 2018 recommended that additional support is needed in terms of promoting good practices, improving processing techniques, management of the quality and hygiene of fisheries products, and all actions involved in the production process, to bring up to standards the hygiene and quality of products in the artisanal processing industry (USAID and CRC, 2018[345]).

Main findings (key gender issues in the supply chains of target fisheries)

- ✓ The fishery and aquaculture sector (target fishery value chains) in all beneficiary countries and globally suffers from a lack of gender studies or data disaggregated by sex. The absence of relevant statistics and monitoring hinders efforts to adequately understand and address gender-related concerns in development projects and public policy.
- ✓ Despite progress in adhering to international agreements and strengthening national regulations on gender equality in all GMC2 countries, social and cultural norms, segregation, and the discrepancy between legislation and reality create obstacles for women to fully exercise their rights, especially in African countries.

[343] https://www.mem.gov.ma/Pages/index.aspx
[344] The Ministry of Environment and Sustainable Development and UNDP (2022). Gender Strategy for the Environment and Sustainable Development SGEED. Senegal.
[345] USAD and CRC (2018). Feed the Future (FTF) and Biodiversity COMFISH Plus Project/PENCOO GEJ/(Collaborative Management for a Sustainable Fisheries Future in Senegal. Senegal.

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- ✓ Ecuador, Panama, Guatemala, and Senegal have public policies as relevant tools to achieve gender equality (such as National Strategies and Plans). Mauritania has an outdated national Strategy for the promotion of women.
- ✓ Public policy instruments related to the fishing sector (such as existing action or management plans for some fisheries) often lack gender considerations. In cases where gender is included, it is not effectively mainstreamed.
- ✓ The 2021 Gender Inequality Index (GII) placed Ecuador and Panama at the top of the six GMC2 countries, with lower education and labor participation gaps, but still a reduced representation of women in politics. Guatemala and Morocco had similar gender gaps in education and deficient political representation of women, facing a significant gender gap in the labor force. At the bottom are Senegal and Mauritania, having the lowest rates of women's participation in the labor force. However, Senegal was also characterized by the highest gender gaps in education.
- ✓ On the other hand, Panama, Guatemala, and Ecuador are at the top of the GMC2 countries in the Gender Development Index (GDI); however, Guatemala has relevant gender gaps in gross income per capita. Morocco, Senegal, and Mauritania are at the bottom of the GMC countries (with higher gender gaps). Still, Morocco has the highest gender gap in income compared with the other African countries.
- ✓ Women play a crucial role in food security, especially in fishing communities. Countries such as Senegal, Mauritania, and Guatemala have a very high index of moderate or severe food insecurity in the population, exceeding 45%. Senegal is one of the most vulnerable countries, as 30% of the workforce relies on the fishing sector, unlike Guatemala (with the highest food insecurity index), which has less dependence on fishing resources in the economy.
- ✓ The GMC2 countries face gender disparities in labor market participation, with women often involved in informal and lower-paid roles in the fishing industry. Gender roles in the fishery sector are typically divided, with men often engaged in fishing activities, boat maintenance, and wholesale. At the same time, women are more involved in processing, marketing, and retail selling, though with minimal representation in the export sector.
- ✓ Women in the fishing sector in all GMC2 countries face barriers in accessing resources, training opportunities, better working conditions, markets, and credit (considering that most of the women's involvement in the target fisheries (small pelagic, octopus, and shrimp) is informal). African women from countries such as Mauritania and Morocco also face limitations in access to the benefits of development projects. Both men and women in African countries have limited access to technology, affecting their productivity.
- ✓ Women's participation in decision-making in the fishery sector remains an issue in all countries, with cultural factors hindering representation in leadership positions and governing bodies. Relevant Gender gaps in education in countries such as Senegal and Mauritania are significant barriers to access to decision-making. Women are more vulnerable to potential measures arising from the support generated by the GMC2 in terms of promoting public policy instruments in the sector, as they have limited representation in governance, especially in those fisheries that involve more informal and artisanal work (small pelagic and octopus in Africa, shrimp in LAC).
- ✓ In terms of institutional capacity, not all of the implementing institutions of the GMC2 have the strengths (resources, specialized personnel, action plans, policies, and/or tools) to mainstream the gender approach in their actions/projects. Just two institutions in Guatemala and one in Panama are identified as strong in gender mainstreaming.

Main barriers, entry points and project responses to address gender issues and gaps and support the empowerment of women in target fisheries supply chains

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Main Barriers	Entry Points	Project Responses (PR)
1) Lack of gender studies and disaggregated data in the fishery and aquaculture sector globally	✓ Contribute to Improving data collection and research to better understand women's roles and contributions in the sector.	✓ PR1. Develop *gender profiles (using an intersectional approach and participatory methodologies)* for each target fishery value chain (project start) ✓ PR2. Integrate gender considerations into the focused situational analysis (at the community level) of selected GMC2 supported fishery supply chain (Outcome 2.1)
2) Lack of statistics and monitoring of the effects of women's segregation in the sector	✓ Implement monitoring mechanisms with a gender approach to track progress and identify areas for improvement.	✓ PR3. Contribute to developing a FishSource Score indicator on Women's Participation in Decision Making in Fisheries (outcome 1.2) ✓ PR4. Pilot, refine, launch, and promote the use of a Score indicator on Women's Participation in Decision Making in supported Fisheries (3.1) ✓ PR5. Ensure a gender sensitive system for the GMC2 monitoring and evaluation plan (outcome 3.2)
3) Social and cultural norms, segregation, and legislative discrepancies hindering women's rights, especially in African countries	✓ Raise awareness and promote gender equality through advocacy using an intersectional approach and emphasizing the strengths of the legislation. ✓ Promoting gender integration in public policy instruments and standards in the fishery sector.	✓ PR6. Advocate for gender equality with large buyers (outcome 1.1) ✓ PR7. Integrate gender considerations into the design of domestic engagement strategies for seafood products (outcome 1.1) ✓ PR8. Ensure that gender is effectively mainstreamed into responsible seafood sourcing standards (outcome 1.2) ✓ PR9. Develop a gender responsive communication strategy (including a gender and communication tool) adapted to the reality of each country (Project start).
4) Public policy instruments specifically related to the fishing sector (such as existing action or management plans for some fisheries) often lack gender considerations	✓ Conduct gender assessments and analyses to identify gaps and opportunities for integrating gender perspectives into existing or new action or management plans for the fishery sector.	✓ PR10. Propose gender mainstreaming action through a complementary GAP (with gender responsive indicators) in some selected target fisheries existing action plans (outcome 2.1) ✓ PR11. Ensure the integration of gender responsive indicators in the preparation of all new management plans of target fisheries supported by the project (outcome 2.1, 2.2)

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Main Barriers	Entry Points	Project Responses (PR)
5) Limited representation of women in the labor market, particularly present in lower-paid segments of fisheries supply chains. Gender Gaps in the supply chain	✓ Promote gender-inclusive employment policies and social standards and opportunities. ✓ Promote equal pay and economic opportunities for women in the fishing sector. ✓ Develop women empowerment initiatives.	✓ PR12. Develop women empowerment initiatives for some selected countries and fisheries (Outcome 2.1) ✓ PR13. Develop a gender responsive communication strategy (including a gender and communication tool) adapted to the reality of each country (Project start). ✓ PR14. Assess the involvement of women in large pelagic value chains in selected countries (outcome 2.1) ✓ PR15. Ensure the inclusion of gender-responsive indicators in the development of social guidelines for mainstreaming social responsibility into fisheries governance and supply chains (Outcome 2.2)
6) Women's contribution to work in the fisheries sector not always recognized or adequately compensated	✓ Advocate for visibility, fair wages, and recognition of women's contributions.	✓ PR13. Develop a gender responsive communication strategy (including a gender and communication tool) adapted to the reality of each country (Project start). ✓ PR16. Promote gender advocacy with large buyers into the fisheries round tables (outcome 1.1) ✓ PR1. Develop *gender profiles (using an intersectional approach)* for each target fishery value chain (project start) ✓ PR14. Assess the involvement of women in large pelagic value chains in selected countries and develop gender strategies (outcome 2.1)
7) Invisible or unrecognized role of women in contributing to food security in fisheries communities.	✓ Implementing awareness and recognition to highlight and acknowledge the significant contributions of women in ensuring food security within fisheries communities. Additionally, promoting gender-inclusive decision-making and increasing women's representation in governance bodies to	✓ PR13. Develop a gender responsive communication strategy (including a gender and communication tool) adapted to the reality of each country (Project start). ✓ PR17. Define appropriate engagement mechanisms to promote women's access, participation and decision making into management platforms to be supported by the GMC2 (outcome 2.1) ✓ PR18. Contribute to fostering collaboration among women in some selected value chains to improve representation in governance (outcome 2.1)

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Main Barriers	Entry Points	Project Responses (PR)
	address food insecurity effectively.	
8) Unequal and gendered power dynamics affecting women's decision-making and resource control	✓ Engage in gender awareness through communication strategies and contribution to women's empowerment.	✓ PR13. Develop a gender responsive communication strategy (including a gender and communication tool) adapted to the reality of each country (Project start). ✓ PR12. Develop women empowerment initiatives for some selected countries and fisheries (Outcome 2.1)
9) Gender division of roles in fisheries supply chains	✓ Encourage women's participation in all links of the value chain. ✓ Promote the visibility of the role of women throughout the supply chain.	✓ PR13. Develop a gender responsive communication strategy (including a gender and communication tool) adapted to the reality of each country (Project start). ✓ PR15. Ensure the inclusion of gender-responsive indicators in the development of social guidelines for mainstreaming social responsibility into fisheries governance and supply chains (Outcome 2.2) ✓ PR1. Develop *gender profiles (using an intersectional approach)* for each target fishery value chain (project start) ✓ PR14. Assess the involvement of women in large pelagic value chains in selected countries and develop gender strategies (outcome 2.1) ✓ PR16. Promote gender advocacy with large buyers into the fisheries round tables (outcome 1.1)
10) Abandonment of traditional key species in Senegal	✓ Support sustainable fisheries management	✓ PR12. Develop women empowerment initiatives for some selected countries and fisheries (Outcome 2.1)

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Main Barriers	Entry Points	Project Responses (PR)
affecting the local processing industry and women	practices and women's involvement in processing.	
11) Limited access to training, markets, financing, and better working conditions for women in the small-scale fishing supply chains.	✓ Provide training and financial support to enhance women's participation in fisheries value chains and entrepreneurship. ✓ Develop women empowerment initiatives ✓ Gender advocacy for access to markets.	✓ PR19. Define gender quotas for training opportunities derived from FIPS, co-management platforms, and RIA (outcomes 2.1 and 2.2) ✓ PR20. Integrate gender considerations into GMC2 knowledge strategy (outcome 3.2) ✓ PR12. Develop women empowerment initiatives for some selected countries and fisheries (Outcome 2.1) ✓ PR21. Evaluation of social, economic, and labor conditions of women in some selected countries and value chains (Outcome 2.1) ✓ PR16. Promote gender advocacy with large buyers into the fisheries round tables (outcome 1.1) ✓ PR15. Ensure the inclusion of gender-responsive indicators in the development of social guidelines for mainstreaming social responsibility into fisheries governance and supply chains (Outcome 2.2)
12) Limited access to new technologies for men and women in artisanal fisheries value chains	✓ Technology-sharing initiatives and capacity building.	✓ PR22. Support the incorporation of technologies through specific FIPS and ensure equal access for men and women (2.1) ✓ PR23. Promote web base platforms for information exchange in some selected fisheries governance structures (outcome 2.1)
13) Women's underrepresentation in decision-making bodies related to fisheries	✓ Promote women's inclusion and leadership in fisheries governance. ✓ Develop women empowerment initiatives.	✓ PR3. Contribute to developing a FishSource Score indicator on Women's Participation in Decision Making in Fisheries (outcome 1.2) ✓ PR17. Define appropriate engagement mechanisms to promote women's access, participation, and decision making into management platforms to be supported by the GMC2 (outcome 2.1) ✓ PR24 Integrate gender consideration into the development of situational analyses of governance structures. (Outcome 2.1)

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Main Barriers	Entry Points	Project Responses (PR)
		✓ PR25. Integrate gender considerations into the annual assessments of management frameworks for target fisheries. (Outcome 2.1) ✓ PR26. Promote women's leadership in FIPS (Outcome 2.1) ✓ PR27. Promote women's access and leadership in some selected fishery organizations (2.1) ✓ PR12. Develop women empowerment initiatives for some selected countries and fisheries (Outcome 2.1) ✓ PR18. Contribute to fostering collaboration among women in some selected value chains to improve representation in governance (outcome 2.1) ✓ PR15. Ensure the inclusion of gender-responsive indicators in the development of social guidelines for mainstreaming social responsibility into fisheries governance and supply chains (Outcome 2.2)
14) Institutional capacity challenges (GMC2 Implementing institutions) in mainstreaming the gender approach in development projects	✓ Strengthen capacity-building for gender-responsive policies and actions.	✓ PR28. Training in gender equality and women empowerment (project start) ✓ PR29. Provide national and international gender consultants (external consultants) to develop specific actions (outcomes 1.1, 1.2, 2.1 and 2.2) ✓ PR30. Engage with women ministries in some countries. ✓ PR32. Integrate a gender, safeguards and participation consultant into the GMC2 project team.

Project responses to contribute to gender equality, women's empowerment and reduction of gender gaps in the supply chains of target fisheries (through GMC2 activities) are structured and detailed in the multiyear workplan and complemented with the following action plan presented below.

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GENDER ACTION PLAN

Strategic Gender Objective: Promote equal access, participation and decision-making of women and men in the project and contribute to gender equality, women empowerment and the reduction of gender gaps in the value chains of the target fisheries of the GMC2.

Activities	Indicators	Targets[346]	Country	Timeline	Responsibility	Budget	M&E mechanisms (and/or sources)	Observations
Project Start and Project Management								
Establish gender quotas for individual consultancies and permanent project team positions.	% of women and men that acceded to the GEF funded GMC2 employment opportunities	50% men and 50% women	All GMC2 countries	Y1-Y5	UNDP Ecuador Project Coordinator Implementing institution and partner	N/A	Quarterly Reports MT and Terminal Evaluation	The calls for positions that become available in the project (whether they are staff positions within the executing unit or national and international consultancies) must be sufficiently inclusive (with a focus on deconstructing gender stereotypes) to encourage both women and men to apply for these positions
Ensure[347] a gender responsive approach in the development of the project communication strategy (including a gender and communication tool)	% communication products at the end of the project designed with a gender responsive approach	100%	All GMC2 countries	Q1/Y1 Y1/Y5	Communication Consultant, advised by the Gender, Safeguard, and participation Consultant.	Included in time/budget allocated in outcome 1.1 (for the Communication Consultant and the Gender, Safeguard and Participation Consultant).	Quarterly Reports	The strategy will be designed in year 1. All products (Y1-Y5) will be developed using a gender lens
Introductory training[348] in gender equality and women empowerment to the Project team,	Number of people trained	All project team and at least 1-2 representatives of each implementing institution and SFP	All GMC2 countries	Q2/Y1	Gender, Safeguard and Participation Consultant	Included in time/budget allocated in outcome 1.1 (for the Gender, Safeguard and	Quarterly Reports List of participants disaggregated by sex and type of actor	Training session for the project team can be done in person, at the facilities where the GMC2 will operate.

[346] Most of the indicators with defined targets have a baseline value of zero. The indicators without defined targets lack baseline information, and their initial value will be obtained during the GMC2 implementation.

[347] Ensure a gender responsive approach in the development of the project communication strategy (including a gender and communication tool).

[348] The training plan will integrate three aspects (but not limited to them): 1. Concepts, theoretical-practical approaches, and basic tools used to mainstream the gender approach in the project cycle (with emphasis on projects in the fishing sector); 2. Mechanisms to integrate gender considerations into public policy instruments in the fisheries sector (for example, gender responsive indicators into the fisheries management plans), using national legislation and international agreements as a basis; 3. How to contribute to the deconstruction of gender stereotypes to reduce gender gaps in the supply chains of the target fisheries (based on the barriers found in the GMC2 gender analysis).

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Activities	Indicators	Targets[346]	Country	Timeline	Responsibility	Budget	M&E mechanisms (and/or sources)	Observations
implementing institutions and SFP						Participation Consultant).		Training session for other actors can be done virtually. (2 sessions half day)
Mid Term training[349] in gender equality and women empowerment to implementing institutions	Number of people trained	At least 1-2 representatives of each implementing institution	All GMC2 countries	Q2/Y3	Gender, Safeguard, and Participation Consultant	Included in time/budget allocated in outcome 2.1 (for the Gender, Safeguard and Participation Consultant).	Quarterly Reports List of participants by sex and type of actor	Training session for the implementing institutions can be done virtually (2 sessions half day).
Develop Gender Profiles (using an intersectional approach) for each target fishery supply chain[350]	Number of gender profiles	11[351]	All GMC2 countries	Q3/Y1	Gender Consultants (National Consultants)	USD 61,000[352] (outcome 1.2)	Quarterly reports	Gender profiles will be used as a basis or input for several actions (as detailed in this GAP)
Outcome 1.2. Increased market demand for socially responsible seafood commodities.								
Incorporate *gender indicators* into the socially responsible seafood standard to be	Number of Fisheries included in ***FishSource Scores*** on **women´s participation in**	All fisheries supported by the GMC2	All GMC2 countries	Q2/Y1-Q3/Y2	Social Consultant (International Consultant) in coordination with SFP	Included in time/budget allocated in outcome 1.2 (for Social Consultant, FishSource Specialist	Quarterly Reports FishSource Platform	Linked to outcome 3.1

[349] The mid-term training plan will integrate four aspects (but not limited to):
1. Concepts, theoretical-practical approaches, and basic tools used to mainstream the gender approach in the project cycle (with emphasis on projects in the fishing sector); 2. Mechanisms to integrate gender considerations into public policy instruments in the fisheries sector (for example, gender responsive indicators into the fisheries management plans), using national legislation and international agreements as a basis; 3. How to contribute to the deconstruction of gender stereotypes to reduce gender gaps in the supply chains of the target fisheries (based on the barriers found in the GMC2 gender analysis and gender profiles); 4. lessons learned and good practices of the GMC2 experience at mid-term.

[350] Considering that the GMC2 has a gender analysis as a basis (mostly developed with secondary information). The Gender profiles will include information of the gender analysis and expand with complementary secondary information and primary information (through the use of participatory methodologies) to achieve the following objectives:
- *Provide a comparative analysis of the current situation of women and men in the target fisheries value chains, identifying gender discrepancies in the enjoyment of social and economic rights, cultural and political rights.*
- *Provide a gender perspective of the analysis of education, poverty and sectoral priorities and issues, with due regard to identified vulnerabilities and gender gaps.*
- *% of participation of women and men in the different links of the value chains.*
- *% of participation of women and men in governance bodies in the fishery sector.*
- *% of women and men occupying leadership roles in the value chains and governance bodies.*
- *Main barriers women face for access to participation and decision making in the value chains.*
- *Identify entry points and strategies to address gender gaps.*
- *Identify gaps in research and data concerning gender equality, including the need for statistical data to cover additional issues.*
- *Provide a list of recognized research bodies that are capable of producing quality data and information. For those countries with some activities focused at community level (Ecuador and Senegal), it would be relevant to include information at this level).*

[351] Ecuadorian large pelagic fish and Pomada supply chains (2); Guatemalan dorado and sharks supply chains (2); Mauritanian small pelagic fish and octopus supply chains (2); Moroccan small pelagic fish supply chain (1); Panamanian shrimp and large pelagic fish supply chains (2). Special attention will be given to the shrimp fishing activities of Emberá-Wounan people; Senegalese small pelagic fish and octopus supply chains (2).

[352] Detailed budget by country is included in project budget.

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Activities	Indicators	Targets[346]	Country	Timeline	Responsibility	Budget	M&E mechanisms (and/or sources)	Observations
integrated into the FishSource rating system and available to major supply chain partners worldwide ***(through the development, pilot and launch of a FishSource Score[353] on women´s participation in decision making).***	**decision making in fishery**				and FishSource Specialist	and Meeting with social experts for peer review of the use and utility of FishSource socially responsible standard.)		
Advocate for Gender Equality with large buyers and support for the integration of gender equality requirements in their policies (as part of the activity aimed at *Providing information, guidance, and support to key target international buyers to integrate socially responsible requirements in their policies and commitments)*	Number of workshops/meetings that include gender advocacy and support related to gender mainstreaming Number of Large buyers that integrate gender equality requirements in their policies.	All meetings/workshops covering socially responsible requirements include *gender aspects* in the agenda 3 large buyers incorporate gender equality requirements in their social policies (at least 1 at mid-term)	Senegal, Guatemala and Ecuador	Y2-Y4	Market Development consultant Gender, Safeguards, and Participation Consultant and Communication Consultant (support and information)	Included in the budget for Meetings and workshops with target end-market channels (outcome 1.1) Included in the budget/time for Gender, Safeguards and Participation Consultant and Communication Consultant (outcome 1.2)	Quarterly reports Mid-Term and Terminal Evaluation	The role of the Gender, Safeguards and Participation Consultant and Communication Consultant will be to prepare material for gender advocacy and provide guidance
Outcome 2.1. Increased supply of seafood products that demonstrate improved fisheries governance and stock health.								
Assess gender integration into the PAN Pomada 2021-2027 and propose actions for gender mainstreaming (including a mechanism	Number of instruments developed to promote gender responsive actions and to promote women's access, participation and	1 Gender Action Plan (with gender responsive indicators) 1 Mechanism[355] to promote women´s	Ecuador	Q2/Y1	Gender Consultant (local consultant)	USD 10,000 (for the Gender Consultant, outcome 2.1)	Quarterly Reports	

[353] With the support of the GMC1, efforts were made to design a draft of a *FISHSOURCE SCORE ON WOMEN'S PARTICIPATION IN DECISION MAKING IN FISHERIES*. Therefore, the tasks to be carried out within the framework of GMC2 will be based on previous efforts.

[355] Refers to a tool, procedure or a formal agreement (validated by the stakeholders) to promote the participation of women in platforms (see foot note with a mechanism example included in next activity).

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Activities	Indicators	Targets[346]	Country	Timeline	Responsibility	Budget	M&E mechanisms (and/or sources)	Observations
to promote women´s participation and decision making[354] in governance)	decision making in governance	access, participation and decision making in governance						
Define (Based on the proposal for the POMADA fishery platform) a mechanism[356] to promote women's access, participation, and decision making into the establishment and operation of all management platforms to be supported by the GMC2 in Latin America.	Number of mechanisms with specific considerations for each target fishery	1 mechanism[357] developed by country	Ecuador, Guatemala, Panama	Q3/Y1	Gender, Safeguards, and Participation Consultant	Included in time/budget allocated in outcome 2.1 (for the Gender, Safeguard, and Participation Consultant).	Quarterly reports	Mechanisms will consider the Gender Profiles and the GMC2 gender analysis
Implement and monitor mechanisms (see previous activity) to promote women's participation and decision making in	% of women effectively participating in the national co-management platforms. Number of Annual	At least 25% at mid-term and 40% at the end of the project. All governance	Ecuador, Panama and Guatemala	Y1-Y4	Implementing: Stakeholders supported by Implementing Institutions and the Ministry of Women and Human Rights (Ecuador)	Implementing: NA Monitoring: Included in the time/budget of the Pomada Platform Part Time Facilitator	Mid-Term and Terminal Evaluation Quarterly Reports	The local consultant (gender consultant) will define a monitoring mechanism to feed the quarterly reports. The Part-time Facilitators

[354] Women play a crucial role in ensuring food security within coastal communities, particularly those whose contributions may not be readily apparent. It is imperative that any designed mechanism consider these populations and acknowledge not only the significance of rendering their roles visible but also the potential impact that decisions stemming from future management plans could exert.
[356] Women play a crucial role in ensuring food security within coastal communities, particularly those whose contributions may not be readily apparent. It is imperative that any designed mechanisms consider these populations and acknowledge not only the significance of rendering their roles visible but also the potential impact that decisions stemming from future management plans could exert.
[357] Refers to a tool, procedure or a formal agreement (validated by the stakeholders) to promote the participation of women in platforms based on (but not limited to): ***Raise awareness before sessions to promote participation***: ii) Promote (with stakeholders) the definition of gender quotas to include women and men in decision-making processes of the platform/working groups ii) Encourage men leaders and fishers to support and promote women's and other marginalized groups participation; iii) Take advantage of alliances with gender organizations to use their dissemination mechanisms to promote gender awareness and boost the participation of women in these spaces. Iv) Produce/Use specific easy GMC2 communication material (it refers to gender awareness short messages, notes, flyers etc, that could be published through the intranets and websites of the stakeholders involved in the platforms) to encourage women participation/influence v) Promote women participation in current related communications campaigns developed by implementing partners (if possible).
Design platform´s meetings considering the causes (obstacles) that limit the participation of women: i) consider the practical obstacles to women's participation, such as their family responsibilities, cultural and religion traditions, women traveling alone and concern for personal safety and security. Organize meetings with considerable flexibility on when and where to meet. Consider logistical arrangements with stakeholders to provide equal, adequate and safe participation of women and men. e.g. ***Plan the agenda incorporating gender considerations***: i) Incorporate gender consideration in meetings agendas (besides awareness sessions planned trough the GMC2; ii) take advantage of engaging with women organizations to raise gender awareness and include brief interventions in the agendas; iii) Plan the presentations considering a balance of women and men as key speakers (including facilitators). ***Recognize different voices and forms of participating***: i) Give everyone a chance to speak, to discuss and respect different methods for making an argument. In order to give an equal chance to every participant to speak up, the facilitator could also search for and implement different methods to facilitate the participation of women ii) It is also relevant that facilitators take into consideration cultural differences that might exist among the different stakeholders iii) Ensure safe spaces where women are free to talk. ***Quantify men and women and document gender issues***: i) Count the participants and disaggregate the list by sex; ii) Document specific gender issues and how they were discussed iii) include gender considerations (women participation in decision making) in **annual governance performance assessments.**

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Activities	Indicators	Targets[346]	Country	Timeline	Responsibility	Budget	M&E mechanisms (and/or sources)	Observations
governance platforms (Pomada and Longline Large Pelagic (Ecuador), Dorado and Shark (Guatemala), Shrimp and Large Pelagic (Panama))	Governance performance assessments that included gender issues	platforms supported by the GMC2 in Latin America are assessed annually in women's participation and decision making			and INAMU (Guatemala) Monitoring: Pomada Platform Part Time facilitator		Governance performance assessments Record of % of women participating on each meeting or activity of the national platform.	will be advised by the Gender, Safeguard, and Participation Consultants. Annual governance performance assessment must include gender issues
Define gender specifications to include in the ToR of the situational analysis of the governance framework for the small pelagic fish fishery in Senegal (CNGPP, CNPCM, CLPAs).	Number of specifications for assessing gender aspects in the situational analysis	1 set of specifications	Senegal	Q3/Y1	Gender, Safeguard, and Participation Consultant	Included in time/budget allocated in outcome 2.1 (for the Gender, Safeguard and Participation Consultant)	ToR for the Situational Analysis	The consultant will review ToR defined for the situational analysis and will ensure the incorporation of gender considerations.
Assess gender integration into the 2023 sardinellas management plan and propose actions for gender mainstreaming (including a mechanism to promote women's participation[358] and decision making in small pelagic governance)	Number of instruments developed to promote gender responsive actions and to promote women's access, participation and decision making in governance	1 Gender Action Plan (with gender responsive indicators) 1 Mechanism[359] to promote women´s access, participation and decision making in governance developed	Senegal	Q2/Y1	Gender Consultant (SFP platform -local Consultant)	USD 10,000 (for the Gender Consultant, outcome 2.1)) Time/budget for the part-time pomada platform facilitator included in Outcome 2.1	Quarterly Reports	
Implement and monitor a mechanism to promote women's participation and decision making in governance framework for small pelagic in Senegal	% of women effectively participating in the national co-management platforms. Number of Annual Governance framework performance	At least 25% at mid-term and 40% at the end of the project. Governance performance of the management framework for small pelagic fish in	Senegal	Y2-Y4	Implementing: Stakeholders supported by Implementing Institutions Monitoring: SFP Platform Governance Facilitator	Implementing: NA Monitoring: Included in the time/budget of the SFP Platform Governance Facilitator	Mid-Term and Terminal Evaluation Quarterly Reports Governance performance assessments	The local consultant (gender consultant) will define a monitoring mechanism to feed the quarterly reports. The Part-time Facilitators will be advised by the Gender, Safeguard, and

[358] Women play a crucial role in ensuring food security within coastal communities, particularly those whose contributions may not be readily apparent. It is imperative that any designed mechanisms consider these populations and acknowledge not only the significance of rendering their roles visible but also the potential impact that decisions stemming from future management plans could exert.
[359] See example of mechanism for the platforms to be supported in Latin America.

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Activities	Indicators	Targets[346]	Country	Timeline	Responsibility	Budget	M&E mechanisms (and/or sources)	Observations
	assessments that included gender issues	Senegal is assessed annually including women's participation and decision making					Record of % of women participating on each meeting or activity of the national platform.	Participation Consultants. Annual governance performance assessment must include gender issues
Incorporate the gender dimension in all social risk assessment of existing or new FIPs supported by the GMC2	Number of FIPs that incorporate gender dimension in social risks assessments	7 FIPS[360]	Ecuador, Guatemala, Panama, Senegal, and Mauritania	Y1-Y2	Fisheries Social Consultants (international consultants)	Included in time/budget allocated in each country in outcome 2.1 (for Fisheries Social Consultants (international consultants)	Quarterly Reports	
Define gender specifications to include in the ToR of the situational analysis of management structure for the small pelagic fishery in Mauritania.	Number of specifications for assessing gender aspects in the situational analysis	1 set of specifications	Mauritania	Q3/Y2	Gender, Safeguard and Participation Consultant	Included in time/budget allocated in outcome 2.1 (for the Gender, Safeguard and Participation Consultant)	ToR for the Situational Analysis	The consultant will review ToR defined for the situational analysis and will ensure the incorporation of gender considerations.
Adapt (based on the one defined for Senegal and according to the results of the situational analysis (see previous activity) a mechanism to promote women's access, participation and decision making in the governance management structure for small pelagic in Mauritania	Number of instruments developed to promote women's access, participation and decision making in governance	1 Mechanism developed	Mauritania	Q2/Y1	Gender, Safeguard and Participation Consultant	Included in time/budget allocated in outcome 2.1 (for the Gender, Safeguard and Participation Consultant)	Quarterly Reports	
Implement and monitor a mechanism to promote women's participation and	% of women effectively participating in the national co-management platforms.	At least 25% at mid-term and 40% at the end of the project.	Mauritania	Y2-Y4	Implementing: Stakeholders supported by Implementing Institutions	Implementing: NA Monitoring: Included in the time/budget of the	Mid-Term and Terminal Evaluation Quarterly Reports	The local consultant (gender consultant) will define a monitoring mechanism to feed the

[360] Pomada and LP in Ecuador, Dorado and Shark in Guatemala, Shrimp and LP in Guatemala, Octopus in Senegal and Octopus in Mauritania.

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Activities	Indicators	Targets[346]	Country	Timeline	Responsibility	Budget	M&E mechanisms (and/or sources)	Observations
decision making in the governance framework for small pelagic in Mauritania	Number of Annual Governance performance assessments that included gender considerations	Governance performance of the management structure for small pelagic fish in Mauritania is assessed annually including women's participation and decision making			Monitoring: SFP platform facilitator of annual meetings	SFP Platform Governance Facilitator	Governance performance assessments Record of % of women participating on each meeting or activity of the national platform.	quarterly reports. The Part-time Facilitators will be advised by the Gender, Safeguard, and Participation Consultants. Annual governance performance assessment must include gender issues
Carry out gender and fishery awareness sessions to stakeholders of all governance platforms supported by the GMC2 (as part of the planned platforms meetings)	Number of sessions implemented Number participants (men and women)	2 sessions x 7 platforms At least 1-2 representatives from each stakeholder group have participated in each gender awareness and fishery session	Ecuador, Guatemala, Panama, Senegal and Mauritania	Y1-Y3[361]	National Gender consultants (local consultants)	USD 5,550 (included in outcome 2.1)[362]	Quarterly Reports Lists of assistance disaggregated by sex	The awareness sessions will be designed according to the reality of each country (based on the GMC2 gender analysis and the gender profile of each supply chain of the target fisheries). The process will take place in three sessions of one hour each during the first two years of operation of each platform. The content will be focused on women's rights, emphasizing the relevance and often overlooked nature of women's roles across various links of the supply chain. It will delve into the obstacles hindering women's entry to and engagement in decision-

[361] Sessions will take place the first year of operation of the platform (preferable at the beginning) and one year later.
[362] The ProDoc budget includes a detailed budget of this amount by country and fishery.

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Activities	Indicators	Targets[346]	Country	Timeline	Responsibility	Budget	M&E mechanisms (and/or sources)	Observations
								making processes within governance structures. Additionally, it will underscore the value of shifting perspectives to align with national regulations and promoting local economic advancement. Lastly, the content will address large buyers' requirements.
Define (and monitor) gender quotas for training and skills development opportunities derived from GEF funded FIPs and implementation of new technologies[363] *(improving women's access to training opportunities and new technologies)*	% women trained (according to the total people trained)	≥30%	Ecuador, Guatemala, Panama, Senegal and Mauritania	Y1-Y4	Project coordinator and monitoring, evaluation and knowledge consultant.	Included in time/budget allocated in outcome 2.1 (for project coordinator and monitoring, evaluation and knowledge consultant).	Quarterly Reports Lists of assistance disaggregated by sex	The project coordinator will be responsible to establish a mechanism to adopt gender quotas in training opportunities. Gender profiles (developed at the project start) by fishery, will be used to define baseline and establish quotas for LP fisheries
Define gender specifications to incorporate into the *Comprehensive situation analysis of the supply chain of small pelagic fish in Joal*	Number of specifications to assess gender aspects in the comprehensive situational analysis	1 set of gender specifications (methodological proposal)	Senegal	Q3/Y1	Gender Consultant (SFP local consultant/consultant team)	Included in time/budget allocated in outcome 2.1 (for the Gender specialist of the consultant team in charge of the comprehensive situational analysis)	Situational analysis final report	
Evaluation of social, economic, and labour conditions of pomada bolso fishers *(using a*	Number of evaluation dimensions that include gender criteria	All evaluation dimensions	Ecuador	Q3/Y1	(pomada) Consultant team- social labour	USD 20,000 (outcome 2.1)	Quarterly Reports	

[363] The GMC2 is promoting the use of new technologies in outcome 2.1.

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Activities	Indicators	Targets[346]	Country	Timeline	Responsibility	Budget	M&E mechanisms (and/or sources)	Observations
gender and youth approach)								
Incorporate a gender and youth approach to assessing baseline capacities of pomada fishers´ organizations to effectively participate and have a voice in the governance platform.	Number or Pomada fishery organizations assessed using a gender and youth approach	All organizations linked to the platform assessed	Ecuador	Q3/Y1	Consultant team (governance and fisheries specialists)	Included in time/budget allocated in outcome 2.1 (for consultant team (governance and fisheries specialists)	Quarterly Reports	
Develop and support a women's empowerment initiative focused on women shrimp peelers in Ecuador to participate in fisheries governance and value chain improvement[364].	Women shrimp peelers are formally represented in the national co-management platform. # of women shrimp peelers that have improved labour conditions and incomes	Delegates formally integrated by mid-term ≥500 by Mid-term, ≥1500 by end-of-project	Ecuador	Q3/Y1-Q4/Y2	Consultant team (social, labour) Social Consultant (local consultant) Local social worker (local consultant)	USD 56,000 (outcome 2.1)	Quarterly reports Mid-Term and Terminal Evaluation	
Assess (complementary to the gender profile) the involvement and contributions of women in the dorado and sharks value chains and define a gender strategy to promote their participation, decision making, and visibility in the value chains.	Number of fisheries value chains with gender strategies designed and in implementation (at the end of the project) by key actors[365]	1 (Dorado)	Guatemala	Q3/Y1	Gender Consultant (local consultant)	USD 15,000	Quarterly Reports MT and Terminal Evaluation	

[364] The initiative include the following actions: Evaluate the social, economic, and labour conditions of women shrimp peelers in Posorja; Prepare workplan to support the empowerment of women shrimp peelers to effectively participate in fisheries governance; Seek partners and build strategic alliances to sustain long-term support to empower women shrimp peelers; Foster collaboration and trust among women shrimp peelers to have a voice in fisheries governance and value chain improvement; discussions of labour conditions issues of women shrimp peelers in the Dialogue Roundtable and other fora.

[365] Although the GMC2 will not finance the implementation of the strategy, financing mechanisms will be defined in the formulation stage.

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Activities	Indicators	Targets[346]	Country	Timeline	Responsibility	Budget	M&E mechanisms (and/or sources)	Observations
Evaluation of social, economic, and labour conditions of Panamanian artisanal shrimp fishers *(using a gender and youth approach)*	Number of evaluation dimensions that include gender criteria	All evaluation dimensions	Panama	Q1/Y2	Consultant team (social labour)	Included in time/budget allocated in outcome 2.1 (for consultant team (social labour))	Quarterly Reports	
Incorporate a gender and youth approach to assessing the capacity needs of key artisanal shrimp fishers' organizations and workplan to engage into participatory governance and fisheries co-management.	Number of Shrimp fishery organizations assessed using a gender and youth approach	All organizations assessed	Panama	Q1/Y2	Consultant team (governance and fisheries specialists)	Included in time/budget allocated in outcome 2.1 (for consultant team (governance and fisheries specialists)	Quarterly Reports	
Develop and support a women's empowerment initiative focused on women processors in the Joal area, to participate in fisheries governance and value chain improvement.[366]	# of women processors in Joal that have improved labour conditions and incomes	50 processors have improved their conditions	Senegal	Q4/Y1-Q4/Y3	National Consultant team (social, gender) Facilitator of semestral meetings Local Social worker	USD 67,300 (outcome 2.1)	Quarterly Reports	target will be defined during project implementation (depending on the number of women to be supported with this initiative)
Outcome 2.2. Increased supply of seafood products that demonstrate improved social responsibility.								
Ensure the incorporation of the Gender criteria into the guidelines to mainstream social responsibility into fishery governance and supply chains, and ensure proper training to key actors	Number of guidelines with gender criteria included Number of fisheries supply chains that mainstream social responsibility with a gender perspective	2 set of guidelines All GMC2 target fisheries mainstream social responsibility at the end of the project All new management or action plans supported by the GMC include	Global	Y1 and Y5	Guidelines and training: Market Specialist of SFP supported by the Gender, Safeguards, and Participation Consultant) Participants: key actors of the value chains (responsible to develop	Included in time/budget allocated in outcome 2.2 (Market Specialist of SFP and the Gender, Safeguards, and Participation Consultant)	Quarterly Reports	The Gender, Safeguards, and Participation Consultant will provide quality assurance of the gender incorporations in the set of guidelines

[366] The initiative include: Evaluation of social, economic, and labor conditions of women that process small pelagic fish in the Joal area; Prepare workplan to empower women processors; Foster collaboration and trust among women processors to have a voice in fisheries governance and value chain improvement; Support improvements in fish processing facilities; Seek allies and build strategic partnerships to sustain long-term support to empower women processors.

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Activities	Indicators	Targets[346]	Country	Timeline	Responsibility	Budget	M&E mechanisms (and/or sources)	Observations
	Number of plans supported by the GMC2 that include gender responsive indicators	gender responsive indicators			gender responsive indicators in new management or action plans)			
Define gender specifications to include in the ToR of the fisheries specialists in charge of the regional workshops and learning experience related to the preparation of fisheries action plans.	Number of specifications	1 set of gender specifications (including considerations to formulate gender-responsive indicators in action plans)	All GMC2 countries	Y2	Gender, Safeguard, and Participation Consultant	Included in time/budget allocated in outcome 2.2 (Gender, Safeguard, and Participation Consultant)	ToR for the preparation of fisheries action plans	
Outcome 3.1. Reliable and verifiable information of sustainability performance of target marine commodities is available to supply chain partners and the public to drive their purchasing decisions.								
Ensure the incorporation of the gender approach in the knowledge transfer strategy	% learning documents with any reference to a social dimension formulated with a gender approach	100%	All GMC2 countries	Q1/Y1 Y5	Monitoring, evaluation, and knowledge Consultant, advised by the gender, safeguard and participation Consultant.	Included in time/budget allocated in outcome 3.2 (Monitoring, evaluation and knowledge Consultant, advised by the gender, safeguard, and participation Consultant).	Quarterly Reports	
Integrate an inclusive approach in planning and convening events for the dissemination of lessons (for example, workshops, IWC)	% of women that participate in events for dissemination of project lessons. Number of events that have integrated an inclusive approach into their planning	≥30% at mid-term and end of project All events have integrated an inclusive approach	All GMC2 countries	Y1-Y4	Project Coordinator Monitoring, evaluation and knowledge consultant Communication consultant	Included in time/budget allocated in outcome 3.2 (Project Coordinator and Monitoring, evaluation and knowledge consultant).	List of Participants	The project must promote (through its call/invitation mechanisms) the access and participation of women in these events, in such a way that at the end of the Project, the % of women has increased until reaching the goals.

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Activities	Indicators	Targets[346]	Country	Timeline	Responsibility	Budget	M&E mechanisms (and/or sources)	Observations
Adapt the monitoring plan to ensure a gender sensitive system	# of indicators of the GMC2 gender action plan captured by the monitoring system	All GAP indicators related to quarterly reports	Ecuador	Q1/Y1	Monitoring, evaluation and knowledge Consultant	Included in time/budget allocated in outcome 3.2 (Monitoring, evaluation and knowledge Consultant).	Monitoring system	
BUDGET (GAP) USD **+plus supplementary time/budget** allocated for GMC2 personnel or local and international consultants (individuals and companies), as outlined in this GAP)		**244,850.00**						

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Annex 10: Procurement Plan

Procurement plan for year 1.												
Does not include project team and travel expenses of project team												
Number	**Outcome**	**Output**	**Atlas code**	**Type of supply**	**Description of goods, services or works**	**Unit of measure**	**QTY**	**Estimated unit price USD**	**Available budget USD**	**Estimated date of Completion of Activity**	**Responsible authorities**	**Note**
1.	1.1.	1.1.1	75700	Training, Workshops and Confer	Side events during SeafoodExpo events (Boston and Barcelona) or specialised meetings with exporters, traders and retailers. Includes presenting FishSource indicators for social responsibility and reduced bycatch. Cost per meeting USD3000 to cover venue, materials and refreshments.	Contract	1	9,000	9,000	Year 1	SFP	
2.	1.1.	1.1.1	71200	International Consultants	Market specialist coordinator of Global octopus roundtable. Part-time support to GMC2 project (15% time allocation)	Contract	1	19,500	19,500	Year 1	SFP	
3.	1.1.	1.1.1	71200	International Consultants	Market specialist coordinator of Global Roundtable on Marine Ingredients (West African Fisheries Workstream). Part-time support to GMC2 project (15% time allocation)	Contract	1	19,500	19,500	Year 1	SFP	
4.	1.1.	1.1.1	71200	International Consultants	Market specialist coordinator of Global mahi roundtable. Part-time support to GMC2 project (15% time allocation)	Contract	1	19,500	19,500	Year 1	SFP	
5.	1.1.	1.1.1	71200	International Consultants	Scoping document and engagement strategy of key stakeholders and market trends in mid-upper market and end-market. Fresh and frozen pomada products from Ecuador	Contract	1	10,000	10,000	Year 1	SFP	

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Procurement plan for year 1.											
Does not include project team and travel expenses of project team											
Number	**Outcome**	**Output**	**Atlas code**	**Type of supply**	**Description of goods, services or works**	**Unit of measure**	**QTY**	**Estimated unit price USD**	**Available budget USD**	**Estimated date of Completion of Activity**	**Responsible authorities**	**Note**
6.	1.1.	1.1.1	71200	International Consultants	Scoping document and engagement strategy of key stakeholders and market trends in mid-upper market and end-market. Fresh and frozen swordfish, sharks and large pelagic fish (excluding dorado) products from Ecuador	Contract	1	20,000	20,000	Year 1	SFP	
7.	1.1.	1.1.1	71200	International Consultants	Scoping document and engagement strategy of key stakeholders and market trends in mid-upper market and end-market. Fresh and frozen dorado from Guatemala	Contract	1	10,000	10,000	Year 1	SFP	
8.	1.1.	1.1.1	71200	International Consultants	Scoping document and engagement strategy of key stakeholders and market trends in mid-upper market and end-market. Octopus products from Mauritania	Contract	1	10,000	10,000	Year 1	SFP	
9.	1.1.	1.1.1	71200	International Consultants	Scoping document and engagement strategy of key stakeholders and market trends in mid-upper market and end-market. Fresh and frozen dorado products from Panama	Contract	1	10,000	10,000	Year 1	SFP	
10.	1.1.	1.1.1	71200	International Consultants	Scoping document and engagement strategy of key stakeholders and market trends in mid-upper market and end-	Contract	1	10,000	10,000	Year 1	SFP	

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Procurement plan for year 1.											
Does not include project team and travel expenses of project team											
Number	**Outcome**	**Output**	**Atlas code**	**Type of supply**	**Description of goods, services or works**	**Unit of measure**	**QTY**	**Estimated unit price USD**	**Available budget USD**	**Estimated date of Completion of Activity**	**Responsible authorities**	**Note**
					market. Wild-caught shrimp products from Panama							
11.	1.1.	1.1.1	71200	International Consultants	Scoping document and engagement strategy of key stakeholders and market trends in mid-upper market and end-market. Octopus products from Senegal	Contract	1	10,000	10,000	Year 1	SFP	
12.	1.1.	1.1.2	71300	Local Consultants	Assess interest of key levels of domestic supply chains (with special emphasis in end and mid-upper levels) in supplying sustainable seafood products in Ecuador. Online and in-person interviews | meetings and focal groups. Lumpsum including honorarium and travel expenses.	Contract	1	10,000	10,000	Year 1	SFP	
13.	1.1.	1.1.2	71300	Local Consultants	Prepare scoping analysis of domestic end-market channels (retailers, hospitality industry) for sustainable seafood products from Ecuadorian FIPs (dorado, swordfish, large pelagic fish, sharks).	Contract	1	10,000	10,000	Year 1	SFP	
14.	1.1.	1.1.2	75700	Training, Workshops and Confer	Meetings and workshops with target end-market channels (engagement, technical support, training) in Ecuador. Includes presenting FishSource indicators	Contract	1	2,000	2,000	Year 1	SFP	

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Procurement plan for year 1.											
Does not include project team and travel expenses of project team											
Number	**Outcome**	**Output**	**Atlas code**	**Type of supply**	**Description of goods, services or works**	**Unit of measure**	**QTY**	**Estimated unit price USD**	**Available budget USD**	**Estimated date of Completion of Activity**	**Responsible authorities**	**Note**
					for social responsibility and reduced bycatch.							
15.	1.1.	1.1.2	71300	Local Consultants	Assess interest of key levels of domestic supply chains (with special emphasis in end and mid-upper levels) in supplying sustainable seafood products in Guatemala. Online and in-person interviews | meetings and focal groups. Lumpsum including honorarium and travel expenses.	Contract	1	8,000	8,000	Year 1	SFP	
16.	1.1.	1.1.2	72100	Contractual services - Companies	Pilot buyer engagement. Consultant team to prepare a detailed analysis of Moroccan consumers´ (urban and rural) and tourist sector willingness to purchase sustainable seafood products. The analysis will provide information about the willingness to buy sustainable small pelagic fish and the consumer habits and preferences for products (e.g., canned, frozen) and channels (e.g., stores, restaurants).	Contract	1	70,000	70,000	Year 1	SFP	
17.	1.1.	1.1.2	72100	Contractual services - Companies	Pilot buyer engagement. Consultant team to prepare a detailed analysis of domestic end-market channels (retailers, hospitality industry) for sustainable seafood products, with emphasis on products from	Contract	1	15,000	15,000	Year 1	SFP	

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Procurement plan for year 1.												
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					Moroccan FIPs (sardine and anchovy).							
18.	1.1.	1.1.2	71200	International Consultants	Pilot buyer engagement. SFP seafood markets advisor to guide the pilot buyers engagement pilot in Morocco. Part-time support to GMC2 project (20% time allocation).	Contract	1	13,000	13,000	Year 1	SFP	
19.	1.1.	1.1.2	71300	Local Consultants	Pilot buyer engagement. Two local market specialists to adapt the Responsible Seafood Sourcing Standard, to design the pilot buyer engagement programme and to implement it. USD2,500 per person per month x 2 persons x 39 months.	Contract	1	15,000	15,000	Year 1	SFP	
20.	1.1.	1.1.2	71600	Travel	Pilot buyer engagement. Lumpsum for travel expenses. Detailed estimates will be prepared once the pilot buyer engagement programme is designed.	Contract	1	5,000	5,000	Year 1	SFP	
21.	1.1.	1.1.2	75700	Training, Workshops and Confer	Pilot buyer engagement. Lumpsum for meetings and training activities with public and private key stakeholders. Detailed estimates will be prepared once the pilot buyer engagement programme is designed.	Contract	1	3,000	3,000	Year 1	SFP	

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22.	1.1.	1.1.2	71300	Local Consultants	Assess interest of key levels of domestic supply chains (with special emphasis in end and mid-upper levels) in supplying sustainable seafood products in Senegal. Online and in-person interviews | meetings and focal groups. Lumpsum including honorarium and travel expenses.	Contract	1	12,000	12,000	Year 1	SFP	
23.	1.2	1.2.1	71300	Local Consultants	Gender consultant to prepare the gender profiles of the Ecuadorian large pelagic fish and pomada supply chains. Lumpsum amount including honorarium and travel expenses.	Contract	1	13,000	13,000	Year 1	SFP	
24.	1.2	1.2.1	71300	Local Consultants	Gender consultant to prepare the gender profile of the Guatemalan dorado and sharks supply chain. Lumpsum amount including honorarium and travel expenses.	Contract	1	7,000	7,000	Year 1	SFP	
25.	1.2	1.2.1	71300	Local Consultants	Gender consultant to prepare the gender profiles of the Mauritanian small pelagic fish and octopus supply chains. Lumpsum amount including honorarium and travel expenses.	Contract	1	13,000	13,000	Year 1	SFP	

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26.	1.2	1.2.1	71300	Local Consultants	Gender consultant to prepare the gender profile of the Moroccan small pelagic fish supply chain. Lumpsum amount including honorarium and travel expenses.	Contract	1	7,000	7,000	Year 1	SFP	
27.	1.2	1.2.1	71300	Local Consultants	Gender consultant to prepare the gender profiles of the Panamanian shrimp and large pelagic fish supply chains. Special attention will be given to the shrimp fishing activities of Emberá-Wounan persons. Lumpsum amount including honorarium and travel expenses.	Contract	1	8,000	8,000	Year 1	SFP	
28.	1.2	1.2.1	71300	Local Consultants	Gender consultant to prepare the gender profiles of the Senegalese small pelagic fish and octopus supply chains. Lumpsum amount including honorarium and travel expenses.	Contract	1	13,000	13,000	Year 1	SFP	
29.	1.2	1.2.1	71200	International Consultants	Social consultant to develop standard for social responsibility working in collaboration with FishSource team.	Contract	1	25,000	25,000	Year 1	SFP	
30.	2.1	2.1.1	71300	Local Consultants	Pomada platform. Gender consultant to design and carry out two awareness sessions of at least one hour each for the Dialogue Roundtable and	Contract	1	400	400	Year 1	SFP	

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					Technical Committee of the pomada fishery. Lumpsum, including honorarium and travel expenses.							
31.	2.1	2.1.1	71300	Local Consultants	Pomada platform. Consultant to prepare situation analysis of dialogue roundtable and technical committee of the pomada fishery and workplan to support the advance of these entities. Lumpsum includes honorarium and travel expenses.	Contract	1	10,000	10,000	Year 1	SFP	
32.	2.1	2.1.1	71300	Local Consultants	Pomada platform. Gender consultant to assess gender integration in curren PAN pomada 2021-2027 and to prepare a workplan with affirmative actions to mainstream gender into the implementation of the plan. Emphasis will be given to strengthen the integration of women in the governance structure and the understanding of the role and contributions of women along the value chain. Lumpsum including honorarium and travel expenses.	Contract	1	10,000	10,000	Year 1	SFP	
33.	2.1	2.1.1	75700	Training, Workshops and Confer	Pomada platform. Meetings of the dialogue roundtable and technical committee of the pomada fishery. USD1,000 per	Contract	1	1,000	1,000	Year 1	SFP	

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					meeting to cover materials andtravel support for artisanal fishers and women shrimp peelers.							
34.	2.1	2.1.1	71300	Local Consultants	Pomada platform. Part-time facilitator to support the work of the dialogue roundtable and technical committee of the pomada fishery. Organise meetings, keep records and minutes, track implementation of decissions. USD1,000 per month.	Contract	1	6,000	6,000	Year 1	SFP	
35.	2.1	2.1.1	72100	Contractual services - Companies	LPF platform. Consultant team (fisheries governance specialist and lawyer) to prepare (i) a key stakeholder mapping, (ii) a proposal for the establishment and operation of a management platform for the longline fishery for large pelagic fish (tuna, marlins, swordfish) based on the lessons from the other ecuadorian fisheries platforms (e.g., dorado, small pelagic fish), (iii) a draft ministerial agreement to establish the management platform, and (iv) a proposed workplan to develop the management platform. The management platform will ensure the engagement of pertinent women groups. Lumpsump including	Contract	1	15,000	15,000	Year 1	SFP	

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					honorarium, travel expenses and meetings.							
36.	2.1	2.1.1	71300	Local Consultants	LPF platform. Meetings of the management platform of the longline large pelagic fish fishery. USD1,000 per meeting to cover materials and travel support for artisanal fishers and women.	Contract	1	1,000	1,000	Year 1	SFP	
37.	2.1	2.1.1	71300	Local Consultants	LPF platform. Part-time facilitator to support the work of the management platform of the longline large pelagic fish fishery. Organise meetings, keep records and minutes, track implementation of decissions. USD1,000 per month.	Contract	1	6,000	6,000	Year 1	SFP	
38.	2.1	2.1.2	71200	International Consultants	Pomada FIP. Consultant to design improved monitoring system to collect data from pomada trawlers and bolsos, in line with the requirements of the Integrated Aquaculture and Fisheries System of Ecuador (SIAP).	Contract	1	10,000	10,000	Year 1	SFP	
39.	2.1	2.1.2	71200	International Consultants	Pomada FIP. Advisor to work with IPIAP to prepare annual stock assessment of pomada. Lumpsum including honorarium and travel expenses.	Contract	1	10,000	10,000	Year 1	SFP	

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40.	2.1	2.1.2	71200	International Consultants	Pomada FIP. Fisheries stock assessment specialists to assess quality, relevancy, and accuracy of annual pomada stock assessment (peer-review).	Contract	1	2,000	2,000	Year 1	SFP	
41.	2.1	2.1.2	71300	Local Consultants	Pomada FIP. Advisor to train members of the FIP research team and IPIAP in using the Risk-Based Framework (RBF) in a fishery assessment.	Contract	1	10,000	10,000	Year 1	SFP	
42.	2.1	2.1.2	71200	International Consultants	Pomada FIP. Fisheries social consultant to prepare social risk assessment and workplan for the pomada FIP. Lumpsum including honorarium and travel expenses.	Contract	1	15,000	15,000	Year 1	SFP	
43.	2.1	2.1.2	71200	International Consultants	ASOAMAN FIP. Consultant to prepare MSC pre-assessment, FIP scoping document, workplan and budget for the ASOAMAN large pelagic fish FIP. Lumpsum including all expenses.	Contract	1	20,000	20,000	Year 1	SFP	
44.	2.1	2.1.2	71200	International Consultants	ASOAMAN FIP. Fisheries social consultant to prepare social risk assessment and workplan for the ASOAMAN large pelagic fish FIP. Lumpsum including honorarium and travel expenses.	Contract	1	15,000	15,000	Year 1	SFP	

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45.	2.1	2.1.3	72100	Contractual services - Companies	Pomada. Consultant team (social, labour) to document social, economic and labour conditions of pomada bolso fishers in Ecuador. Particular attention will be given to the roles of women and young persons in the fishing activities. Lumpsum including honorarium and travel expenses.	Contract	1	20,000	20,000	Year 1	SFP	
46.	2.1	2.1.3	72100	Contractual services - Companies	Pomada. Consultant team (governance and fisheries specialists) to assess baseline capacities of pomada fishers´ organisations to effectively participate and have a voice in the governance platform. Identify capaciy needs and prepare a workplan for capacity development, including fostering constructive collaboration among fishers´ organisations. Particular attention will be given to the contributions of women and young persons to fisheries governance. Lumpsum including honorarium and travel expenses.	Contract	1	20,000	20,000	Year 1	SFP	
47.	2.1	2.1.3	72100	Contractual services - Companies	Pomada. Consultant team (social, labour) to document social, economic and labour conditions of women pomada shrimp peelers in Posorja. This	Contract	1	23,000	23,000	Year 1	SFP	

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					includes the preparation of a register of pomada peelers in Posorja in coordination with SRP personnel. Lumpsum including honorarium and travel expenses.							
48.	2.1	2.1.3	71300	Local Consultants	Pomada. Social consultant to support SRP to prepare a workplan to empower of women shrimp peelers to participate in fisheries governance. Lumpum including honorarium and travel expenses.	Contract	1	5,000	5,000	Year 1	SFP	
49.	2.1	2.1.2	71200	International Consultants	Consultant to underake FIP scoping of the dorado and sharks fishery (supply chain analysis, stakeholder idntification, FIP scope, MSC quick assessment, draf pre-FIP plan). Lumpsum including all expenses.	Contract	1	8,000	8,000	Year 1	SFP	
50.	2.1	2.1.2	71200	International Consultants	Dorado and sharks FIP. Consultant to prepare MSC pre-assessment, FIP scoping document, workplan and budget for the dorado and sharks FIP. Lumpsum including all expenses.	Contract	1	10,000	10,000	Year 1	SFP	

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51.	2.1	2.1.3	72100	Contractual services - Companies	Consultant team (social, labour) to document social, economic and labour conditions of fishers and traders (comerciantes) associated with the dorado and sharks fisheries. The consultant team will engage with academia to motivate their involvement in this topic. Lumpsum including honorarium and travel expenses.	Contract	1	20,000	20,000	Year 1	SFP	
52.	2.1	2.1.3	71300	Local Consultants	Gender consultant to identify, document and quantify the involvement and contributions of women in the dorado and sharks value chains and prepare a gender strategy. Lumpsum including honorarium and travel expenses.	Contract	1	15,000	15,000	Year 1	SFP	
53.	2.1	2.1.3	72100	Contractual services - Companies	Consultant team (governance and fisheries specialists) to assess baseline capacities of independent fishers, traders (comerciantes) and existing fishers´ organisations to effectively participate and have a voice in the governance platforms for dorado and sharks. Identify capaciy needs and prepare a workplan for capacity development, including fostering constructive collaboration among independent fishers and fishers´	Contract	1	20,000	20,000	Year 1	SFP	

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					organisations. Particular attention will be given to the contributions of women and young persons to fisheries governance. Lumpsum including honorarium and travel expenses.							
54.	2.1	2.1.1	72100	Contractual services - Companies	Shrimp management platform. Consultant team (fisheries governance specialist, social specialist and lawyer) to prepare (i) a key stakeholder mapping, (ii) a proposal for the establishment and operation of a management platform (comité de manejo) for the shrimp fisheries of the Pacific coast (in line with the fisheries law of 2021), (iii) draft a legal instrument to establish the management platform, and (iv) a proposed workplan to develop the management platform. The management platform will ensure the representation of key stakeholders of the value chain like fishers, traders, processors, women, young persons and indigenous peoples (as pertinent). The design of the participatory management platform will use the results of the situation analysis of shrimp fisheries by Emberá-Wounaan indigenous groups. Lumpsump	Contract	1	30,000	30,000	Year 1	SFP	

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					including honorarium, travel expenses and meetings.							
55.	2.1	2.1.1	72100	Contractual services - Companies	Shrimp management platform. Consultant team (fisheries specialist, specialist on indigenous peoples) to document shrimp fishing operations by people of Emberá-Wounaan Comarca on the Pacific coast (e.g., fishing gear, fishing areas, landing ports, catch composition, number of fishers, level of organisation) and the uses of the capture (shrimp and bycatch) (e.g., self-consumption, trade and related supply chain). Particular attention will be given to the roles of women and young persons in the fishing activities. Lumpsum includes honorarium, field work, travel expenses and meetings.	Contract	1	20,000	20,000	Year 1	SFP	
56.	2.1	2.1.1	71200	International Consultants	Shrimp FIP. Consultant to undertake FIP scoping of the shrimp fishery (supply chain analysis, stakeholder identification, FIP scope, MSC quick assessment, draft pre-FIP plan). Lumpsum including all expenses.	Contract	1	15,000	15,000	Year 1	SFP	

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57.	2.1	2.1.2	71200	International Consultants	LPF FIP. Consultant to review and strengthen the monitoring system to collect data from the fishing operations and the supply chain.	Contract	1	10,000	10,000	Year 1	SFP	
58.	2.1	2.1.3	72100	Contractual services - Companies	Artisanal shrimp fishers. Consultant team (social, labour) to document social, economic, and labour conditions of Panamanian artisanal shrimp fishers in the Pacific coast. Particular attention will be given to the roles of women and young persons in the fishing activities. This study will complement the examination of Emberá-Wounaan shrimp fishers. Must coordinate with the indigenous peoples specialist that will prepare the baseline analysis of Emberá-Wounaan shrimp fishers. Lumpsum including honorarium and travel expenses.	Contract	1	25,000	25,000	Year 1	SFP	
59.	2.1	2.1.3	71300	Local Consultants	Artisanal shrimp fishers. Baseline analysis of the conditions of Emberá-Wounaan artisanal shrimp fishers, their families and organisations (number of artisanal fishers, fishers´ families conditions, women participation in the shrimp value chain, use - dependency of the fishery´s	Contract	1	12,000	12,000	Year 1	SFP	

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					resources, actual and past levels of organization, interests and views to be organised as fishers for this activity). Indigenous peoples specialist. Must closely coordinate and work in parallel with the consultan team that will assess the social, economic and labour conditions of Panamanian artisanal shrimp fishers. Lumpsum including honorarium and travel expenses. USD 12.000.							
60.	2.1	2.1.1	71300	Local Consultants	SPF platform. Consultant to undertake a participatory situation analysis of the Senegalese governance framework for the small pelagic fish fishery (e.g., level of performance, identify governance gaps and limitations) and to prepare a workplan (including targets and indicators) to strengthen governance and to track progress. This person will closely coordinate with the consultant that prepares the assessment of gender integration into the 2023 sardinellas management plan. Lumpsum includes honorarium and travel expenses.	Contract	1	15,000	15,000	Year 1	SFP	

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61.	2.1	2.1.1	71300	Local Consultants	SPF platform. Gender consultant to assess gender integration in current sardinellas management plan and the mangement framework for small pelagic fish and to prepare a workplan with affirmative actions to (i) mainstream gender into the implementation of the plan and (ii) potentiate women integration into the small pelagic fish governance framework. The consultant will closely coordinate with the person that prepares the situation analysis of the governance framework. Emphasis will be given to strengthen the integration of women in the governance framework and the understanding of the role and contributions of women along the small pelagic fish value chain. Lumpsum including honorarium and travel expenses.	Contract	1	10,000	10,000	Year 1	SFP	
62.	2.1	2.1.2	71300	Local Consultants	SPF SCIP. Consultant team (market specialist, gender specialist, economist, seafood safety specialist, fisheries specialist). The work includes: [1] a detailed analysis of the situation of the small pelagic	Contract	1	40,000	40,000	Year 1	SFP	

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					fish supply chain in Joal (e.g., stakeholder identification, domestic markets, value distribution along the supply chain, role of women and youth in the supply chain) to identify bottlenecks, market disruptions and opportunities to develop supply of sustainable small pelagic fish products to the domestic market. [2] a MSC pre-assessment of the fishery to identify environmental and management challenges.							
63.	2.1	2.1.2	71200	International Consultants	SPF SCIP. Advisor from SFP, part-time support the preparation and implementation of the value chain improvement project. 5% time allocation.	Contract	1	26,000	26,000	Year 1	SFP	
64.	2.1	2.1.2	71200	International Consultants	Octopus FIP. Consultant to undertake FIP scoping of the Senegalese octopus fishery (supply chain analysis, stakeholder identification, FIP scope, MSC quick assessment, draf pre-FIP plan). Lumpsum including all expenses.	Contract	1	6,000	6,000	Year 1	SFP	
65.	2.1	2.1.2	71200	International Consultants	Octopus FIP. Consultant to prepare Rapid Assessment, FIP scoping document, workplan and budget for the Senegalese	Contract	1	10,000	10,000	Year 1	SFP	

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					octopus FIP. Lumpsum including all expenses.							
66.	2.1	2.1.3	71300	Local Consultants	CLPA network. Governance consultant to: (1) undertake a rapid situation analysis of the operation of the CLPAs and the coordination network using information from previous cooperation work (e.g., USAID COMFISH, COMFISH+ and Dekkal Geej projects) and in-depth interviews and focus groups with CLPAs, and (2) prepare a workplan to strengthen the coordination network.	Contract	1	4,000	4,000	Year 1	SFP	
67.	2.1	2.1.3	72100	Contractual services - Companies	Joal CLPA. Consultant team (governance and fisheries specialists) to assess baseline capacities of Joal CLPA to effectively participate and have a voice in the governance framework for the small pelagic fish fishery. Identify capacity needs and prepare a workplan for capacity development with indicators and targets to measure progress. Particular attention will be given to the contributions of women and young persons to the CLPA operation and to small pelagic fish fisheries governance.	Contract	1	5,000	5,000	Year 1	SFP	

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Procurement plan for year 1.												
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Number	**Outcome**	**Output**	**Atlas code**	**Type of supply**	**Description of goods, services or works**	**Unit of measure**	**QTY**	**Estimated unit price USD**	**Available budget USD**	**Estimated date of Completion of Activity**	**Responsible authorities**	**Note**
					Lumpsum including honorarium and travel expenses.							
68.	2.1	2.1.3	72100	Contractual services - Companies	Women processors. Consultant team (social, gender) to document social, economic and labour conditions of women that process small pelagic fish in the Joal area (related to the SCIP) and to participatively prepare a workplan to potentiate their capacities to contribute to improvements in the supply chain and fisheries governance. Lumpsum including honorarium and travel expenses.	Contract	1	8,000	8,000	Year 1	SFP	
69.	2.1	2.1.1	71300	Local Consultants	SPF platform. Governance consultant to prepare: (i) a situation analysis of operation and performance of the management structure of the Mauritanian fishery for small pelagic fish (i.e., CNC-PP, CAAP, CCNADP and the PAP-PP coordination unit), and (ii) workplan to strengthen the capacities and operation of (a) the CNC-PP and (b) the PAP-PP coordination unit. Lumpsum includes honorarium and travel expenses.	Contract	1	10,000	10,000	Year 1	SFP	

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Procurement plan for year 1.												
Does not include project team and travel expenses of project team												
Number	**Outcome**	**Output**	**Atlas code**	**Type of supply**	**Description of goods, services or works**	**Unit of measure**	**QTY**	**Estimated unit price USD**	**Available budget USD**	**Estimated date of Completion of Activity**	**Responsible authorities**	**Note**
70.	2.1	2.1.1	71300	Local Consultants	SPF platform. Gender consultant to design and carry out two awareness sessions of at least one hour each for the members of the management platform. Lumpsum, including honorarium and travel expenses.	Contract	1	400	400	Year 1	SFP	
71.	2.1	2.1.1	71300	Local Consultants	SPF platform. Facilitator of the annual meetings of the management structure. For each meeting: (i) support the PAP-PP coordination unit in the assessment of progress of the PAP-PP and the preparation of the proposal of annual action plan and budget for the following year, (ii) prepares and runs the meeting, (iii) facilitate the review of assessment of progress, (iv) systematically capture and document learning, and (iv) prepares a memoire that is distributed to all participants. Finally, this person will prepare a lessons learned document of the process which will include recommendations for improvement. USD1000 per meeting (four annual meetings) + USD1000 to prepare the lessons learned document.	Contract	1	1,000	1,000	Year 1	SFP	

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Procurement plan for year 1.												
Does not include project team and travel expenses of project team												
Number	**Outcome**	**Output**	**Atlas code**	**Type of supply**	**Description of goods, services or works**	**Unit of measure**	**QTY**	**Estimated unit price USD**	**Available budget USD**	**Estimated date of Completion of Activity**	**Responsible authorities**	**Note**
72.	2.1	2.1.1	71300	Local Consultants	SPF FIP. Fisheries scientist to organise, coordinate and support the initial implementation of the local coordination team of the Mauritanian small pelagic fish FIP. This person will (i) assess the current limitations and barriers for effective local coordination, (ii) then prepare a strategy and workplan to establish and consolidate a local coordination team, (iii) then conform a coordination team that ensure fluid coordination and operation among FIP participants (e.g., Ministère des Pêches et de l'Economie Maritime, IMROP, local businesses and international buyers, (iv) initiate the operation of the local coordination team and implement actions to facilitate its work (e.g., operations manual, collaboration agreements). Full time one year. Afterwards, it is expected that the FIP will finance the operation of the local coordination team.	Contract	1	12,000	12,000	Year 1	SFP	
73.	2.1	2.1.2	71200	International Consultants	MTR octopus FIP. Fisheries social consultant to prepare social risk assessment and workplan for the Mauritanian	Contract	1	15,000	15,000	Year 1	SFP	

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Procurement plan for year 1.												
Does not include project team and travel expenses of project team												
Number	**Outcome**	**Output**	**Atlas code**	**Type of supply**	**Description of goods, services or works**	**Unit of measure**	**QTY**	**Estimated unit price USD**	**Available budget USD**	**Estimated date of Completion of Activity**	**Responsible authorities**	**Note**
					octopus FIP. Lumpsum including honorarium and travel expenses.							
74.	2.1	2.1.2	71300	Local Consultants	MTR octopus FIP. Facilitator to support the institutional and governance development of the Association Mauritanienne the Producteurs et Exportateurs de Poulpe (AMPEP) as a key actor of the Mauritanian octopus FIP. This person will provide practical hands-on support (i) to develop positive dialogue and negotiation skills, (ii) to prepare and agree on key instruments like internal rules and regulations, administration of a common fund, a strategic plan, self-evaluation tools, and a code of conduct, and (iii) to understand the requirements of the sustainable seafood market (e.g., sustainable use of the resource, social responsibility). At the end it is expected that AMPEP can (i) effectively represent the actors of the value chain, (ii) positively interact and collaborate with the fisheries authority and other pertinent government entities (e.g. IMROP, maritime authority), and (iii) sustain the	Contract	1	5,400	5,400	Year 1	SFP	

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Procurement plan for year 1.											
Does not include project team and travel expenses of project team											
Number	**Outcome**	**Output**	**Atlas code**	**Type of supply**	**Description of goods, services or works**	**Unit of measure**	**QTY**	**Estimated unit price USD**	**Available budget USD**	**Estimated date of Completion of Activity**	**Responsible authorities**	**Note**
					FIP. Twelve-months support to AMPEP.							
75.	2.2	2.2.|	71200	International Consultants	RIA. Consultant team to prepare guidelines and training workshop on Regulatory Impact Analysis in fisheries building on main international guidelines (e.g., OECD, United Nations Department of Economic and Social Affairs) and practical application in fisheries.	Contract	1	30,000	30,000	Year 1	SFP	
76.	2.2	2.2.2	71300	Local Consultants	PAN large pelagic fish. Labour consultant to evaluate labour and working conditions in large pelagic fish longline vessels (espinel grueso) and prepare a proposed action plan to address gaps. Lumpsum includes honorarium and travel expenses.	Contract	1	8,000	8,000	Year 1	SFP	
77.	2.2	2.2.2	71300	Local Consultants	Guatemalan PAN sharks. External independent evaluation of the implementation of the Guatemalan PAN sharks. Lumpsum includes honorarium, travel expenses and meetings with key stakeholders.	Contract	1	8,000	8,000	Year 1	SFP	
78.	2.2	2.2.2	72100	Contractual services - Companies	Guatemalan PAN sharks. Consultant team to prepare a detailed analysis of the Guatemalan domestic	Contract	1	50,000	50,000	Year 1	SFP	

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Procurement plan for year 1.												
Does not include project team and travel expenses of project team												
Number	**Outcome**	**Output**	**Atlas code**	**Type of supply**	**Description of goods, services or works**	**Unit of measure**	**QTY**	**Estimated unit price USD**	**Available budget USD**	**Estimated date of Completion of Activity**	**Responsible authorities**	**Note**
					consumption and value chain for shark meat, parts, and products and the contribution to food security, livelihoods and income. Lumpsum includes honorarium and travel expenses.							
79.	2.2	2.2.|	71300	Local Consultants	Guatemalan PAN sharks. Facilitated intersectoral dialogue on implications of Guatemalan domestic shark consumption and trade on conservation and management measures (e.g., food security, employment). The dialogue process will foster policy coherence and an agreed policy framework for shark conservation, trade, and management measures. A facilitation team (two persons) will organise and facilitate meetings, prepare memoirs of each meeting with the agreements achieved, and a final memoir of the process. Eight half-day dialogue meetings. Cost per meeting: USD580 (1) facilitation team (2 persons | USD500 including preparation of meeting and memoir), (2) venue USD80 (refreshments and materials).	Contract	1	1,160	1,160	Year 1	SFP	

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Procurement plan for year 1.											
Does not include project team and travel expenses of project team											
Number	**Outcome**	**Output**	**Atlas code**	**Type of supply**	**Description of goods, services or works**	**Unit of measure**	**QTY**	**Estimated unit price USD**	**Available budget USD**	**Estimated date of Completion of Activity**	**Responsible authorities**	**Note**
80.	2.1	2.2.2.	72800	Information Technology Equipmt	Guatemalan PAN sharks. Equipment (e.g., laptops, tablets, printer) and software (e.g., database) to implement a registry of shark fishers and traders in the main ports of the Pacific coast of Guatemala.	Contract	2	2,000	8,000	Year 1	SFP	
81.	2.2	2.2.2.	71200	International Consultants	COREMAHI. Fisheries specialist of SPF that coordinates and supports the work of COREMAHI. Part-time support to GMC2 project (10% time allocation).	Contract	1	9,750	9,750	Year 1	SFP	
82.	2.2	2.2.2.	71300	Local Consultants	COREMAHI. Social consultant to prepare social responsibility targets for COREMAHI´s code of conduct.	Contract	1	3,000	3,000	Year 1	SFP	
83.	2.2	2.2.2.	71300	Local Consultants	Shrimp management plan. Labour consultant to evaluate labour and working conditions in shrimp trawlers. Lumpsum includes honorarium and travel expenses.	Contract	1	10,000	10,000	Year 1	SFP	
84.	2.2	2.2.2.	72100	Contractual services - Companies	MTR SPF management. Consultant team to (i) calculate the present values of employment and economic contribution of the existing small pelagic fish value chains and (ii) prepare a forecast of future employment and economic contribution of three	Contract	1	20,000	20,000	Year 1	SFP	

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Procurement plan for year 1.												
Does not include project team and travel expenses of project team												
Number	**Outcome**	**Output**	**Atlas code**	**Type of supply**	**Description of goods, services or works**	**Unit of measure**	**QTY**	**Estimated unit price USD**	**Available budget USD**	**Estimated date of Completion of Activity**	**Responsible authorities**	**Note**
					scenarios: (a) 100% capture destined to added value human consumption (domestic and export markets) and use of fish residues to produce fishmeal and oil, (b) 100% capture destined to production of fishmeal and oil, and (c) an intermediate scenario. Lumpsum including honorarium, field work and meetings.							
85.	2.1	2.2.2.	72100	Contractual services - Companies	MTR SPF management. Consultant team to (i) calculate the current national fish and seafood per capita consumption, (ii) calculate the current national per capita consumption of small pelagic fish, and (iii) identify the consumer preferences and major barriers to seafood and small pelagic fish consumption. Lumpsum including honorarium, field work and meetings.	Contract	1	40,000	10,000	Year 2	SFP	
86.	2.3	2.3.1	72100	Contractual services - Companies	Ecuadorian PAT-Ec. Consultant team to prepare a detailed analysis of the Ecuadorian domestic consumption, market and value chain for shark meat and parts and their contribution to food security, income and livelihoods. Lumpsum includes	Contract	1	30,000	30,000	Year 1	SFP	

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Procurement plan for year 1.												
Does not include project team and travel expenses of project team												
Number	**Outcome**	**Output**	**Atlas code**	**Type of supply**	**Description of goods, services or works**	**Unit of measure**	**QTY**	**Estimated unit price USD**	**Available budget USD**	**Estimated date of Completion of Activity**	**Responsible authorities**	**Note**
					honorarium and travel expenses.							
87.	3.2	3.2.1	72100	Contractual Services - Companies	Development of project website according to IW:LEARN guidelines, linked to web portals of project partners. Webportal in three languages: English, French and Spanish.	Contract	1	8,000	8,000	Year 1	SFP	
88.	3.2	3.2.1	72100	Contractual Services - Companies	Maintenance and operation of project website (outsourced).	Contract	1	8,000	40,000	Year 5	SFP	
89.	3.2	3.2.1	72800	InfoTech Equipment	Equipment and software for website and social-media platforms. Two servers (USD8,000) + dos video cameras (USD1,400) + dos voice recorders (USD200) + software to edit video, audio and images (USD2000) + website and webinar administration software (USD4,000)	Contract	1	15,600	15,600	Year 1	SFP	
90.			74100	Professional Services	Annual financial audit (USD10,000 per year).	Contract	1	10,000	50,000	Year 5	SFP	
91.			72800	InfoTech Equipment	Equipment for project offices (computers, all-in-one printers)	Contract	1	13,640	13,640	Year 1	SFP	

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Annex 11: Terms of Reference for Project Board and Project Team

Project Board

Purpose

The Project Board will serve as the project´s decision-making body. It supervises the project and provides strategic direction.

Members

The board is formed by the following persons:

1. The Undersecretary of Fisheries Resources of Ecuador.
2. The Director of regulations for fishing and aquaculture of Guatemala.
3. The Director of the Directorate General for the Exploitation of Fishery Resources of Mauritania.
4. The Director of the Department of Maritime Fisheries of Morocco.
5. The Director of the Aquatic Resources Authority of Panama.
6. The Director of the Directorate of Maritime Fisheries of Senegal.
7. The chair of the Global mahi Supply Chain Roundtable.
8. The chair of the Global octopus Supply Chain Roundtable.
9. The chair of the Global Roundtable on marine ingredients.
10. The UNDP Resident Representative of lead country office.

The participating countries will ensure gender equality among the board members. Each board member will have one officially designated alternate person. The designation will be made through a letter addressed to the chairperson. The alternate board member will be kept informed of the project developments and will be present at a meeting when the principal member is unable to attend. To ensure the firewall between oversight and execution functions, the board member and the alternate person cannot be directly participating in project execution activities.

The Project Board will be co-chaired by a representative of the countries of the CCLME (i.e., Mauritania, Morocco, and Senegal) and a representative of the countries of the PACA (Ecuador, Guatemala and Panama). These persons will be elected among the pertinent board members on the first board meeting. Also, the term for the board chairs will be established in the same first board meeting.

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The Regional Technical Specialist for Waters, Oceans, Ecosystems and Biodiversity for Latin America and the Caribbean, in coordination with her peers from the other participating regions (i.e., Africa and Arab States) will participate in the meetings as part of UNDP´s quality assurance role to provide advice and guidance.

The GEF operational focal points will be invited to board meetings as non-voting participants.

The Project Coordinator will attend all board meetings with no right to vote. This person will function as board secretariat, will prepare and keep the project board minutes and supporting documentation.

A representative of the Implementing Partner will be invited to participate in the board meetings, with no right to vote. As necessary, the board will invite other persons to attend the meetings as observers without vote.

The persons that serve on the project board must:

- Agree to the terms of reference of the board and the rules on protocols, quorum, and minuting.
- Meet annually, at least once per year.
- Disclose any conflict of interest in performing the functions of a project board member and take all measures to avoid any real or perceived conflicts of interest. This disclosure must be documented and kept on record by UNDP.
- Discharge the functions of the project board in accordance with UNDP policies and procedures.
- Ensure highest levels of transparency and ensure project board meeting minutes are recorded and shared with project stakeholders.

Meetings and decision-making

The Project Board will hold in-person or virtual meetings at least once a year. The board may meet extraordinarily when the chairpersons convene it as per request of its members.

The Project Board will take management decisions when orientation will be required by the Project Coordinator, including recommendations for UNDP/ implementing partner approval of annual work plans, budgets, and their revisions.

To ensure UNDP´s ultimate responsibility, the Project Board will take its decisions in accordance with standards that ensure the management to achieve project outcomes, best quality-price ratio, justice, integrity, transparency, and effective international competition. Decisions will be taken by consensus.

Roles

The two main (mandatory) and nondelegable roles of the project board are:

i. High-level oversight of the execution of the project by the Implementing Partner (as explained in the "Provide Oversight" section of the POPP). This is the primary function of the project board and includes annual (and as-needed) assessments of any major risks to the project, and decisions/agreements on any management actions or remedial measures to address them effectively. The project board reviews evidence of project performance based on monitoring, evaluation, and reporting, including progress reports, evaluations, risk logs and the combined delivery report. The project board is responsible for taking corrective action as needed to ensure the project achieves the desired results.

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ii. Approval of strategic project execution decisions of the Implementing Partner with a view to assess and manage risks, monitor, and ensure the overall achievement of projected results and impacts and ensure long term sustainability of project execution decisions of the Implementing Partner (as explained in the "Manage Change" section of the POPP).

Responsibilities

The project board has four key nondelegable responsibilities:

[1] Consensus making.

(1) The project board provides overall guidance and direction to the project, ensuring it remains within any specified constraints, and providing overall oversight of the project implementation.

(2) Review project performance based on monitoring, evaluation, and reporting, including progress reports, risk logs and the combined delivery report.

(3) The project board is responsible for making management decisions by consensus.

(4) To ensure UNDP's ultimate accountability, project board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency, and effective international competition.

(5) In case consensus cannot be reached within the board, the UNDP representative on the board will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.

[2] Oversee project execution.

(1) Agree on project manager´s tolerances as required, within the parameters outlined in the project document, and provide direction and advice for exceptional situations when the project manager´s tolerances are exceeded.

(2) Appraise annual work plans prepared by the Implementing Partner for the project and review the combined delivery reports prior to certification by the implementing partner.

(3) Address any high-level project issues as raised by the project manager and project assurance.

(4) Advise on major and minor amendments to the project within the parameters set by UNDP and the donor and refer such proposed major and minor amendments to the UNDP BPPS Nature, Climate and Energy Executive Coordinator (and the GEF, as required by GEF policies).

(5) Provide high-level direction and recommendations to the project management unit to ensure that the agreed deliverables are produced satisfactorily and according to plans.

(6) Track and monitor co-financed activities and realisation of co-financing amounts of this project.

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(7) Approve the Inception Report, the GEF annual project implementation reports (PIRs), and the mid-term review and terminal evaluation reports.

(8) Ensure commitment of human resources to support project implementation, arbitrating any issues within the project

[3] Risk Management:

(1) Provide guidance on evolving or materialized project risks and agree on possible mitigation and management actions to address specific risks.

(2) Review and update the project risk register and associated management plans based on the information prepared by the Implementing Partner. This includes risks related that can be directly managed by this project, as well as contextual risks that may affect project delivery or continued UNDP compliance and reputation but are outside of the control of the project. For example, social and environmental risks associated with co-financed activities or activities taking place in the project's area of influence that have implications for the project.

(3) Attend and answer or solve the requests/claims/concerns submitted by stakeholders through the grievance mechanism as the highest instance of conflict resolution within the project framework

[4] Coordination:

(1) Ensure coordination between various donor and government-funded projects and programmes.

(2) Ensure coordination with various government agencies and their participation in project activities.

Roles of the members

The members of the Project Board will have three roles: (i) project executive, (ii) beneficiary representatives and (iii) development partners:

- Project Executive. These are persons who represents ownership of the project. The members of the Project Executive are (in country alphabetical order) (1) the Undersecretary of Fisheries Resources of Ecuador, (2) the Director of regulations for fishing and aquaculture of Guatemala, (3) the Technical Advisor in charge of Fisheries and Oceanographic Research of the Ministry of Fisheries and Maritime Economy of Mauritania, (4) the Director of the Department of Maritime Fisheries of Morocco, (5) the Director of the Aquatic Resources Authority of Panama, and (6) the Director of the Directorate of Maritime Fisheries of Senegal. As indicated before, the Project Board will be co-chaired by a representative of the countries of the CCLME (i.e., Mauritania, Morocco and Senegal) and a representative of the countries of the PACA (Ecuador, Guatemala and Panama).
- Beneficiary Representatives. These are persons representing the interests of those groups of stakeholders who will ultimately benefit from the project. Their primary function within the board is to ensure the realisation of project results from the perspective of project beneficiaries. In this project the beneficiary representatives are (1) the chair of the Global mahi Supply Chain Roundtable (GMSR), (2) the chair of the Global octopus Supply Chain Roundtable (GOSR), and (3) the chair of the Global Roundtable on marine ingredients (GRMI).
- Development Partner. These are persons representing the interests of the parties concerned that provide funding, strategic guidance and/or technical expertise to the project. In this project the Development Partner is the UNDP Resident Representative of lead country office.

Technical Advisory Group

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The Technical Advisory Group is a coordination instance for the key project partners. Its main role is to provide technical orientation to support the achievement of the project outcomes and the corresponding outputs.

This advisory group will be constituted by one formally designed delegate from the fisheries and environment authorities (including pertinent fisheries research entities) of the participating countries. Designation (or replacement) of the members of the Technical Advisory Group will be made through a letter addressed to the co-chairs of the project board copied to the Project Coordinator. The members of the Technical Advisory Group cannot be the person that holds a seat in the Project Board and will not have an alternate person. The member organisations will promote the involvement of women and young persons in this advisory group and will ensure that they have equal participation opportunities and equal treatment.

The chair of the Technical Advisory Group will be elected by its members. Decisions will be made by consensus, but in case consensus cannot be reached within the committee, only formally designated members will have a vote. The chair will have the casting vote.

A member of the project unit will be designated to be the secretary of the technical committee. This person will support the chair in ensuring the efficient functioning of the Technical Advisory Group. The secretary will be responsible for:

i. Ensuring meetings are effectively organised and minutes are recorded.
ii. Maintaining effective records and administration.
iii. Communication and correspondence.
iv. Following the fulfilment of the agreements.

The Technical Advisory Group will hold virtual meetings at least quarterly. Meetings will be organised by the chair with support of the secretary. The advisory group will meet extraordinarily when the chairperson convenes it as per request of its members.

The members of the advisory group will decide on inviting other entities as appropriate to participate in the meetings but without vote.

The Technical Advisory Group will be responsible for:

1. Ensuring fluid inter-sectoral communication and collaboration within and among the participating countries.
2. Guaranteeing ownership of the activities implemented by the Implementing Partner, ensuring that the results are aligned with the countries' policies and priorities.
3. Providing technical guidance to the Project Coordinator and the project management unit to support the achievement of the project outcomes.
4. Review and pre-approve the annual work plan and its corresponding budget before they are submitted for consideration of the Project Board.

National Coordination Groups

Each country will have a National Coordination Group. Its main role is to facilitate collaboration and synergies among key partners and other projects and initiatives (e.g., FiTI, ILO, FAO). Each coordination group will be constituted formally designated delegates from the partner entities. Designation (or replacement) of the members of each National Coordination Group will be made through a letter addressed to the Project Coordinator. Each Coordination Group will elect a chair to guide the meetings and joint work.

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The Fisheries Officers of the project, with support of the pertinent Fisheries Specialists, will be the secretary of the National Coordination Groups. These persons will support the chair in ensuring the efficient functioning of the coordination group. The secretary will be responsible for:

i. Ensuring meetings are effectively organised and minutes are recorded.

ii. Maintaining effective records and administration.

iii. Communication and correspondence.

iv. Following the fulfilment of the agreements.

The National Coordination Group will hold in-person or virtual meetings at least every six months. It will be promoted to have every year, at a minimum, a meeting for joint programming and another meeting to assess progress. However, the National Coordination Group will meet as frequently as needed when the chairperson convenes the group.

The National Coordination Group will be responsible for:

1. Ensure fluid inter-sectoral communication and collaboration among (i) project partners, (ii) pertinent key organisations (e.g., civil society or fishers organisations), and (iii) other projects and initiatives.
2. Ensure synergy and complementarity among the actions of the GMC2 project and other public and private initiatives.
3. Provide technical guidance and recommendations to the Project Coordinator and the project management unit to support the achievement of the project outcomes.
4. Review and comment the GMC2 annual work plan and its corresponding budget before they are submitted for consideration of the Project Board.
5. Identify experience and lessons that will be useful in the country and worldwide.

Project management unit

Project Coordinator

The Project Coordinator (also called project manager) heads the project management unit. This person will ensure adequate project implementation and the generation of the outputs and outcomes set in the project document. This person will be responsible for the day-to-day management of the project on behalf of the Implementing Partner. This includes (i) guiding technical and strategic actions, (ii) closely work with the project´s partners, and (iii) the mobilisation of resources, contract management, budget management, bookkeeping, procurement and supervision of project staff, consultants, subcontractors, and responsible parties (in case these are designated during project execution).

The Project Coordinator will be hired by the implementing partner for 60 months using GEF resources, with annual contract, renewal subject to performance evaluation and criteria established by the Implementing Partner. The location of this person will be decided by the Implementing Partner at project start. The Project Manager will report to the Implementing Partner regarding all the project's technical, administrative, and financial issues. This person will report on a periodic basis to the Project Board.

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The Implementing Partner will apply strict measures to prevent conflicts of interest of the Project Coordinator with other matters or activities of the implementing partner. The functions of the Project Coordinator will end once the final project report has been finished and delivered to UNDP, and any other document required by GEF and UNDP, including the project administrative and financial closure and transfer of assets. This person will keep the necessary records, prepare financial and operative information, consolidate accounting information, and provide administrative, logistic, and financial support to all activities conducted in the six participating countries.

This person will be responsible for:

1. An adequate technical, administrative, and financial implementation of the project according to the approved annual work plan and the PRODOC.
2. Acting as the authorizing officer for the requirements to UNDP of disbursements of project funds.
3. Providing strategic guidance to the members of the project team and ensuring the logistic, administrative, and financial effectiveness of the project unit.
4. Providing operative, administrative, and financial direction and guidance to the members of the project unit.
5. Promoting the coordination and fluent communication among the partners of the project, key stakeholders, and project beneficiaries. As well as with other entities related to the project or which contribute to the project (e.g., civil society organizations, international organisations, other projects).
6. Receive and respond or solve the requests / claims / concerns submitted by stakeholders as part of the Grievance Mechanism in coordination with the Gender, Safeguards, and Participation Consultant. Those cases without a solution at this level should be brought to the attention of the Project Board.

In addition, this person will coordinate the following:

1. Preparation of technical, administrative, and financial reports, work plans, budget, and accounting records.
2. Preparation of terms of reference, specifications and other documents required for hiring personnel, goods, and services.
3. Identification and selection of consultants and supervision of consultancies and other goods and services providers.
4. Supervision of project tasks, to be accomplished on time and efficiently.
5. Organisation of events, workshops and other activities indicated in the PRODOC.

Specific responsibilities of the Project Coordinator include:

1. Manage the technical, administrative, and financial aspects of the project.
2. Plan the technical, administrative, and financial activities of the project and monitor progress against the project results framework and the approved annual workplan.
3. Provide technical, administrative, and financial direction and guidance to the project team.
4. Liaise with the Project Board to assure the overall direction and integrity of the project.
5. Monitor events as determined in the project monitoring plan, and update the plan as required.
6. Provide support for completion of assessments required by UNDP, spot checks and audits.
7. Monitor project progress, identify plan deviations, and make course corrections when needed within project board-agreed tolerances to achieve results.
8. Ensure that changes are controlled, and problems addressed.
9. Perform regular progress reporting to the project board as agreed with the board, including measures to address challenges and opportunities.

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10. Manage and monitor the project risks – including social and environmental risks - initially identified and submit new risks to the project board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log.
11. Oversee that project lessons are documented during implementation.
12. With support of the administrative assistant, keep records of project funds and expenditures and ensure all project-related financial documentation are well maintained and readily available.
13. With support of the administrative assistant, review project expenditures and ensure that project funds are used in compliance with the project document and the pertinent financial rules and procedures.
14. Provide necessary financial information as and when required for project management decisions.
15. Provide necessary financial information during project audits.
16. With support of the administrative assistant, consolidate financial progress reports submitted by the responsible parties for implementation of project activities.
17. Execute activities by managing personnel, goods and services, training, and low-value grants (if applicable), including drafting terms of reference and work specifications, and overseeing all contractors' work.
18. Identify and obtain any support and advice required for the management, planning and control of the project.
19. Provide support for completion of assessments required by UNDP, spot checks and audits.
20. Manage requests for the provision of UNDP financial resources through funding advances, direct payments or reimbursement using the Funding Authorization and Certificate of Expenditures (FACE) form.
21. Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports.
22. Monitor progress watch for plan deviations and make course corrections when needed within project board-agreed tolerances to achieve results.
23. Prepare and submit financial reports to UNDP on a quarterly basis.
24. Ensure that changes are controlled, and administrative and financial problems addressed.
25. Perform regular administrative and financial progress reporting to the project board as agreed with the board, including measures to address challenges and opportunities.
26. Prepare revisions to the multi-year workplan, as needed, as well as annual and quarterly plans if required.
27. Prepare the GEF PIR with support of the project team.
28. Based on the GEF PIR, prepare the annual workplan for the following year.
29. Prepare the inception report no later than one month after the inception workshop.
30. Implement the necessary administrative and financial processes to ensure that the indicators included in the project results framework are monitored annually in advance of the GEF PIR submission deadline so that progress can be reported in the GEF PIR.
31. Assess major and minor amendments to the project within the parameters set by UNDP-GEF.
32. Execute the necessary technical, administrative and financial processes to ensure that the gender action plan, stakeholder engagement plan, monitoring and evaluation plan and any environmental and social management plans are implemented.

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33. Monitor implementation plans including the gender action plan, stakeholder engagement plan, environmental and social management framework, and any other environmental and social management plans.
34. Monitor and track progress against the GEF core indicators, especially during PIR, MTR and TE.
35. Ensure that the midterm review process is undertaken as per the UNDP guidance and submit the final MTR report (including the corresponding management response and follow-up actions) to the project board. Ensure that administrative and financial MTR recommendations are properly reflected in the subsequent Annual Work Plan and budget.
36. Ensure that the terminal evaluation process is undertaken as per the UNDP guidance and submit the final TE report (including the management response) to the project board.

The Project Coordinator will generate (i) annual work plans, procurement plans and their corresponding budgets, (ii) quarterly progress reports, and (iii) annual project implementation reports (PIR). Drafts of the annual work plans and budget will be reviewed with the Technical Advisory Group before presenting them to the Project Board. The quarterly progress report and PIR will provide details on achievements, difficulties, and restrictions that the project is facing, and recommendations needed to achieve the planned outcomes. These reports will be presented to the Project Board for their information.

The Project Coordinator will have a signature delegation as a valid requirement in financial administrative processes up to USD60,000 for the following processes:

1. Requests for payment for fees, consulting products and goods and services from suppliers,
2. Requests for purchase orders of goods and / or equipment,
3. Requests for individual and company contracts, and
4. Others that do not exceed the authorized limit value.

In addition to his/her responsibilities for the technical execution of the project, this person will (i) direct the work with the National Coordination Groups, (ii) ensure positive collaboration and synergic work with project partners and other projects and initiatives, and (iii) direct the support to the countries in the application of Regulatory Impact Assessment.

This person will have a university degree (M.Sc. or Ph.D. levels are desirable) in fisheries related fields (such as fisheries biology, fisheries economy, fisheries anthropology) at least ten years of working experience in fisheries work. This person must have (i) solid experience in fisheries governance and management and project management, (ii) a sound understanding of seafood value chains and (iii) be fluent in English and an advanced level in French or Spanish. Previous working experience in key issues of fisheries management or seafood market transformation and GEF project implementation is very desirable.

Fisheries Officer CCLME

This person will be responsible for ensuring that national governance platforms and fisheries management plans are adequately supported in the three participating countries that are part of the Canary Current Large Marine Ecosystem. This person must ensure the generation of the outputs and outcomes specified in the PRODOC (mainly outcomes 2.1, 2.2 and 2.3), according to the required quality standards, and within time and costs restrictions.

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The Fisheries officer CCLME will be hired for 60 months by the Implementing Partner using GEF resources, with annual contract, renewal subject to performance evaluation and criteria established by the implementing partner. The location of the Fisheries officer CCLME will be decided by the Implementing Partner at project start. This person will be supervised by the Project Coordinator.

This person will be responsible for:

1. Ensuring fluid communication with project partners, responsible parties (if pertinent), and key stakeholders.
2. The development of the fisheries management platforms (2.1.1) and the capacity development activities (2.1.3) in the CCLME countries. Support the collaborative work between Morocco and Mauritania for the management of small pelagic fish, including the preparation of the joint research plan (2.1.1).
3. Support the development of the FIPs in the CCLME countries (2.1.2).
4. Support the implementation or preparation of fisheries management plans and the application of Regulatory Impact Assessment in the CCLME countries (2.2.1). Ensuring that the management plans integrate social, economic, and by-catch | ecosystem impact reduction objectives and targets.
5. Organise the learning exchange on management plans for small pelagic fish and octopus (2.2.2).
6. Work with SFP FishSource specialists to develop the fisheries profiles for the CCLME fisheries.
7. Support the development of the socially responsible seafood standards and the application of the reduced by-catch and ecosystem impacts standard to the project target fisheries.
8. Ensuring a prompt delivery of outputs and the generation of project outcomes.
9. Keeping an adequate and fluent communication and collaboration with project key stakeholders and partners.
10. Keeping an adequate and fluent communication and collaboration with the rest of the members of the project unit.
11. Preparing the draft annual work plan with the corresponding budget for the pertinent project outcomes.
12. Support the implementation of the ESMF management measures in close coordination with the Gender, Safeguards, and Participation Consultant.
13. Receive and respond or solve the requests / claims / concerns submitted by stakeholders as part of the Grievance Mechanism in coordination with the Gender, Safeguards, and Participation Consultant and the Project Coordinator.
14. Promoting communication and sharing experiences among project partners, stakeholders, and direct beneficiaries from the countries.
15. Contributing to the monitoring of project indicators, providing inputs in order that these subjects be analysed and included in the PIR, MTR and terminal evaluation.
16. Providing information and support for the preparation of quarterly progress reports, annual project implementation reports, the mid-term review, and the terminal evaluation.

This person will have a university degree (M.Sc. is highly desirable) in fisheries science. At least seven years of working experience in management of fishery resources, interdisciplinary teams, and participatory processes in fisheries governance; previous experience in implementing GEF projects is highly desirable. This person must be fluent in English and French. Previous working experience in the key issues of the Canary Current Large Marine Ecosystem is valuable.

Fisheries Officer PACA

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This person will be responsible for ensuring that national governance platforms and fisheries management plans are adequately supported in the three participating countries that are part of the Pacific Central American Coastal Large Marine Ecosystem. This person must ensure the generation of the outputs and outcomes specified in the PRODOC (mainly outcomes 2.1, 2.2 and 2.3), according to the required quality standards, and within time and costs restrictions.

The Fisheries officer PACA will be hired for 60 months by the Implementing Partner using GEF resources, with annual contract, renewal subject to performance evaluation and criteria established by the implementing partner. The location of the Fisheries officer PACA will be decided by the Implementing Partner at project start. This person will be supervised by the Project Coordinator.

This person will be responsible for:

1. Ensuring fluid communication with project partners, responsible parties (if pertinent), and key stakeholders.
2. The development of the fisheries management platforms (2.1.1) and the capacity development activities (2.1.3) in the PACA countries. Organise the south-south cooperation on fisheries action plans among Ecuador, Guatemala and Panama (2.2.2) and the regional work with COREMAHI (2.2.2, 2.3.1).
3. Support the development of the FIPs in the PACA countries (2.1.2).
4. Support the implementation or preparation of fisheries management plans and the application of Regulatory Impact Assessment in the PACA countries (2.2.1). Ensuring that the management plans integrate social, economic, and by-catch | ecosystem impact reduction objectives and targets.
5. Work with SFP FishSource specialists to develop the fisheries profiles for the PACA fisheries.
6. Support the development of the socially responsible seafood standards and the application of the reduced by-catch and ecosystem impacts standard to the project target fisheries.
7. Ensuring a prompt delivery of outputs and the generation of project outcomes.
8. Keeping an adequate and fluent communication and collaboration with project key stakeholders and partners.
9. Keeping an adequate and fluent communication and collaboration with the rest of the members of the project unit.
10. Preparing the draft annual work plan with the corresponding budget for the pertinent project outcomes.
11. Support the implementation of the ESMF management measures in close coordination with the Gender, Safeguards, and Participation Consultant.
12. Receive and respond or solve the requests / claims / concerns submitted by stakeholders as part of the Grievance Mechanism in coordination with the Gender, Safeguards, and Participation Consultant and the Project Coordinator.
13. Promoting communication and sharing experiences among project partners, stakeholders, and direct beneficiaries from the countries.
14. Contributing to the monitoring of project indicators, providing inputs in order that these subjects be analysed and included in the PIR, MTR and terminal evaluation.
15. Providing information and support for the preparation of quarterly progress reports, annual project implementation reports, the mid-term review, and the terminal evaluation.

This person will have a university degree (M.Sc. is highly desirable) in fisheries science. At least seven years of working experience in management of fishery resources, interdisciplinary teams, and participatory processes in fisheries governance; previous experience in implementing GEF projects is highly desirable. This person must be fluent in English and Spanish. Previous working experience in the key issues of the Pacific Central American Coastal Large Marine Ecosystem is valuable.

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Administrative assistant

This person will provide administrative, logistic, and financial support for project execution. The Administrative Assistant will be hired by the implementing partner for 60 months using GEF resources, with annual contract, renewal subject to performance evaluation and criteria established by the implementing partner. The location of this person will be decided by the Implementing Partner at project start. The functions of the Administrative Assistant will end once the final project report has been finished and delivered to UNDP, and any other document required by GEF and UNDP, including the project administrative closure. This person will be supervised by the Project Coordinator.

This person will keep the necessary records, prepare financial and operative information, consolidate accounting information, and provide administrative, logistic and financial support to all activities carried out in the six participating countries.

Under the guidance and supervision of the Project Coordinator, this person will carry out the following tasks:

1. Keep records of project funds and expenditures and ensure all project-related financial documentation are well maintained and readily available when required by the project coordinator.
2. Review project expenditures and ensure that project funds are used in compliance with the project document and the pertinent financial rules and procedures.
3. Provide necessary financial information as and when required for project management decisions.
4. Provide necessary financial information during project audits.
5. Review annual budgets and project expenditure reports and notify the project coordinator if there are any discrepancies or issues.
6. Consolidate financial progress reports submitted by the responsible parties for implementation of project activities.
7. Liaise and follow up with the responsible parties (in case these are designated during project execution) for implementation of project activities in matters related to project funds and financial progress reports.

This person must have a bachelor's degree or an advanced diploma in accounting/ financial management and at least ten years of relevant work experience, preferably in a project management setting involving multi-lateral/ international funding agency. Previous experience with United Nations or GEF projects will be a definite asset. This person must have good working proficiency of English.

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Annex 12: GEF Core indicators

Core Indicator 1	**Terrestrial protected areas created or under improved management for conservation and sustainable use**						***(Hectares)***
			Hectares (1.1+1.2)				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
Indicator 1.1	Terrestrial protected areas newly created						
Name of Protected Area	WDPA ID	IUCN category	Hectares				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
		Sum					
Indicator 1.2	Terrestrial protected areas under improved management effectiveness						
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score			
				Baseline		Achieved	
					Endorsement	MTR	TE
		(select)					
		(select)					
		Sum					
Core Indicator 2	**Marine protected areas created or under improved management for conservation and sustainable use**						***(Hectares)***
			Hectares (2.1+2.2)				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	*TE*	
Indicator 2.1	Marine protected areas newly created						
Name of Protected Area	WDPA ID	IUCN category	Hectares				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
		(select)					
		(select)					
		Sum					
Indicator 2.2	Marine protected areas under improved management effectiveness						
	WDPA ID	IUCN category	Hectares	METT Score			
				Baseline		Achieved	

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Name of Protected Area				PIF stage	Endorsement	MTR	TE
		(select)					
		(select)					
		Sum					
Core Indicator 3	**Area of land restored**						***(Hectares)***
				Hectares (3.1+3.2+3.3+3.4)			
				Expected		Achieved	
				PIF stage	Endorsement	MTR	TE
Indicator 3.1	Area of degraded agricultural land restored						
				Hectares			
				Expected		Achieved	
				PIF stage	Endorsement	MTR	TE
Indicator 3.2	Area of forest and forest land restored						
				Hectares			
				Expected		Achieved	
				PIF stage	Endorsement	MTR	TE
				1,200	*2,312*		
Indicator 3.3	Area of natural grass and shrublands restored						
				Hectares			
				Expected		Achieved	
				PIF stage	Endorsement	MTR	TE
Indicator 3.4	Area of wetlands (including estuaries, mangroves) restored						
				Hectares			
				Expected		Achieved	
				PIF stage	Endorsement	MTR	TE
Core Indicator 4	**Area of landscapes under improved practices (hectares; excluding protected areas)**						***(Hectares)***
				Hectares (4.1+4.2+4.3+4.4)			
				Expected		Expected	

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		PIF stage	Endorsement	MTR	TE
Indicator 4.1	Area of landscapes under improved management to benefit biodiversity				
		Hectares			
		Expected		Achieved	
		PIF stage	Endorsement	MTR	TE
Indicator 4.2	Area of landscapes that meet national or international third-party certification that incorporates biodiversity considerations				
Third party certification(s):		Hectares			
		Expected		Achieved	
		PIF stage	Endorsement	MTR	TE
Indicator 4.3	Area of landscapes under sustainable land management in production systems				
		Hectares			
		Expected		Achieved	
		PIF stage	Endorsement	MTR	TE
Indicator 4.4	Area of High Conservation Value Forest (HCVF) loss avoided				
Include documentation that justifies HCVF		Hectares			
		Expected		Achieved	
		PIF stage	Endorsement	MTR	TE
Core Indicator 5	**Area of marine habitat under improved practices to benefit biodiversity**				***(Hectares)***
Indicator 5.1	Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations				
Third party certification(s):		Number			
		Expected		Achieved	
		PIF stage	Endorsement	MTR	TE
Indicator 5.2	Number of large marine ecosystems (LMEs) with reduced pollution and hypoxial				
		Number			
		Expected		Achieved	
		PIF stage	Endorsement	MTR	TE

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Indicator 5.3	Amount of Marine Litter Avoided					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 6	**Greenhouse gas emission mitigated**					***(Tons)***
			Expected metric tons of CO_2e (6.1+6.2)			
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)					
	Expected CO2e (indirect)					
Indicator 6.1	Carbon sequestered or emissions avoided in the AFOLU sector					
			Expected metric tons of CO_2e			
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)					
	Expected CO2e (indirect)					
	Anticipated start year of accounting					
	Duration of accounting					
Indicator 6.2	Emissions avoided Outside AFOLU					
			Expected metric tons of CO_2e			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)					
	Expected CO2e (indirect)					
	Anticipated start year of accounting					
	Duration of accounting					
Indicator 6.3	Energy saved					
			MJ			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 6.4	Increase in installed renewable energy capacity per technology					
		Technology	Capacity (MW)			
			Expected		Achieved	

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			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
Core Indicator 7	**Number of shared water ecosystems (fresh or marine) under new or improved cooperative management**					**2**
Indicator 7.1	Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation[367]					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.2	Level of Regional Legal Agreements and Regional Management Institutions to support its implementation[368]					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.3	Level of national/local reforms and active participation of Inter-Ministerial Committees[369]					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.4	Level of engagement in IWLEARN through participation and delivery of key products[370]					
		Shared water ecosystem	Rating (scale 1-4)			
			Rating		Rating	
			PIF stage	Endorsement	MTR	TE

[367] Four-point scale. 1 = No TDA/SAP developed. 2 = TDA finalized. 3 = SAP ministerially endorsed. 4 = SAP under implementation.

[368] Five-point scale. 0 = Not established. 1 = By-laws and operating regulations manual drafted. 2 = IWRM committee established in the transboundary basin (according to the regulations of the GIRH Binational Commission Peru - Ecuador) and operating regulations manual approved by both countries' delegations. 3 = transboundary action plan approved by the countries and the transboundary basin IWRM committee meets regularly. 4 = transboundary action plan under implementation and the transboundary basin IWRM committee meets regularly.

[369] Four-point scale. 1 = Neither national/local reforms nor IMCs. 2 = National/local reforms in preparation, IMCs functional. 3 = National/local reforms and IMCs in place. 4 = National/local reforms/policies implemented, supported by IMCs.

[370] Four-point scale. 1 = No participation. 2 = Website in line with IW:LEARN guidance active. 3 = As above, plus strong participation in training/twinning events and production of at least one experience note and one results note. 4 = As above, plus active participation of project staff and country representatives at International Waters conferences and the provision of spatial data and other data points via project website.

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		Canary Current	1	1		
		Pacific Central American Coastal	1	1		
Core Indicator 8	**Globally over-exploited fisheries Moved to more sustainable levels**					***1,417,500 (Tons)***
Fishery Details			Metric Tons			
			PIF stage	Endorsement	MTR	TE
Ecuador pomada (Protrachypene precipua) 2,277 t per year Ecuador lare pelagic fish longline (espinel grueso) 1,600 t per year (mainly swordfish Xiphias gladius, yellowfin tuna Thunnus albacares and marlins, and sharks as bycatch). Guatemala dorado Coryphaena hippurus) and sharks longline fishery. 3,840 t per year. Panama shrimp fisheries (trawl and artisanal) 1,248 t per year. Panama large pelagic fish longline fishery (mainly Thunnus albacares and Coryphaena hippurus). Mauritania octopus fishery (Octopus vulgaris) 39,000 t per year. Mauritania small pelagic fish fishery (Sardinella aurita, S. maderensis) 318,000 t per year. Morocco sardine fishery (Sardina pilchardus) zone C stock shared with Mauritania 824,000 t per year. Senegal small pelagic fish fishery (Sardinella aurita, S. maderensis) 218,163 t per year. Senegal octopus fishery (Octopus vulgaris) 8,375 t per year. TOTAL 1,417,500 t per year under improved management.			*1,015,000*	*1,417,500 t*		
Core Indicator 9	**Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products**					***(Tons)***
			Metric Tons (9.1+9.2+9.3)			
			Expected		Achieved	
			PIF stage	PIF stage	MTR	TE

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Indicator 9.1	Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)					
POPs type			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
(select)	(select)	(select)				
(select)	(select)	(select)				
(select)	(select)	(select)				
Indicator 9.2	Quantity of mercury reduced					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.3	Hydrochloroflurocarbons (HCFC) Reduced/Phased out					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.4	Number of countries with legislation and policy implemented to control chemicals and waste					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.5	Number of low-chemical/non-chemical systems implemented particularly in food production, manufacturing and cities					
		Technology	Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.6	Quantity of POPs/Mercury containing materials and products directly avoided					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	PIF stage	Endorsement
Core Indicator 10	**Reduction, avoidance of emissions of POPs to air from point and non-point sources**					***(Grams)***

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Indicator 10.1	Number of countries with legislation and policy implemented to control emissions of POPs to air					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 10.2	Number of emission control technologies/practices implemented					
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 11	**Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment**					***(Number)***
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		Female	*200,000*	*3,162*		
		Male	*300,000*	*14,105*		
		Total	*500,000*	*17,267*		

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Annex 13: GEF Taxonomy

Level 1	Level 2	Level 3	Level 4
☐ **Influencing models**			
	☒ **Transform policy and regulatory environments**		
	☐ **Strengthen institutional capacity and decision-making**		
	☒ **Convene multi-stakeholder alliances**		
	☒ **Demonstrate innovative approaches**		
	☐ **Deploy innovative financial instruments**		
☐ **Stakeholders**			
	☒ **Indigenous Peoples**		
	☒ **Private Sector**		
		☐ Capital providers	
		☐ Financial intermediaries and market facilitators	
		☒ Large corporations	
		☒ SMEs	
		☒ Individuals/Entrepreneurs	
		☐ Non-Grant Pilot	
		☐ Project Reflow	
	☒ **Beneficiaries**		
	☒ **Local Communities**		
	☒ **Civil Society**		
		☒ Community Based Organization	
		☒ Non-Governmental Organization	
		☒ Academia	
		☐ Trade Unions and Workers Unions	
	☒ **Type of Engagement**		
		☒ Information Dissemination	
		☒ Partnership	
		☒ Consultation	
		☒ Participation	
	☒ **Communications**		
		☒ Awareness Raising	
		☐ Education	
		☐ Public Campaigns	
		☐ Behavior Change	
☒ **Capacity, Knowledge and Research**			
	☐ **Enabling Activities**		
	☒ **Capacity Development**		
	☒ **Knowledge Generation and Exchange**		

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	☒ **Targeted Research**		
	☒ **Learning**		
		☒ Theory of Change	
		☐ Adaptive Management	
		☐ Indicators to Measure Change	
	☒ **Innovation**		
	☒ **Knowledge and Learning**		
		☒ Knowledge Management	
		☒ Innovation	
		☐ Capacity Development	
		☐ Learning	
	☒ **Stakeholder Engagement Plan**		
☒ **Gender Equality**			
	☒ **Gender Mainstreaming**		
		☒ Beneficiaries	
		☒ Women groups	
		☒ Sex-disaggregated indicators	
		☒ Gender-sensitive indicators	
	☒ **Gender results areas**		
		☐ Access and control over natural resources	
		☒ Participation and leadership	
		☐ Access to benefits and services	
		☒ Capacity development	
		☒ Awareness raising	
		☒ Knowledge generation	
☒ **Focal Areas/Theme**			
	☐ **Integrated Programs**		
		☐ Commodity Supply Chains (Good Growth Partnership)	
			☐ Sustainable Commodities Production
			☐ Deforestation-free Sourcing
			☐ Financial Screening Tools
			☐ High Conservation Value Forests
			☐ High Carbon Stocks Forests
			☐ Soybean Supply Chain
			☐ Oil Palm Supply Chain
			☐ Beef Supply Chain
			☐ Smallholder Farmers
			☐ Adaptive Management
		☐ Food Security in Sub-Sahara Africa	
			☐ Resilience (climate and shocks)
			☐ Sustainable Production Systems
			☐ Agroecosystems
			☐ Land and Soil Health

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			☐ Diversified Farming
			☐ Integrated Land and Water Management
			☐ Smallholder Farming
			☐ Small and Medium Enterprises
			☐ Crop Genetic Diversity
			☐ Food Value Chains
			☐ Gender Dimensions
			☐ Multi-stakeholder Platforms
		☐ Food Systems, Land Use and Restoration	
			☐ Sustainable Food Systems
			☐ Landscape Restoration
			☐ Sustainable Commodity Production
			☐ Comprehensive Land Use Planning
			☐ Integrated Landscapes
			☐ Food Value Chains
			☐ Deforestation-free Sourcing
			☐ Smallholder Farmers
		☐ Sustainable Cities	
			☐ Integrated urban planning
			☐ Urban sustainability framework
			☐ Transport and Mobility
			☐ Buildings
			☐ Municipal waste management
			☐ Green space
			☐ Urban Biodiversity
			☐ Urban Food Systems
			☐ Energy efficiency
			☐ Municipal Financing
			☐ Global Platform for Sustainable Cities
			☐ Urban Resilience
	☐ **Biodiversity**		
		☐ Protected Areas and Landscapes	
			☐ Terrestrial Protected Areas
			☐ Coastal and Marine Protected Areas
			☐ Productive Landscapes
			☐ Productive Seascapes
			☐ Community Based Natural Resource Management
		☐ Mainstreaming	
			☐ Extractive Industries (oil, gas, mining)
			☐ Forestry (Including HCVF and REDD+)
			☐ Tourism
			☐ Agriculture & agrobiodiversity
			☐ Fisheries

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			☐ Infrastructure
			☐ Certification (National Standards)
			☐ Certification (International Standards)
		☐ Species	
			☐ Illegal Wildlife Trade
			☐ Threatened Species
			☐ Wildlife for Sustainable Development
			☐ Crop Wild Relatives
			☐ Plant Genetic Resources
			☐ Animal Genetic Resources
			☐ Livestock Wild Relatives
			☐ Invasive Alien Species (IAS)
		☐ Biomes	
			☐ Mangroves
			☐ Coral Reefs
			☐ Sea Grasses
			☐ Wetlands
			☐ Rivers
			☐ Lakes
			☐ Tropical Rain Forests
			☐ Tropical Dry Forests
			☐ Temperate Forests
			☐ Grasslands
			☐ Paramo
			☐ Desert
		☐ Financial and Accounting	
			☐ Payment for Ecosystem Services
			☐ Natural Capital Assessment and Accounting
			☐ Conservation Trust Funds
			☐ Conservation Finance
		☐ Supplementary Protocol to the CBD	
			☐ Biosafety
			☐ Access to Genetic Resources Benefit Sharing
	☐ **Forests**		
		☐ Forest and Landscape Restoration	
			☐ REDD/REDD+
		☐ Forest	
			☐ Amazon
			☐ Congo
			☐ Drylands
	☐ **Land Degradation**		
		☐ Sustainable Land Management	

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			☐ Restoration and Rehabilitation of Degraded Lands
			☐ Ecosystem Approach
			☐ Integrated and Cross-sectoral approach
			☐ Community-Based NRM
			☐ Sustainable Livelihoods
			☐ Income Generating Activities
			☐ Sustainable Agriculture
			☐ Sustainable Pasture Management
			☐ Sustainable Forest/Woodland Management
			☐ Improved Soil and Water Management Techniques
			☐ Sustainable Fire Management
			☐ Drought Mitigation/Early Warning
		☐ Land Degradation Neutrality	
			☐ Land Productivity
			☐ Land Cover and Land cover change
			☐ Carbon stocks above or below ground
		☐ Food Security	
	☒ **International Waters**		
		☐ Ship	
		☐ Coastal	
		☐ Freshwater	
			☐ Aquifer
			☐ River Basin
			☐ Lake Basin
		☒ Learning	
		☒ Fisheries	
		☐ Persistent toxic substances	
		☐ SIDS : Small Island Dev States	
		☐ Targeted Research	
		☐ Pollution	
			☐ Persistent toxic substances
			☐ Plastics
			☐ Nutrient pollution from all sectors except wastewater
			☐ Nutrient pollution from Wastewater
		☐ Transboundary Diagnostic Analysis and Strategic Action Plan preparation	
		☐ Strategic Action Plan Implementation	
		☐ Areas Beyond National Jurisdiction	
		☒ Large Marine Ecosystems	
		☒ Private Sector	
		☐ Aquaculture	

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		☐ Marine Protected Area	
		☐ Biomes	
			☐ Mangrove
			☐ Coral Reefs
			☐ Seagrasses
			☐ Polar Ecosystems
			☐ Constructed Wetlands
	☐ **Chemicals and Waste**		
		☐ Mercury	
		☐ Artisanal and Scale Gold Mining	
		☐ Coal Fired Power Plants	
		☐ Coal Fired Industrial Boilers	
		☐ Cement	
		☐ Non-Ferrous Metals Production	
		☐ Ozone	
		☐ Persistent Organic Pollutants	
		☐ Unintentional Persistent Organic Pollutants	
		☐ Sound Management of chemicals and Waste	
		☐ Waste Management	
			☐ Hazardous Waste Management
			☐ Industrial Waste
			☐ e-Waste
		☐ Emissions	
		☐ Disposal	
		☐ New Persistent Organic Pollutants	
		☐ Polychlorinated Biphenyls	
		☐ Plastics	
		☐ Eco-Efficiency	
		☐ Pesticides	
		☐ DDT - Vector Management	
		☐ DDT - Other	
		☐ Industrial Emissions	
		☐ Open Burning	
		☐ Best Available Technology / Best Environmental Practices	
		☐ Green Chemistry	
	☐ **Climate Change**		
		☐ **Climate Change Adaptation**	
			☐ Climate Finance
			☐ Least Developed Countries
			☐ Small Island Developing States
			☐ Disaster Risk Management
			☐ Sea-level rise

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			☐ Climate Resilience
			☐ Climate information
			☐ Ecosystem-based Adaptation
			☐ Adaptation Tech Transfer
			☐ National Adaptation Programme of Action
			☐ National Adaptation Plan
			☐ Mainstreaming Adaptation
			☐ Private Sector
			☐ Innovation
			☐ Complementarity
			☐ Community-based Adaptation
			☐ Livelihoods
		☐ **Climate Change Mitigation**	
			☐ Agriculture, Forestry, and other Land Use
			☐ Energy Efficiency
			☐ Sustainable Urban Systems and Transport
			☐ Technology Transfer
			☐ Renewable Energy
			☐ Financing
			☐ Enabling Activities
		☐ **Technology Transfer**	
			☐ Poznan Strategic Programme on Technology Transfer
			☐ Climate Technology Centre & Network (CTCN)
			☐ Endogenous technology
			☐ Technology Needs Assessment
			☐ Adaptation Tech Transfer
		☐ **United Nations Framework on Climate Change**	☐ Nationally Determined Contribution
	☒ **Rio Markers**		
		☐ Paris Agreement	
		☒ Sustainable Development Goals	
		☒ Climate Change Mitigation 0	
		☐ Climate Change Mitigation 1	
		☐ Climate Change Mitigation 2	
		☒ Climate Change Adaptation 0	
		☐ Climate Change Adaptation 1	
		☐ Climate Change Adaptation 2	

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Annex 14: Results of the Partners Capacity Assessment Tool (PACT) and HACT Micro Assessment

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Annex 15: Profiles of target fisheries

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GMC2 project

Fishery profile: Guatemala. Dorado (Coryphaena hippurus) and sharks longline fishery on the Pacific coast.

Overview of the country´s fisheries sector

Fishing in Guatemala constitutes an important source of employment and food security especially in the Pacific marine sector of the country, with a total of 8,800 reported fishermen for the region (Organización de las Naciones Unidas para la Acuicultura y Alimentación [FAO], 2019; Organización del Sector Pesquero y Acuícola del Istmo Centroamericano [Ospesca], 2012). Currently, fishing allowed in Guatemala according to the General Law of Fisheries and Aquaculture (Decree 80-2002) and its Regulation (government agreement 223-2005) is divided into four main categories: subsistence fishing, sport fishing, scientific fishing, and commercial fishing (artisanal, small, medium, and large-scale, and tuna fishing) (Dirección de Normatividad de la Pesca y Acuicultura [Dipesca], 2002, Decreto 80-2002).

In the Pacific coast of Guatemala, it has been reported that around 95 species of commercially important fish are exploited by industrial and artisanal fisheries. These include pelagic species such as Mahi-mahi, sharks, and tuna which are among the most targeted species, with longlines (Consejo Nacional de Áreas Protegidas [Conap], 2016; Hernández-Padilla et al., 2020; López & Ixquiac-Cabrera, 2010; Marroquín et al., 2013).

To regulate fishing activities in the region, the Fishing Law specifies regulations regarding fishing gear, permitted species, and fishing efforts based on the scale of exploitation. The law permits small-scale, medium-scale, and large-scale fishing operations. In the Pacific region of Guatemala, artisanal and small-to-medium-scale fishing operations primarily target large pelagic fisheries focusing on Mahi Mahi, tuna, and sharks. Currently, there are five small-scale fishing vessels focused on Dorado and shark fishing, and five active vessels targeting Dorado, shark, and tuna. Additionally, twelve medium-scale commercial fishing vessels are dedicated to Dorado and shark fishing, while six vessels are focused on Dorado, shark, and tuna fishing (Dipesca, 2002, Acuerdo Gubernativo 223-2005).

In 2010, the artisanal fishery contributed 0.37% to Guatemala's gross domestic product (GDP), and in 2017, the total fishery production was estimated to be approximately 43,100 tons with a total value of USD 114.8 million. Despite the economic importance of the fishing industry, there are ongoing challenges facing the sector. These include overfishing, illegal fishing practices, and inadequate monitoring and enforcement of regulations. It is important to mention that most artisanal fleets operate without permits or official records. The implementation of sustainable fishing practices and improved governance is critical to ensure the long-term viability of the industry and the conservation of fish stocks in the country (FAO, 2014).

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Regarding exports, Guatemala directs the majority of its fishery products to the European Union, the United States, Mexico, Asia, and Central America. Including shrimp, tuna, tilapia, and dorado as the main export products (Asociación Guatemalteca de Exportadores [Agexport], 2017; Zuñiga-Flores, 2009).

Institutional framework

In Guatemala, the national fisheries' institutional framework consists of multiple entities responsible for different aspects of fisheries management and conservation.

The national fisheries authority is the Office of Fishing and Aquaculture Norms (Dipesca), which is the competent authority for the administration of hydrobiological resources and the enforcement of the Fisheries and Aquaculture General Law (LGPA) and its regulations. It oversees the management of the fishing sector in Guatemala, addressing matters related to the use, exploitation, and management of fisheries resources, including chondrichthyans.

Within the institutional framework, the National Council for Protected Areas (Conap) plays a crucial role in the conservation of protected areas and biodiversity. Conap is responsible for planning, coordinating, and implementing policies and conservation models necessary for the preservation of various species, including sharks. This public entity works in coordination with Dipesca to administer these organisms, ensuring their conservation and sustainable use. Additionally, there is the Ministry of Environment and Natural Resources (Marn), which is the public entity responsible for regulating environmental management and natural resources, such as hydrobiological resources.

The members of the national fisheries' institutional framework may include various entities such as fisheries research institutions, fishing control and surveillance, seafood safety authorities, and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Cites) authorities for fishery products. These entities collaborate to ensure the proper management, research, surveillance, and control of fisheries resources, as well as the safety and compliance of fishery products with relevant regulations.

In terms of co-management arrangements, Guatemala may have specific mechanisms in place to involve stakeholders, including local communities and indigenous peoples, in fisheries management. These arrangements aim to foster collaboration, shared decision-making, and the involvement of local knowledge and traditional practices in sustainable fisheries management.

Regulatory framework

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The national fisheries regulatory framework in Guatemala is based on the General Fisheries and Aquaculture Law contained in Decree 80-2002 and its regulation (government agreement 223-2005), which aims to regulate and govern fishing and aquaculture activities in the country, establishing guidelines for licenses, permits, and fishing quotas, among other measures (Dipesca, 2002, Decreto 80-2002).

Fishery resources in Guatemala are considered public property. Therefore, the State holds the ownership rights over them, and through the Fisheries and Aquaculture Regulatory Directorate (Dipesca), which operates under the Ministry of Agriculture, Livestock, and Food (Maga), it is responsible for their management and administration. Thus, Dipesca is the competent authority that ensures compliance with the General Fisheries and Aquaculture Law (FAO, 2023; Iniciativa de Ley General de Pesca y Acuicultura, 2018).

In addition to the previously mentioned law, Guatemala has other laws related to fishing, and some of the main ones are 1) the Plant and Animal Health Law, which ensures the protection and health of plants, animals, forest species, and hydrobiological resources (Congreso de la República de Guatemala, 1998, Decreto 36-98); 2) the Protected Areas Law, which aims to ensure the optimal functioning of ecological processes, achieve the conservation and sustainable use of biological diversity, defend and preserve the nation's natural heritage, and establish the necessary protected areas for the national territory (Congreso de la República de Guatemala, 1989, Decreto 4-89); and 3) the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Cites), of which Guatemala is a signatory, which regulates the trade of threatened species of wild fauna and flora in the country (Comisión Centroamericana de Ambiente y Desarrollo [CCAD], 2010).

When it comes to regulations, there are several specific measures implemented to enforce the national fisheries regulatory framework. These measures include licensing and permits, as well as technical measures such as the use of fishing gear and specific fishing zones (Dipesca, 2002, Decreto 80-2002; Iniciativa de Ley General de Pesca y Acuicultura, 2018). In the case of Mahi-mahi and shark fishing, the authorized area in the Pacific Ocean starts from twenty (20) nautical miles, measured from the baseline determined in accordance with the United Nations Convention on the Law of the Sea.

On the other hand, among the policies related to fisheries management in Guatemala, the following stand out: 1) the Policy for the Comprehensive Management of Guatemala's Coastal and Marine Areas, which ensures the preservation of marine ecosystems and the equitable development of the population in coastal areas (Acuerdo Gubernativo No. 328-2009); 2) the Policy for the Integration of Fisheries and Aquaculture in the Central American Isthmus, which establishes a common regional system to contribute to the appropriate and sustainable use of fishing resources and aquaculture products (Sistema de la Integración Centroamericana [Sica] & Organización del Sector Pesquero y Acuícola del Istmo Centroamericano [Ospesca], 2005); and 3) the Policy for the Development of Hydrobiological Resources, which aims to establish guidelines for achieving sustainable and responsible development of national

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fisheries and aquaculture (Ministerio de Agricultura, Ganadería y Alimentación [Maga] & Unidad de Políticas e información Estratégica [Upie], 2002).

According to the diagnosis of the fisheries and aquaculture sector in Guatemala, there appear to be no regulations or policies with a gender differentiation focus. In fact, it is mentioned that the institutional framework and regulations have, as one of their weaknesses, a poor inclusion of ethnic and gender differentiation. Additionally, it recognizes that there is a lack of awareness in the socioeconomic environment regarding the potential of fisheries and aquaculture resources with a gender equity focus for the Guatemalan population (FAO, 2018). However, in 2022, Dipesca participated in the National Determined Contributions (NDC), proposing a socioeconomic analysis and data collection of gender-disaggregated actors involved in shark fishing; this goal is expected to be achieved by 2025. Furthermore, several dialogues have been conducted at the national and regional levels to gather development proposals and promote gender equality in fisheries and aquaculture (e.g., Marn, 2021; Ospesca, 2010, 2019; Siles et al., 2021).

For its part, for the fishing sector of indigenous peoples, ethnic groups, or communities in the country, the International Labour Organization Convention No. 169 on Indigenous and Tribal Peoples in Independent Countries, in Part IV, Article 23, establishes that "*handicrafts, rural and community industries, and traditional activities related to the subsistence economy of the interested peoples, such as hunting, fishing, trapping, and gathering, should be recognized as important factors in the maintenance of their culture and their self-sufficiency and economic development*". Therefore, the government must strengthen and promote such activities (Organización Internacional del Trabajo [OIT], 1996, Convenio Núm. 169, Parte IV, Artículo 23). However, the diagnosis of the fisheries and aquaculture sector in Guatemala has acknowledged that, despite the above, there is a weakness in the socioeconomic environment of not consulting indigenous groups in the development of relevant plans for the fishing sector (FAO, 2018).

Furthermore, it is important to highlight that, according to the information gathered from consultations and reports, there is a notable absence of indigenous peoples in the fishing sector of Iztapa, a coastal area on the Pacific coast of Guatemala. Despite the diversity of the population in this area, which primarily consists of individuals from nearby regions, there is a significant number of people who have migrated primarily from El Salvador. Additionally, individuals from other municipalities within the department of Escuintla and various departments in Guatemala, such as the eastern region (e.g., Zacapa and Jutiapa) and the northeastern region (Izabal), can also be found among the fishermen (Dipesca, personal communication, December 5, 2022; Melendreras, 2008).

Additionally, in Guatemala, there are specific regulations for fisheries management within protected areas, as established by the Protected Areas Law in various articles (FAO, 2023). Article 27 of Chapter III, Title II, prohibits the collection, capture, hunting, fishing, transportation, exchange, trade, and export of endangered species of fauna and flora listed by Conap. Moreover, the entire chapter on

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hunting and sport fishing within the same law contains 8 articles that address topics such as hunting zones, private hunting areas, carrying firearms, prohibited weapons, validity, and value of hunting and fishing licenses, rights per specimen when hunting, and exemptions. And finally, Articles 76 of Chapter III, Title IV, and 82 of Chapter I, Title V, outline the process for issuing licenses and describe actions considered illegal, including cutting, collecting, fishing, or hunting within any duly declared protected area (Congress of the Republic of Guatemala, 1989, Decree 4-89).

Specifically, regarding fisheries, Guatemala has signed and ratified only the United Nations Convention on the Law of the Sea ((Unclos) also known as Conmevar in Spanish), on February 11, 1997 (United Nations, 2015). However, it has not yet signed or ratified the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated Fishing [PSMA], which aims to prevent, deter, and eliminate illegal, unreported, and unregulated fishing (Wantland, 2021). Guatemala has also not signed or ratified the International Labour Organization instruments (ILO also known as OIT in Spanish), which include the Work in Fishing Convention of 2007 (No. 188) and the Work in Fishing Recommendation of the same year (No. 199) (OIT, 2007, 2017). However, in 2014, the competent authorities approved the Regional Regulation to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated Fishing in the Member Countries of Sica (Sica, 2014; Wantland, 2021).

Lastly, Guatemala is a member of one of the five Regional Fisheries Management Organizations (RFMOs), which is the Inter-American Tropical Tuna Commission (IATTC) (Comisión Interamericana del Atún Tropical [Ciat], s.f.). And like most countries in the American continent, it has not yet joined the Fisheries Transparency Initiative (FiTI).

Overview of the Fishery

Fishing Operations

Shark fishery

Sharks are highly valued target species in the small-scale and artisanal fisheries operating in the Pacific region of Guatemala. According to Ixquiac-Cabrera and collaborators (2009), the most frequently caught shark species in this region include the silky shark (*Carcharhinus falciformis*), and scalloped hammerhead (*Sphyrna lewini*), among others. For this fishery, two types of vessels have been identified: the small boats or pangas used in artisanal fishing and the vessels involved in small and medium-scale fishing.

Two types of boats are used in artisanal and small-scale fishing, ranging from 22 to 25 feet (6.70 to 7.60 meters) and from 26 to 32 feet (7.90 to 9.75 meters) in length. These boats are made of fiberglass and each boat is equipped with a 75-horsepower outboard main engine and a 48-horsepower auxiliary engine. The number of fishermen on board can range from two to three per boat. Fishing

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operations consist of 12-hour night sets. Surface longline fishing gear is used, consisting of four to eight kilometers of polyethylene mainline with 400 to 500 hooks. Previously, "eagle claw" hooks were used, but more recently circular hooks numbered 13 to 16 are utilized. The most common bait for this fishery is blackfin tuna. Incidental catch of other pelagic species such as marlin (Istiophoridae), swordfish (*Xiphias gladius*), tuna of the Thunnus sp. genus, and sailfish (*Istiophorus platypterus*) may occur. The boats have ice chests with a capacity of up to one ton. All vessels use satellite navigation systems (GPS).

On the other hand, the artisanal fisheries of the communities of Buena Vista are classified as commercial demersal and small pelagic fisheries, according to the General Law of Fisheries and Aquaculture of Guatemala (Maga, 2002), and do not include the capture of elasmobranch species as target species. The notable problem is that artisanal fishing activities are carried out without permits from the Fisheries and Aquaculture Regulations Department of Guatemala.

In Guatemala, shark meat is the primary product sold domestically as fresh, dried, or salted fillets. Local processing also yields various sub-products, including liver oil to vitamin A, which is extracted for its anticoagulant properties, as well as dried shark fins which are highly valued products in the domestic markets that are exported to Asian markets. Furthermore, cartilage has become increasingly popular due to its curative properties and its use in creating jewelry and crafts (Figure 1) (Márquez & Ruiz, 1999; Ixquiac et al., 2009).



Figure 1. Shark sup-products selling in local markets on the Pacific coast of Guatemala, from left to right: liver oil, cartilage, shark landings, and shark landing monitoring.

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The importance of shark fishing in Guatemala has prompted the implementation of several conservation initiatives. In 2008, the National Action Plan for the Conservation and Management of Sharks in Guatemala; this plan acknowledges that chondrichthyan fishing is an activity of social and economic significance due to the benefits derived from it, such as a source of food and employment. The plan also recommends implementing a resource research program to evaluate exploited populations and provide the necessary biological, ecological, technological, and socioeconomic information to regulate the fishery.

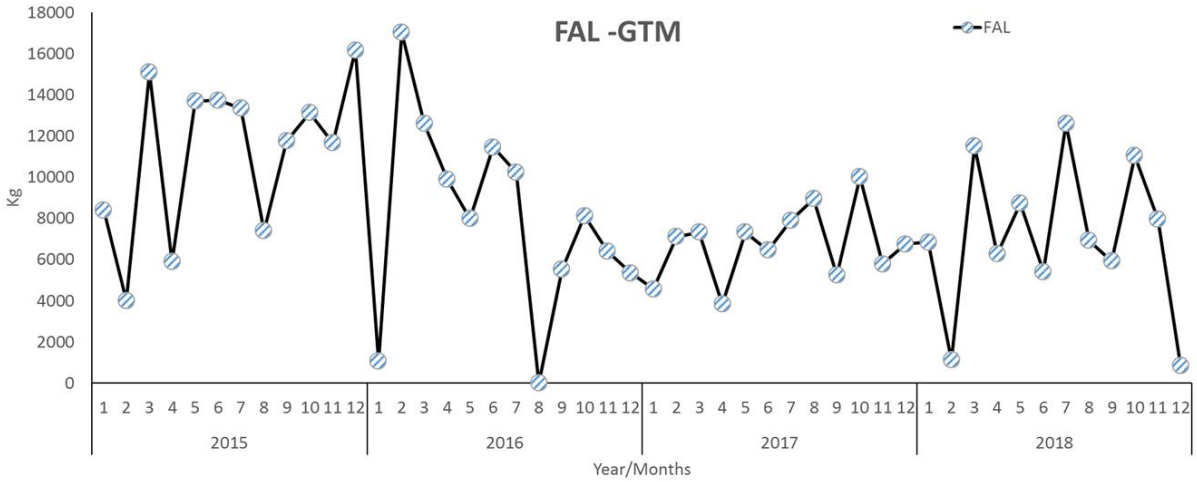


Figure 1. Silky sharks (FAL) landings (Kg) by months and year, period2015-2018

Mahi-mahi fishery

According to the General Fisheries and Aquaculture Law Regulations, the target species for commercial mahi-mahi fishing belong to the Coryphaenidae family. This fishery is carried out from 20 nautical miles where small-scale fishing allows a maximum of 1,000 hooks and medium and large-scale fishing allows a maximum of 2,000 hooks, with a minimum hook size of 1.5 inches, and only one longline is allowed per vessel.

The mahi-mahi is commercially and recreationally exploited throughout its distribution range, however, in recent years the capture of this species has increased, mainly in Latin American countries including Guatemala, as a result of intense exportation to countries such

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as the United States of America (USA) and the European Union (Zuñiga-Flores, 2009). Moreover, this fishing activity in the Pacific of Guatemala began in 1996, but the catch increased from approximately 100 tons to 380 tons in 2001. (FAO, 2001; López & Ixquiac, 2002). The Guatemalan Association of Exporters reported that in 2017 mahi-mahi exports of 8,000 tons, representing USD 5.38 million (Vides, 2017).

Although the economic contribution of mahi-mahi to fishers' it is not sufficient to allocate a fishing task exclusively for this resource, as the catch can vary among different marine species that inhabit the Guatemalan Pacific, depending on factors such as water temperature, changes in purchase prices, and the fishing gear used. The prices can vary from $0.35 to $6 per pound. The high season demand for mahi-mahi includes the months from October to December, including domestic trade and export to the United States focused on the sale of fresh as HG (Headless and gutted). At the present time, Samaritan Fishing Industry is in the process of exporting Mahi-mahi frozen and vacuum-sealed fillets in small portions to the United States.

This fishery is usually carried out during the day to increase the likelihood of catching this species. The fishing operation typically lasts between 2 and 3 days, depending on the volume of the catch, and may last up to 1 day if weather conditions are adverse or the resource is scarce. All these factors are evaluated by the fishermen during the fishing operation, relying on their mostly empirical skills.

Most fishing boats operate with a crew of three people, who at the end of the fishing trip receive 60% of the net profit from the sale of the catch, while the remaining 40% is allocated to the cooperative or boat owner. However, the crew members often do not receive any income, which results in losses that are borne by the cooperatives or individual owners. In the case of cooperatives, if the fishing trip generates losses, cash amounts are provided to the fishers for their sustenance and that of their families, which is considered an advance and will be deducted from the next successful operation.

Furthermore, fishing cooperatives finance and prepare the boats for their members' fishing operations, while individual boat owners often must rely on loans from fish traders at the port. In these cases, they agree with the fishermen to finance the fish operation in exchange for the exclusive sale of the catch to the said traders.

Despite the importance of this species for the country, there are few studies to date. López (2005), generated the size structures from industrial fleet data (85%) and from artisanal fleet data (15%) showing that 50% of the sizes are above 135 cm in Total Length. However, 50% of the sizes above 85 cm in Total Length were reported from the artisanal fisheries.

Ixquiac-Cabrera and collaborators (2010), report that Industrial fishing caught organisms from 110 cm and artisanal fishing caught organisms from 35 cm in total length. Therefore, they concluded that industrial fishery mainly captures adult and mature organisms,

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while artisanal fishing mainly captures juveniles and immature organisms. In addition, they identified that this specie is overexploited (E = 0.806) in the Pacific of Guatemala. The authors also recommended establishing landing and biological monitoring to propose fishing management measures in Guatemala.



Figure 2. Mahi Mahi landings.

Tuna Fishery

Commercial tuna fishing in the Pacific of Guatemala is carried out using purse seine nets and longlines (Dipesca, 2005). The target species are *Thunnus albacares* (Bonnaterre, 1788), *Katsuwonus pelamis* (Linnaeus, 1758), *Thunnus obesus* (Lowe, 1839) & *Euthynnus lineatus* Kishinouye, 1920. In this fishery, only a maximum of 2,000 hooks not larger than 1.5 inches are allowed. Species not listed above are considered incidental catches, and in the case of longline fishing, they should not exceed 15% of the total catch per fishing trip.

Guatemala currently has 11 purse seine fishing vessels engaged in tuna fishing, of which six are flagged in Panama, two in Ecuador, and one in Mexico, all operating in the Pacific Ocean of Guatemala. These vessels are authorized to fish up to 100 nautical miles, in accordance with Article 23 of the General Law of Fisheries and Aquaculture.

However, purse seine fisheries and the use of fish aggregating devices have had a significant impact on tuna stocks, due to the low selectivity of the seine and the tendency of fish aggregating devices to capture a greater number of juvenile tunas. Both issues are being

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addressed in regional fishery management organizations such as the Inter-American Tropical Tuna Commission (IATTC) in the Pacific, of which Guatemala is a member.

The tuna fishing industry in Guatemala currently operates with three medium-scale vessels and six small-scale vessels, utilizing longline fishing methods. In an effort to promote sustainable development for artisanal and medium-scale fishermen, Industria Atunera Centro Americana, S.A. has been conducting assessments of fishing efficiency using trolling and longline techniques for the yellowfin tuna fishery in the Pacific of Guatemala. Due to the absence of technological progress in artisanal fishing practices, which is currently limited to shark and mahi-mahi fishing, it can be transformed into tuna fishing to promote sustainable practices and generate higher revenue for Guatemalan artisanal fishermen (figure 4). To target yellowfin tuna, a longline spanning 20 nautical miles and equipped with 1,000 hooks has been developed. In addition to longline fishing, trials are being conducted using trolling equipment such as lures, baits, and reels, on both shark boats and larger vessels. The efficacy of different bait types, including squid, sardines, and ballyhoo, has also been investigated as part of the survey. In addition, recently fishers are using sport fishing boats to fish tuna 4-6 rods in a 1-day fishing trip.

The main market for Guatemala's tuna production is currently exported to the European Union, generating revenues equivalent to $60 million and in a small portion to national markets. According to data from the Spanish Economic Office in Guatemala, 57% of Guatemalan exports correspond to frozen whole or clean and frozen tuna loins, prepared in the country by a Spanish investment plant, whose exports to Spain are intended for the production plants of fish canning factory as the main raw material. The national tuna plant in Guatemala employs more than 600 people (400 women and 200 men), with the capacity to employ twice as many personnel depending on the amount of raw material entering the plant. Monthly in the areas of San José, Iztapa, and Masagua in the department of Escuintla, $800,000 is generated in salaries (Muños Geldi, 2018).







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Figure 3. Tuna fishery in the Pacific of Guatemala. a) currican fishing (trolling), b) fishermen building fish gears specifically designed for catching tuna, c) small-scale boat design for tuna fishing.

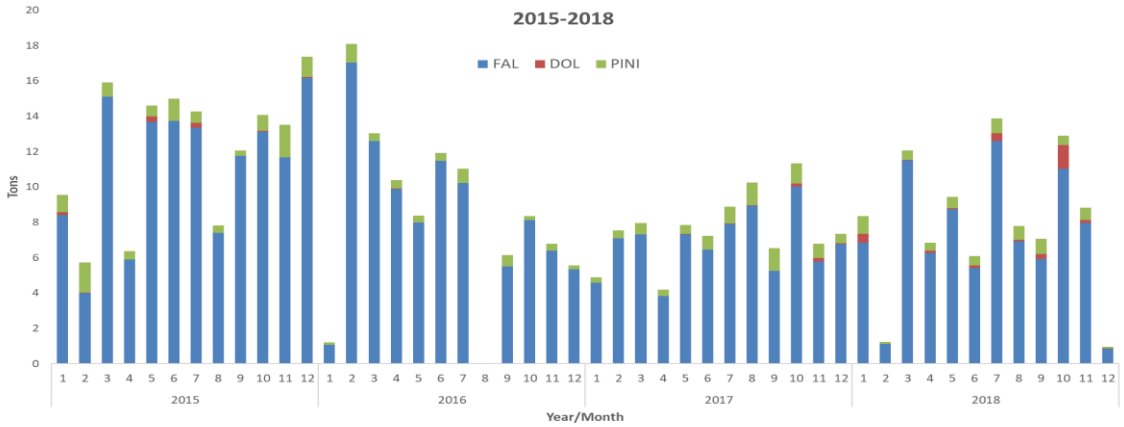


Figure 4. Silky shark (FAL) vs other species in Tons by months and year, period 2015-2018. Coryphaena hippurus (DOL) & PINI (Picudo no identificado).

Target species

According to the Regulations of the General Law of Fisheries and Aquaculture, the target species for commercial fishing of mahi-mahi belong to the Coryphaenidae family, and for sharks, they belong to the families Alopiidae, Carcharhinidae, Ginglymostomatidae, Lamnidae, Sphyrnidae, and Triakidae. This fishery takes place beyond 20 nautical miles, where small-scale fishing permits a maximum of 1,000 hooks, and medium-scale and large-scale fishing permits a maximum of 2,000 hooks. In both cases, the hook size should not be less than 1.5 inches, and only one longline per vessel is allowed (Dipesca, 2002, Decreto 80-2002).

Regarding the commercial fishing of tunas, the target species for the Pacific coast of Guatemala include *Thunnus albacares* (Bonnaterre, 1788), *Katsuwonus pelamis* (Linnaeus, 1758), *Thunnus obesus* (Lowe, 1839) y *Euthynnus lineatus* Kishinouye, 1920. For this fishery, a maximum of two thousand hooks not exceeding 1.5 inches is allowed (Dipesca, 2002, Decreto 80-2002).

However, the target species in the project's area of influence are the following:

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English common name	Local common name	Scientific name	CITES listing	IUCN Red List status
Silky Shark	Tiburón gris	*Carcharhinus falciformis*	Appendix II	Vulnerable
Scalloped hammerhead	Tiburón martillo	*Sphyrna lewini*	Appendix II	Critically Endangered
Pelagic thresher	Tiburón zorro	*Alopias pelagicus*	Appendix II	Endangered
Bull shark	Tiburón toro	*Carcharhinus leucas*	Appendix II	Vulnerable
Mahi-mahi	Pez dorado	*Coryphaena hippurus*	Not Evaluated	Least Concern
Yellowfin Tuna	Atún de aleta amarilla	*Thunnus albacares*	Not Evaluated	Least Concern

Fishing areas

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To understand the different categories, fishing gear, and fishing areas exploited by this fishing category reported by The Nature Conservancy in 2018:

Category	Net Registered Tonnage	Fishing gear	Target specie	Authorized vessels	Fishing Area
Small scale	1.0-1.99	Longline	Mahi-mahi, Shark	5	From 100 to 200 nautical miles from the coast
			Mahi-mahi, Shark and Tuna	5	From 100 to 200 nautical miles from the coast
Medium	2.0-30	Longline	Mahi-mahi - Shark	12	From 100 to 200 nautical miles from the coast
			Mahi-mahi, Shark and Tuna	6	From 100 to 200 nautical miles from the

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					coast

Based on Dipesca data, the predominant reports of target species catch using the longline method are concentrated within a range of up to 100 nautical miles from the coastline. This distance aligns with the operational capacity of fishing vessels for their fishing expeditions.

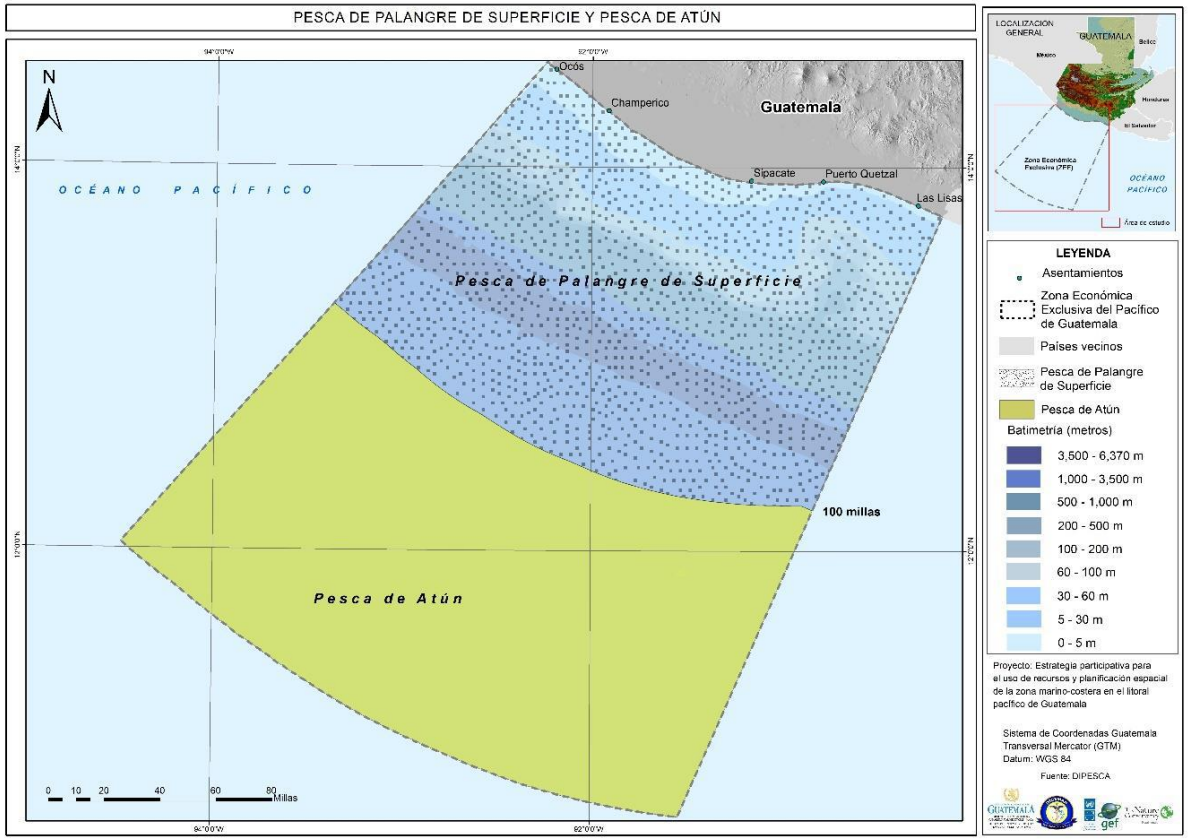


Figure 5. Longline and tuna fishery in the Pacific coast of Guatemala.

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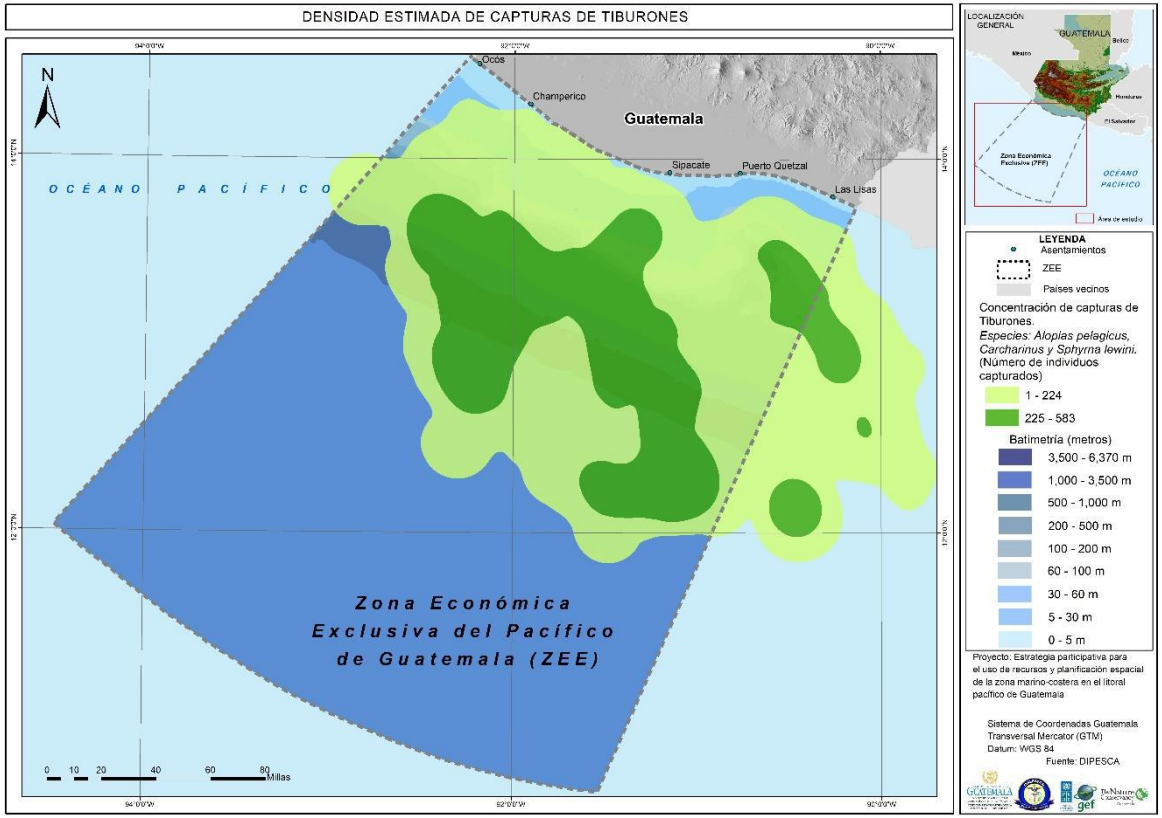


Figure 6. Shark density in the Pacific coast of Guatemala.

Stock status

For each target species describe (i) the type of stock (single, regional, shared), and (ii) geographic extent.

The following is information about the status of the target species populations:

Target specie	Type of stock	Geographic extent
Mahi-mahi	Regional	Eastern Tropical Pacific

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		Ocean -EPT-
Silky Shark	Regional	Eastern Tropical Pacific Ocean -EPT- Northern and Southern silky shark stock
Scalloped hammerhead	Regional	Eastern Tropical Pacific Ocean -EPT-
Pelagic thresher	Regional	Eastern Tropical Pacific Ocean -EPT-
Bull shark	Regional	Eastern Tropical Pacific Ocean -EPT-
Yellowfin Tuna	Regional	The Eastern Tropical Pacific -EPT-

Stock Assessment

The competent authority responsible for examining and assessing the condition of fish stocks is DIPESCA. This public entity is obligated to carry out ongoing evaluations of the exploitation status of fisheries resources with the support of national or foreign scientific entities with expertise.

Current stock status

There is no stock assessment for the target species in the area. However, there is a critical need for shark population assessments to better inform shark management and conservation; Unfortunately, to date, it has not been possible to assess the condition of the shark. On the other hand, according to the IATTC, Mahi-mahi stock status is Maximum sustainably fished (MSY) (IATTC, 2021).

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Regarding the Yellowfin tuna in Eastern Tropical Pacific the IATCC suggest the stock is overfished (IATTC, 2021). However, in 2021 the IATTC present the results for the Stock status indicators (SSIs; time series of data used as supplements to, or in the absence of, stock assessments), based on both purse-seine and longline data, are presented for the yellowfin tuna - YFT-. Most SSIs based on the floating-object fishery suggest that the fishing mortality of all this specie has increased, mainly due to the increase in the number of floating-object sets.

Fisheries management

The management arrangements for the fishery on the Pacific coast of Guatemala involve multiple entities and stakeholders. The fisheries authority responsible for overseeing the fishery is the Directorate of Fisheries and Aquaculture (DIPESCA) which plays a crucial role in generating information for decision-making, including biological data and landings information, through its monitoring and research activities.

Decisions related to the fishery are taken through a participatory approach that involves consultation and collaboration with various stakeholders, including fishers, and industry representatives, among others. These decisions are made in coordination with DIPESCA and other relevant government agencies.

Regulations governing the fishery are issued by DIPESCA in accordance with national fisheries laws and regulations. These regulations cover aspects such as gear restrictions and conservation measures to ensure sustainable management of fishery resources.

In terms of control and enforcement, DIPESCA, along with other authorized agencies such as the Guatemalan Navy and the Diprona National Civil Police are responsible for enforcing the fishery regulations and ensuring compliance. They conduct surveillance activities, inspections, and patrols to monitor fishing activities and deter illegal practices.

Regarding the control of the fishery by a Regional Fisheries Management Organization (RFMO), Guatemala collaborates with the IATTC, which is the regional fisheries management organization (RFMO) responsible for the conservation and management of tuna and tuna-like species, associated species, and their ecosystems, throughout the Eastern Pacific Ocean.

Registries

Vessel registers

The vessel registry system is carried out by the National Navy and is public at https://tramites.gob.gt/servicio/3320/.

Fisher’s register

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In Guatemala, the fisher register is carried out by DIPESCA. However, there is no official registry regarding the country's anglers. According to FAO data (2018), there are approximately 20,000 artisanal fishermen in the country, of which around 70% operate on the Pacific coast. This information is not public.

Although, it is important to mention that there are freely accessible documents, produced by public entities that provide specific data on fishermen by areas of the country's coasts (e.g., Dipesca/Maga & PNUD, 2018a, 2018b).

Traders register

There is a processor register carried out by MAGA, and it is public at www.maga.com.

Processors register

There is a processor register carried out by MAGA, and it is required to apply for a Sanitary Operation License and Good manufacturing practices. This information is public at www.maga.com.

Monitoring

Vessel monitoring

The Ministry of National Defense of Guatemala, in its role as the Maritime Authority, is responsible for inspecting and monitoring everything related to ships, vessels, and naval artifacts that navigate in Guatemalan waters (Acuerdo Ministerial No. 12-2023).

However, as of now, there is no institution in the country that carries out systematic monitoring of artisanal fishing (United States Agency for International Development [USAID], 2019).

Monitoring of landings

On the Pacific coast of Guatemala, there is a system in place to monitor the landings, although it faces challenges in terms of coverage and effectiveness. The responsibility for monitoring the landings lies primarily with DIPESCA.

However, one of the main problems is the limited number of inspectors available. Currently, there are only two inspectors based on the Pacific coast of Guatemala. Moreover, within the area of interest for the GMCII, specifically in Buena Vista, Iztapa, there is only one inspector who is responsible for overseeing daily the industrial fleets, including the longline fishery and shrimp trawling fishery.

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This limited number of inspectors poses a significant challenge in effectively monitoring the landings. With such a vast area to cover and a variety of fishing activities taking place, the workload for a single inspector becomes overwhelming. It becomes challenging to ensure compliance with regulations and to gather accurate data on landings.

The lack of sufficient personnel hinders the ability to monitor fishing activities consistently and thoroughly. It not only compromises the effectiveness of monitoring efforts but also raises concerns about the enforcement of regulations and the collection of reliable data for informed decision-making.

Onboard monitoring

In the Pacific coast of Guatemala, currently, there is no system for onboard monitoring of fishing activities. This means that there are no mechanisms or procedures in operation to monitor and record fishing activities directly on board the fishing vessels.

The absence of onboard monitoring poses a significant challenge in accurately assessing and documenting the fishing activities and landings taking place in the region. It hinders the ability to gather real-time data on catch composition, fishing effort, and compliance with regulations. Without this crucial information, it becomes difficult to make informed management decisions and effectively enforce fishing regulations.

Electronic monitoring

In Guatemala there are no electronic monitoring systems in use.

Other types of monitoring

There are no other types of monitoring in the area.

Regulations

National fishing regulations are established by the General Law on Fishing and Aquaculture (Dipesca, 2002, Decreto 80-200). And the articles that specify the regulations pertinent to the fishing of target pelagics (Mahi-mahi, shark, and Yellowfin Tuna) in the Pacific of Guatemala are as follows:

Regarding commercial fishing of dorado and shark in the Pacific Ocean:

Title III, chap. III

1. Article 27, target species
2. Article 28, fishing zone

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3. Article 29, fishing gear
4. Article 30, bycatch

Regarding commercial fishing of tunas:

Title II, chap. III

1. Article 21, exploitation

Title III, chap. V

1. Article 34, target species
1. Article 35, bycatch
2. Article 36, international commissions
3. Article 37, fishing gears and Methods

Regarding responsible fishing certification:

Title IV, sole chap.

1. Article 80, prohibition

Management Plans

National Action Plan for the Management and Conservation of Sharks, Rays, and Chimaeras in Guatemala - Ministerial Agreement No. 418-2021.

Fisheries agreements

- Convention on the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stock.
- Convention for the Establishment of an Interamerican Tropical Tuna Commission.

Bycatch

To manage the issue of bycatch, measures, and regulations are included in the General Law on Fishing and Aquaculture (Dipesca, 2002). Regarding this, the law stipulates that only 5% of bycatch is allowed per fishing trip for the mahi-mahi and shark fishery, and 15% for tuna fishery using longline.

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Additionally, efforts are being made to promote effectively manage and minimize bycatch. This includes the use of gear modifications, such as the implementation of circle hooks as selective fishing gear to reduce the incidental capture of sea turtles. However, it has been reported by fishermen that these circle hooks are not widely available in the market, which hinders their adoption and use in fishing activities. This highlights the importance of addressing the availability and accessibility of such gear modifications to ensure their effective implementation and minimize the unintended capture of non-target species like sea turtles. Although several authors have reported the occurrence of incidental catch for various groups of organisms in longline fishing, especially sea turtles and seabirds, none of these reports indicate the abundance that this incidental catch represents within the longline fishery (Arévalo-Salazar, 2010; Dipesca/Maga, PNUD & TNC, 2018; Peréz et al., 2009).

Interaction with ETP species

List the endangered, threatened, and protected species (ETP) that are captured or interact with the fishery (e.g., sharks, marine mammals, marine turtles, seabirds). Summarise estimates of capture and research papers | reports. Indicate if there are specific measures | or regulations to manage and report ETP bycatch.

English common name	Local common name	Scientific name	CITES listing	IUCN Red List status
Parasitic Jaeger	salteador parásito	*Stercorarius parasiticus*	No	Least concern
Pomarine Jearger	salteador pomarino	*Stercorarius pomarinus*	No	Least concern
Pink-footed Shearwater	pardela de patas rosadas	*Puffinus creatopus*	No	Vulnerable
Olive Ridley Turtle	Parlama	*Lepidochelys olivacea*	Yes	Vulnerable

Perez et al., 2009

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Interaction with protected areas

This fishery does not interact with protected areas-

Impacts on the marine environment

Overfishing: in Guatemala, as in many tropical seas worldwide, coastal fisheries are multispecies, meaning there is extensive fishing effort targeting a wide range of species and sizes, leading to population overexploitation (Gelera, 2018). Pelagic fish species are the main targets of industrial, providing food and generating economic income. However, they are also caught as bycatch by artisanal fisheries (Castillo & Morales, 2021).

Furthermore, the requirements imposed by Article 33 of the Regulation of the General Fisheries and Aquaculture Law (Government Agreement 223-2005) are not being fulfilled. It has been reported that artisanal fleets operate with mesh sizes and hook sizes smaller than permitted, resulting in the high capture rates of juvenile fish that have not reached reproductive maturity (Dipesca/Maga, PNUD, & IARNA, 2018; Dipesca/Maga and PNUD, 2018; Dipesca/Maga, PNUD, and TNC, 2018).

Illegal, Unreported, and Unregulated (IUU) Fishing: Pelagic fisheries in Guatemala also face the threat of illegal, unreported, and unregulated (IUU) fishing activities, encompassing irresponsible fishing practices where catches are not reported, and fishing regulations regarding fishing gear are not followed. There have been reports in Guatemala of fishermen using gillnets with mesh sizes smaller than permitted, joined gillnets along length and width, or entangled gear, as well as the capture of juveniles and non-target species (Dipesca, personal communication, October 5, 2018). IUU fishing poses a significant threat to aquatic ecosystems and undermines local economies, exacerbating poverty and food insecurity (Dipesca/Maga, PNUD, and TNC, 2018).

Climate Change: Climate change effects on the oceans include changes in pH, temperature increase, and decreased dissolved oxygen, as solubility decreases with rising temperatures in both surface and deep waters, causing water stratification and reducing vertical fish distribution (Ehrhardt & Fitchett, 2006; Keeling & García, 2002). Furthermore, rising temperatures are expected to result in tropical fish shifting towards higher latitudes, leading to population reductions or local extinctions.

FIPs

Indicate if there are FIPs in this fishery. List the FIPs. Information from FisheryProgress

FIP name	Type	Status	FIP lead entity	FIP identification number
PROSPECTIVE Guatemala Pacific mahi-	Prospective	Stage 1: FIP Development	CeDePesca	21225

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mahi and yellowfin tuna - longline				

Initiatives working with the fishery

- Integración de la cadena de valor en la pesca y la acuicultura -INCAVPESCA- Ospesca/Dipesca
- Impulsando la conservación marina en Guatemala - WCS-
- Mejoras en la recolección de datos de tiburones para las pesquerías costeras del OPO: ABNJ2. -IAATC-
- Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems - UNDP.
- Plan Estrátegico 2020-2030 Fondo Socio-ambiental para la conservación del Pez Vela y Desarrollo sostenible de la Pesca Artesanal – CEMA/USAC – EPESTURDE.

SWOT analysis for improving the management of the fishery and the condition of the fishery resources.

List key strengths, weaknesses, opportunities, and weaknesses.

Strengths	Weaknesses
- Strategic position of Guatemala for accessing the North American and European Union markets with fresh and frozen products. - Processing plants (Tunart, Industria Centroamericana, Langosta Roja and Industria Samaritana) are interested in developing Fishery Improvement	- Limited monitoring and data collection. - Weak governance. - Lack of registration of fishermen and presence of illegal fishing activities. - Lack of interest from the fisheries management authorities.

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Projects (FIP) for tuna and mahi-mahi.	
Opportunities	Threats
- The artisanal and small to medium-scale fishing sector is interested in the GMCII project development. - Sustainable fishing practices, management plans, and action plans can be developed.	- Lack of support from the government sector. - Lack of landing data registration. - Absence of fishermen registration.

Literature

Acuerdo Gubernativo No. 328-2009. [Ministerio de Ambiente y Recursos Naturales]. Por lo cual se establece la Política para el Manejo Integral de las Zonas Marino Costeras de Guatemala. 27 de enero de 2010.

Acuerdo Ministerial No. 16-2008. [Ministerio de la Defensa Nacional]. Por lo cual se establece la Normativa de Procedimientos de Inscripción, Matriculación y Abanderamiento de Buques, Embarcaciones y Artefactos Navales. 21 de julio de 2008.

Acuerdo Ministerial No. 12-2023. [Ministerio de la Defensa Nacional]. Por lo cual se establece la Estrategia Marítima del Ministerio de la Defensa Nacional para la Implementación de los Instrumentos Marítimos. 13 de febrero de 2023.

Arévalo Salazar, S. G. (2010). Incidencia de tortugas marinas como pesca incidental en la pesquería artesanal de Dorado Coryphaena hippurus de la aldea Buena Vista, Iztapa (Doctoral dissertation, Universidad de San Carlos de Guatemala).

Asociación Guatemalteca de Exportadores. (2017). Guatemala: Exportaciones pesqueras crecen 44%. CentralAmericaData.com https://www.centralamericadata.com/es/article/home/Guatemala_Exportaciones_pesqueras_crecen_44

Castillo, C. G. A., & Morales, O. S. (2021). Characterization of the artisanal elasmobranch fisheries off the Pacific coast of Guatemala. Fishery Bulletin, 119(1), 3-10.

Comisión Centroamericana de Ambiente y Desarrollo. (2010). Listados Actualizados de las Especies de Fauna y Flora, Incluidas en los Apéndices de la CITES, distribuidas en Centroamérica y República Dominicana. Agencia de EE. UU. para el Desarrollo Internacional [Usaid], International Technical Assitance Program U.S.DOI, Comisión Centroamericana de Ambiente y Desarrollo [CCAD].

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Comisión Interamericana del Atún Tropical. (s.f.). Rol y características. CIAT IATTC. https://www.iattc.org/es-ES/About/Role#:~:text=Actualmente%20existen%20cinco%20organizaciones%20internacionales,%2C%20CICAA%2C%20IOTC%2C%20WCPFC.

Congreso de la República de Guatemala. (1989). Decreto 4 de 1989. Por lo cual se expide la Ley de Áreas Protegidas.

Congreso de la República de Guatemala. (1998). Decreto 36 de 1998. Por lo cual se expide la Ley de Sanidad Vegetal y Animal.

Consejo Nacional de Áreas Protegidas y Ministerio de Agricultura, Ganadería y Alimentación Conap y Marn. (2009). Biodiversidad Marina de Guatemala: Análisis de Vacíos y Estrategias para su Conservación. Consejo Nacional de Áreas Protegidas, Ministerio de Ambiente y Recursos Naturales, The Nature Conservancy. Guatemala. 152 p.

Consejo Nacional de Áreas Protegidas & Ministerio de Agricultura, Ganadería y Alimentación. (2016). Informe sobre recopilación de información biológica y de aprovechamiento de tiburon a pequeña escala para la subsistencia de las comunidades pesqueras y Aplicación de la Guía Práctica sobre la Convención sobre el Comercio Internacional de Especies Amenazadas de Fauna y Flora Silvestres (CITES) y los medios de subsistencia-. Programa de asistencia Técnica internacional.

Cumez, B. L. (2018). Evaluación del éxito de eclosión en nidos de la tortuga marina Lepidochelys olivacea y su relación con el manejo en tortugarios del Pacífico de Guatemala.

Dávila, V., Velásquez, P., & Siguenza, R. (julio de 2009). Diagnóstico de Captura Incidental de Aves Marinas en el Pacífico de Guatemala, Centro América.

Dirección de Normatividad de la Pesca y Acuicultura. (2002). Decreto 80 de 2002. Por lo cual se expide la Ley General de Pesca y Acuicultura y su Reglamento (Acuerdo Gubernativo 223-2005).

Dirección de Normativa de la Pesca y Acuicultura del Ministerio de Agricultura, Ganadería y Alimentación Dipesca/Maga y Programa de Naciones Unidas para el Desarrollo PNUD. (2018). Caracterización de la pesca artesanal en el Pacífico de Guatemala. 74 Proyecto “Conservación y Uso sostenible de la biodiversidad en Áreas protegidas Marino Costeras (APM´s). (MARN-CONAP/PNUD-GEF)-FND, Guatemala, 408 p.

Dirección de Normatividad de la Pesca y Acuicultura del Ministerio de Agricultura, Ganadería y Alimentación & Programa de Naciones Unidas para el Desarrollo (2018a). Caracterización de la pesca artesanal en el Pacífico de Guatemala. Proyecto “Conservación y Uso Sostenible de la Biodiversidad en Áreas Protegidas Marino Costeras (APM’s)”. Marn-Conap/PNUD-GEF

Dirección de Normatividad de la Pesca y Acuicultura del Ministerio de Agricultura, Ganadería y Alimentación & Programa de Naciones Unidas para el Desarrollo (2018b). Diseño de Arte de Pesca para la reconversión de Prácticas No Amigables con Diversidad Biológica Marino-Costera en el Área de Conservación Marino-Costera Sipacate Naranjo. Proyecto Conservación y Uso Sostenible de Biodiversidad en Área Protegidas Marino-Costeras (APM). Marn-Conap/PNUD-GEF, Instituto de Investigación y Proyección sobre el Ambiente y Sociedad / Universidad Rafael Landivar.

Ehrhardt, N., Fitchett, M. (2006). On the seasonal dynamic characteristics of the sailfish, Istiophorus platypterus, in the Eastern Pacific off Central America. Bulletin of Marine Sciencie, 79(3): 589-606.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Gelera-Santa María, R., (2018). Parámetros biológicos del pargo lunarejo Lutjanus guttatus (Steindachner, 1969) de la pesqueria en la aldea Las Lisas, Santa Rosa, Tesis de Licenciatura. Universidad del Valle Guatemala.

Hernández-Padilla, J. C., Capetillo-Piñar, N., Vélez-Arellano, N., Aranceta-Garza, F., Ortíz-Aldana, J. R., Navas-Beteta, A., & Herrarte-Müller, I. C. (2020). Variación espacial en la composición y abundancia de las especies capturadas por las pesquerías de pequeña escala en el litoral del Pacífico de Guatemala. Revista Mesoamericana de Biodiversidad y Cambio Climático–Yu'am, 4(1), 19-43.

Iniciativa de Ley General de Pesca y Acuicultura. (01 de marzo de 2018). Dirección Legislativa, N.° 5399. Congreso de la República de Guatemala, Departamento de Información Legislativa.

ATTC (2021). Stock Assessment of the dolphinfish (Coryphaena hippurus) in the South-EastPacificOcean -13th meeting. Arizona, United States of America. 57p. https://www.iattc.org/GetAttachment/6d3cf4f6-

IATTC (2021). Status of the Tuna and Billfish Stock in 2021. Inter-American Tropical Tuna Commission -Assessment Report 23. California, United States of America. 359p. https://www.iattc.org/GetAttachment/84d7907b-d570-4861-a769-d9158d03dfb6/No-23-2022_Status-of-the-tuna-and-billfish-stocks-in-2021.pdf

Ixquiac-Cabrera, M., Franco, I., Lemus, J., Méndez, S., & López-Roulet, A. (2009). Identificación, Abundancia, Distribución Espacial de Batoideos (Rayas) en el Pacífico Guatemalteco. Fondo Nacional de Ciencia y Tecnología, Centro de Estudios del Mar y Acuicultura, Organización para la Conservación y el Medio Ambiente. FONACYT/CEMA/ONCA.

Keeling, R. F., & Garcia, H. E. (2002). The change in oceanic O2 inventory associated with recent global warming. Proceedings of the National Academy of Sciences, 99(12), 7848-7853.

López, R., & Ixquiac-Cabrera, M. (2010). Contribución al desarrollo de la pesquería de Dorado (Coryphaena hippurus, Linnaeus, 1758.), en la zona económica exclusiva ZEE del Océano Pacífico guatemalteco. Proyecto del Fondo Competitivo de Desarrollo Tecnológico Agroalimentario [Agrocyt].

López, R., & Ixquiac, M. (2002). Análisis de la pesquería de dorado Coryphaena hippurus en el litoral del Pacífico guatemalteco. UNIPESCA. Guatemala.

Ministerio de Agricultura, Ganadería y Alimentación & Unidad de Políticas e información Estratégica. (2002). Política para el Desarrollo de los Recursos Hidrobiológicos. Autores.

Márquez–Farias, J. F., & Ruíz–Alvarado, C. (1999). Lineamientos técnicos para la implementación de un plan de acción que regula la captura de tiburón en aguas de jurisdicción de la República de Guatemala. SEMARNAP. México. MAGA. UNEPA. Guatemala. Cd. de Guatemala, CA.

Marroquín, E., Batres, L., Ruano, P., & Álvarez, J., (2013). Evaluación de procesos de Industrialización y comercialización de especies ícticas de bajo valor comercial de la pesca artesanal en el Litoral Pacífico de Guatemala. Dirección General de Investigación [Digi].

Melendreras, P. V. (2008). El hombre y el mar en el Puerto de Iztapa, Escuintla: una mirada antropológica a la pesca artesanal (2006.2008) [Tesis de licenciatura, Universidad de San Carlos de Guatemala].

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Barría, C. (2017). Ecología trófica de tiburones y rayas en ecosistemas explotados del Mediterráneo noroccidental [Tesis doctoral, Universitat de Barcelona]. https://dialnet.unirioja.es/servlet/tesis?codigo=230347

Organización de las Naciones Unidas para la Alimentación y la Agricultura. (2014). Contribución de la pesca y la acuicultura a la seguridad alimentaria y el ingreso familiar en Centroamérica.

Organización de las Naciones Unidas para la Alimentación y Agricultura. (2018). Diagnóstico del sector de la pesca y la acuicultura en Guatemala. Autor.

Organización de las Naciones Unidas para la Acuicultura y Alimentación. (2019). La Pesca. Recuperado de http://www.fao.org/fisheries/es/

Organización de las Naciones Unidas para la Alimentación y Agricultura. (June 14th 2023). Fishery and Aquaculture Country Profiles, Guatemala, 2018. https://www.fao.org/fishery/en/facp/gtm?lang=es

Organización del Sector Pesquero y Acuícola del Istmo Centroamericano. (19 de marzo de 2010). Pescadoras y acuicultoras buscan fortalecer su rol. Noticias OSPESCA. https://www.sica.int/busqueda/Noticias.aspx?IDItem=47870&IDCat=3&IdEnt=47

Organización del Sector Pesquero y Acuícola del Istmo Centroamericano. (2012). Encuesta Estructural de la Pesca Artesanal y la Acuicultura en Centroamérica 2009-2011. Autor.

Organización del Sector Pesquero y Acuícola del Istmo Centroamericano. (21 de marzo de 2019). La mujer en la pesca y acuicultura. Noticias OSPESCA. https://www.sica.int/busqueda/Noticias.aspx?IDItem=117350&IDCat=3&IdEnt=47

Organización Internacional del Trabajo. Convenio Núm. 169 de la OIT sobre Pueblos Indígenas y Tribales, Parte IV, Artículo 23. 5 de junio del 1996 (Guatemala).

Organización Internacional del Trabajo. (16 de noviembre de 2017). Ratificación del C188 - Convenio sobre el trabajo en la pesca, 2007 (núm. 188). Organización Internacional del Trabajo. https://www.ilo.org/dyn/normlex/es/f?p=1000:11300:0::NO:11300:P11300_INSTRUMENT_ID:312333

Pérez, C. V. D., Jofre, P. D. M. V., & Sigüenza, R. Diagnóstico de Captura Incidental de Aves Marinas en el Pacífico de Guatemala, Centro América.

Registro Mercantil. (s.f.). La Institución. https://www.registromercantil.gob.gt/webrm/?page_id=67

Siles, J., Prebble, M., Wen, J., Hart, C., & Schuttenberg, H. (2021). Un mar de oportunidades: Avance de las dimensiones de género en la pesca. IUCN.

Sistema de la Integración Centroamericana & Organización del Sector Pesquero y Acuícola del Istmo Centroamericano. (2005). Política de Integración de Pesca y Acuicultura en el Istmo Centroamericano. Autores.

Sistema de la Integración Centroamericana. (2014). Reglamento Regional, Para Prevenir, Desalentar y Eliminar la Pesca Ilegal, No Declarada y No Reglamentada en los Países Miembros del Sica (OSP-08-2014). Sica.

United Nations. (2015). Convención de las Naciones Unidas sobre el derecho del mar: Situación de la convención de las Naciones Unidas sobre el derecho del mar, del acuerdo relativo a la aplicación de la parte XI de la convención y del acuerdo sobre la aplicación de las disposiciones de la convención relativas a la

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

conservación y ordenación de las poblaciones de peces transzonales y las poblaciones de peces altamente migratorios. Derecho del mar Boletín, 2014 (85), 1-19. https://doi.org/10.18356/885f5790-es

United States Agency for International Development. (2019). Informe Final Monitoreo de la Pesca Artesanal Estuarina en Sipacate diciembre 2019 - junio 2020, Proyecto de Biodiversidad de USAID Guatemala. Chemonics International Inc. https://conap.gob.gt/wp-content/uploads/2021/09/42.-Monitoreo-de-pesca-artesanal-estuarina-en-Parque-Nacional-Sipacate_2020.pdf

Vides, A. (19 de abril de 2017). Aumentan en un 44% las exportaciones de los productos pesqueros de Gautemala. Agexport Hoy. https://agexporthoy.export.com.gt/agexport/aumenta-en-un-44-las-exportaciones-de-productos-pesqueros-de-guatemala/

Wantland, O. (8 de agosto de 2021). Medidas de Estado Rector del Puerto para Frenar la Pesca Ilegal. Comisión Portuaria Nacional Guatemala. https://blog.cpn.gob.gt/2021/08/08/medidas-de-estado-rector-del-puerto-para-frenar-la-pesca-ilegal/

Zúñiga-Flores, M. S. (2009). Dinámica poblacional del dorado (Coryphaena hippurus) en Baja California Sur, México: implicaciones para su manejo [Tesis doctoral, Instituto Politécnico Nacional. Centro Interdisciplinario de Ciencias Marinas].

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

GMC2 project

Fishery profile: Panama. Large pelagic fish from longlines.

Overview of the country´s fisheries sector

The fisheries sector in Panama is crucial in the country's coastal regions, where 80% of the population resides. This sector, encompassing fishing and aquaculture activities, serves as a significant source of employment and contributes directly to Panama's economic development (Castrejón & Bucaram, 2020; Food and Agriculture Organization [FAO], 2007).

Panama's fishing activity is primarily concentrated in the Pacific Ocean, accounting for 95% of the country's fishing operations, with the remaining 5% taking place in the Caribbean Sea (FAO, 2018). The fishing sector is divided into five subsectors: industrial fishing in jurisdictional waters, industrial fishing in international waters, artisanal fishing, sports fishing, and spearfishing. According to Panamanian legislation, vessels with a gross tonnage (GT) exceeding 10 tons are classified as industrial vessels, while those with a GT below 10 are classified as artisanal vessels (Castrejón & Bucaran, 2020; Decreto Ley 17, 1959). The Panamanian fishing fleet primarily consists of artisanal vessels, estimated at 2,351 in 2017, while the industrial fleet comprised 453 vessels during the same year.

To ensure the regulation of fishing activities in the region, the Fishing Law provides specific guidelines regarding fishing gear, permitted species, and fishing efforts based on the scale of exploitation. This law establishes the following fisheries artisanal/small-scale, medium-scale, large-scale fishing, and international service fishing (Ley de Pesca No. 204, 2023).

Based on the most recent publication available data from 2018, the fisheries and aquaculture sector contributed 0.37% to the national GDP, amounting to USD 245.4 million. Of this contribution, fishing accounted for 74.2% (USD 182.2 million), while aquaculture contributed 25.8% (USD 63.2 million) (Castrejón & Bucaram, 2020). In 2015, the fishing sector was estimated to have generated approximately 43,027 jobs directly and indirectly, with the majority (37,277) in marine fishing and the rest (5,750) in inland fishing (Castrejón & Bucaram, 2020). In the case of the industrial fishing subsector, the tuna and finfish fishery provide the highest number of employment opportunities (FAO, 2014a).

Regarding fish production in the country, the majority (over 95%) of catches within the exclusive economic zone originate from the Pacific Ocean. These catches are attributed to industrial shrimp fishing, industrial fishing of large and small pelagic species, industrial and artisanal shark fishing, artisanal invertebrate fishing, and recreational fishing (Castrejón & Bucaram, 2020).

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In general, Panama's exports of fishery products have the Americas as their main destination, accounting for 66.1% of the total, with the United States being at the top of the list. Following with a lower percentage (18.4%) is Europe, where the main export destinations are Denmark and Spain. In turn, 14.9% is Asia where Taiwan leads the exports. And finally, there are Africa and Oceania, receiving less than 1% of the country's total fishery products (Ministerio de Comercio e Industrias [Mici], 2022).

Panama was first cited with a 'yellow card' by the EU carding scheme for IUU fishing in November 2012. This was later revoked in October 2014 when the country was deemed to have successfully taken measures to address illegal fishing. But in December 2019, Panama was reissued a 'yellow card' for failing to adequately address IUU fishing.

Institutional framework

The national fisheries institutional framework of Panama consists of various entities responsible for the regulation, management, research, surveillance, and control of fisheries resources. The key components of this framework are as follows:

National Fisheries Authority: The national fisheries authority in Panama is the Autoridad de los Recursos Acuáticos de Panamá (ARAP), also known as the Panama Aquatic Resources Authority. ARAP is the main regulatory and administrative body overseeing fisheries and aquaculture activities in the country. It is responsible for issuing fishing licenses, enforcing fishing regulations, and promoting sustainable fishing practices (Panama Aquatic Resources Authority [ARAP], 2017).

Fisheries Research Institutions: Panama has fisheries research institutions that contribute to the scientific understanding of fish stocks, ecosystems, and sustainable fishing practices. These institutions conduct research, data collection, and analysis to support evidence-based decision-making in fisheries management. Notable research institutions include the Instituto Smithsonian de Investigaciones Tropicales (STRI).

Fisheries Surveillance and Control: Fisheries surveillance and control are carried out by various entities to ensure compliance with fishing regulations and deter illegal, unreported, and unregulated (IUU) fishing activities. ARAP plays a significant role in monitoring fisheries activities in collaboration with other entities as the Panamanian Coast Guard, under the authority of the National Maritime Authority (Autoridad Maritima de Panama -AMP-).

Seafood Safety Authority: The authority responsible for ensuring seafood safety and quality in Panama is the Ministry of Health (MINSA) and the Ministry of Agricultural Development (MIDA). These entities set standards, conduct inspections, and enforce regulations related to the safety, hygiene, and labeling of fishery products.

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CITES Authorities for Fishery Products: CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) authorities in Panama are responsible for regulating the international trade of protected fish species and their products. The Ministry of Environment (MiAmbiente) serves as the CITES management authority, ensuring compliance with CITES regulations for fishery products.

According to ARAP, in the Pacific region of Panama, there are Indigenous Peoples, Ethnic Groups, and Communities actively engaged in fishing practices. Two notable associations in this region are the Asociación de Pescadores Artesanales y Agroturística de Cucunatí (APAGROCU) and the Asociación de Pescadores Artesanales de Río Platanares (APAGROCU). These communities primarily focus on fishing shrimp and finfish, which they subsequently trade in both national and international markets.

Regulatory framework

Property of Fisheries Resources: In Panama, fisheries resources are considered public property owned by the state. The state, represented by the National Fisheries Authority (ARAP), has the responsibility of managing and regulating the use of these resources to ensure their sustainable exploitation and conservation.

The national fisheries regulatory framework in Panama includes several key laws, regulations, and policies:

Fisheries Law (Ley de Pesca No. 204, 2023): This law establishes regulations pertaining to fishing gear, permitted species, fishing efforts, and licensing requirements for different scales of fishing operations.

Policy on the Integration of Fisheries and Aquaculture: This policy aims to promote the sustainable integration of fisheries and aquaculture activities, emphasizing responsible resource management and economic development.

Policy on Aquatic Resources of Panama for Fisheries and Aquaculture: This policy provides guidelines and strategies for the sustainable utilization and conservation of aquatic resources, ensuring their long-term viability.

Pact for Agriculture of the Republic of Panama: This pact includes commitments and measures to support the agricultural sector, including fisheries and aquaculture, promoting its growth and competitiveness.

Code of Conduct for Responsible Fisheries: Panama adheres to the Code of Conduct for Responsible Fisheries, developed by the Food and Agriculture Organization (FAO), which provides principles and guidelines for sustainable fishing practices.

Sustainable Development Goals (SDGs): Panama aligns its fisheries sector with the SDGs, particularly those related to marine resource conservation, poverty eradication, and sustainable economic growth.

Aichi Biodiversity Targets: These targets, developed under the Convention on Biological Diversity, are aimed at conserving biodiversity and ecosystems, including those related to fisheries and aquaculture.

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National Dialogue for Sustainable Fisheries: This dialogue involves stakeholders from the fisheries sector to discuss and develop strategies for sustainable fishing practices and resource conservation.

CITES: Panama is a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which regulates the international trade of endangered or threatened fish species.

Indigenous Peoples, Ethnic Groups, or Communities: Panama recognizes the rights of indigenous peoples, ethnic groups, and local communities in the fisheries sector. These groups often have fishing territories or traditional fishing rights that are respected and considered in fisheries management and decision-making processes. Specific regulations, policies, or plans may be in place to address their specific needs and aspirations, although further research or consultation is necessary to obtain specific details.

Fisheries Sector in Protected Areas: The General Environmental Law establishes that marine-coastal resources are national heritage subject to the provisions of the Panama Aquatic Resources Authority (ARAP) (Article 94 and 95 of Law No. 41 of 1998, modified by Law No. 44 of 2006). On the Pacific coast of Panama, there are 20 marine protected areas (AMPs) located along the coastal zone, each under different management categories. These AMPs have specific regulations and management plans in place to ensure the conservation and sustainable use of marine resources within their boundaries.

International Agreements and Conventions:

United Nations Convention on the Law of the Sea (UNCLOS) of 1982: Panama has signed and ratified the UNCLOS, which establishes the rights and responsibilities of countries regarding the use and conservation of marine resources.

Agreement on Port State Measures (PSMA): Panama has signed and ratified the PSMA, an international treaty aimed at preventing, deterring, and eliminating illegal, unreported, and unregulated fishing.

International Labour Organization (ILO) Instruments: Panama has ratified the Work in Fishing Convention of 2007 (C188) and the Work in Fishing Recommendation of 2007 (R199) adopted by the ILO. These instruments aim to improve the working conditions and welfare of fishers.

Regional Fisheries Management Organizations (RFMOs): Panama is a member of several RFMOs, including the Inter-American Tropical Tuna Commission (IATTC) and the International Commission for the Conservation of Atlantic Tunas (ICCAT). These organizations collaborate on the management and conservation of shared fish stocks in the respective regions.

Since 2018, Panama has been a member of the Open Government Partnership (OGP), demonstrating its commitment to being more open to its citizens through the implementation of principles and practices that promote transparency and access to information, as well as civic participation, accountability, and public integrity.

Since 2017, Panama has been a member of the Construction Sector Transparency Initiative (CoST), which is one of the leading global initiatives to improve transparency and accountability in public infrastructure.

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Since 2019, Panama has been collaborating with the Global Fishing Watch (GFW) to make its fishing and carrier vessels' tracking data accessible to the public through the GFW map platform. This initiative aims to enhance transparency in the fishing industry by providing public access to vessel tracking information.

As of January 2023, the Panamanian government has not committed to joining the Transparency International Fisheries Transparency Initiative (FITI).

Overview of the Fishery

Fishing operations

Mahi-mahi fishery

In Panama, Mahi-mahi (*Coryphaena hippurus*) is a commercially exploited species by industrial fishing, as well as artisanal and recreational fishing (Guzman et al., 2015). The capture of Mahi-mahi, along with tuna and sharks, primarily involves the use of surface longline fishing gear, although hand lines are also used in some cases. The artisanal fishery's gross registered Mahi-mahi catches (<10 tons) are considered part of the industrial fishing sector due to their numbers (Castrejón & Bucaram, 2020; Ross-Salazar, 2014).

Throughout the year, the country experiences higher Mahi-mahi catches from October to January, with December being the peak season (Figure 1) (Kirchner et al., 2020). As for the registered vessels, preliminary data from 2017 indicates 27 tuna-type vessels used for Mahi-mahi fishing in the country (Castrejón & Bucaram, 2020).

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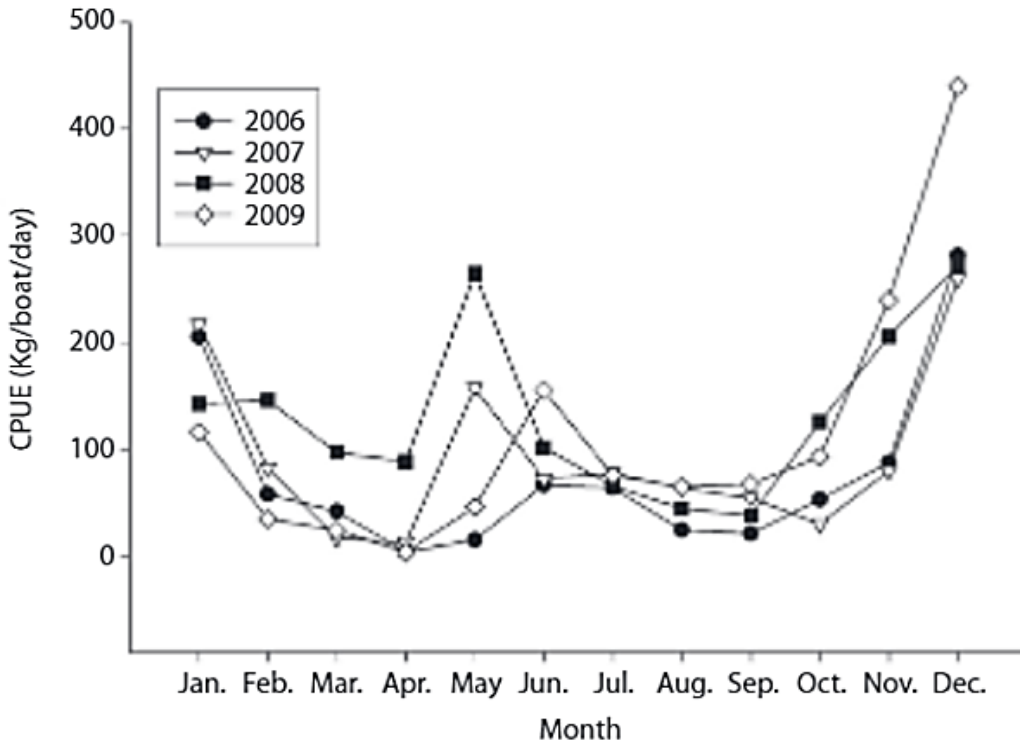


Figure 1. Monthly catch per unit effort (CPUE, kg/vessel/day) for Mahi-mahi in the Pacific of Panama between 2006-2009 (Guzman et al., 2015).

The artisanal fishery in Panama employs various fishing gear types, with longlines accounting for 28% according to the latest census conducted by ARAP. This census provides details about the fishing gear and vessels used in the artisanal fishery. The majority of artisanal vessels (82.7%) are constructed with fiberglass, while 16.7% are made of wood, and only 0.4% use both materials. The vessels typically range from 5 to 9 meters in length (81%), have a depth between 0.60 and 1.5 meters (79%), and a width of less than 1.9 meters (94%). Outboard motors with horsepower between 30 and 100 are used in around 98% of the vessels, while only 2% rely on oars for propulsion. Most vessels are equipped with navigation systems such as cell phones (77%), GPS (20%), or compasses (10%), but 11% do not use any technology. Approximately 87% of the vessels have refrigeration systems and transport ice to maintain the cold chain, while 9% lack any

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cooling system, violating the regulations set by Executive Decree No. 84 of June 10, 1996, issued by the Ministry of Health (MINSA), which requires adequate amounts of ice to surround the catch (Castrejón & Bucaram, 2020).

Mahi-mahi fillets are a significant export product from Panama, with the United States being the primary destination (Pacheco, 2013). The size of Mahi-mahi catches in Panama varies depending on the hook used, and there is a proportional relationship between catch size and hook size, as reported by Pacheco (2013). Generally, longline fisheries observe catches of over 80 cm in length.

A performance study conducted against the Marine Stewardship Council's (MSC) sustainability standard in 2013 indicated that the dorado fishery in Panama did not meet the requirements for MSC certification, with 19 out of the 31 evaluated indicators receiving lower scores (Centro Desarrollo y Pesca Sustentable [CeDePesca], 2013). It is likely that this situation still persists.

Tuna Fishery

The tuna fishing industry in the Pacific of Panama plays a crucial role in providing employment opportunities within the industrial fishing subsector. This generates jobs both in domestic and international waters (Castrejón & Bucaram, 2020). In the county, tuna is primarily captured using longlines and purse seines. In terms of annual tuna catches in the Eastern Pacific Ocean (EPO), Panamanian vessels ranked third, accounting for 12% of the total catch in 2020 (Castrejón & Bucaram, 2020; Scientific Advisory Committee [SAC] of the IATTC, 2020).

Panama is a full member of the InterAmerican Tropical Tuna Commission (IATTC). Panama's tuna fishing fleet is the fourth largest in the IATTC region, following Ecuador, Mexico, and the US. In 2017, Panama reported 170 authorized vessels operating under the IATTC, including 17 purse seine vessels, 17 large longline vessels, and 136 small longline vessels. Panama accounted for 11% of tuna catches in the EPO in 2017, with notable catches of skipjack tuna, yellowfin tuna, and bigeye tuna using purse seines and longlines (ICCAT, 2019).

Panama's tuna fishing fleet includes carrier vessels used for receiving catch at sea and transporting it to port. While transshipment can serve legitimate purposes, it can also increase the risk of illicit activities and make catch tracing more challenging. Nevertheless, Panama has taken steps to combat illegal, unreported, and unregulated (IUU) fishing, such as ratifying the Port State Measures Agreement in 2016 and making its national vessel tracking data publicly available through the Global Fishing Watch (GFW) map platform (Global Fishing Watch, 2019).

However, limited information is available on tuna processing in Panama. Most seafood processing occurs in the ports of Vacamonte and Puerto Armuelles on the Pacific coast (US Department of Agriculture, 2017). Tuna exports from Panama mainly consist of fresh, chilled, and frozen yellowfin tuna, with Portugal, the US, and Costa Rica being the primary destinations. However, it's worth noting that actual exports may differ from reported trade data, as Panamanian fishing vessels sometimes land frozen fish in other ports in Central and South America for transshipment without reporting the quantities to Panama (European Commission, 2012).

Panama plays a significant role as a supplier of tropical tuna to the US market. Its exports mainly comprise fresh or chilled yellowfin tuna, while smaller quantities of fresh or chilled bigeye tuna and frozen skipjack tuna are also included. According to data from the US National Marine Fisheries Service in 2018, Panama

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accounted for approximately 28% by weight and 18% by value of US imports of frozen skipjack tuna, 8% by weight and value of US imports of fresh yellowfin tuna, and 1.3% by value of fresh bigeye tuna imports (US National Marine Fisheries Service, 2019).

The Figure 2 and 3, show the landings data tends of fisheries on the pacific coast of Panama. The figure 2 represent the main groups of fish of the marine fisheries estimated between 1950 and 2010, were mainly small pelagic 55%, finfish (Artisanal, mainly Lutjanidae) 9%, shrimps (Penaeidae) 6.3%; large pelagic: Tuna (Scombridae), dolphinfish (Coryphaena hippurus) 5.8%, sharks (Sphyrnidae) are mainly recorded as bycatch of large pelagic and finfish fisheries 2.2%; other invertebrates. The figure 3 shows the landing collected from ARAP during 2015-2021.

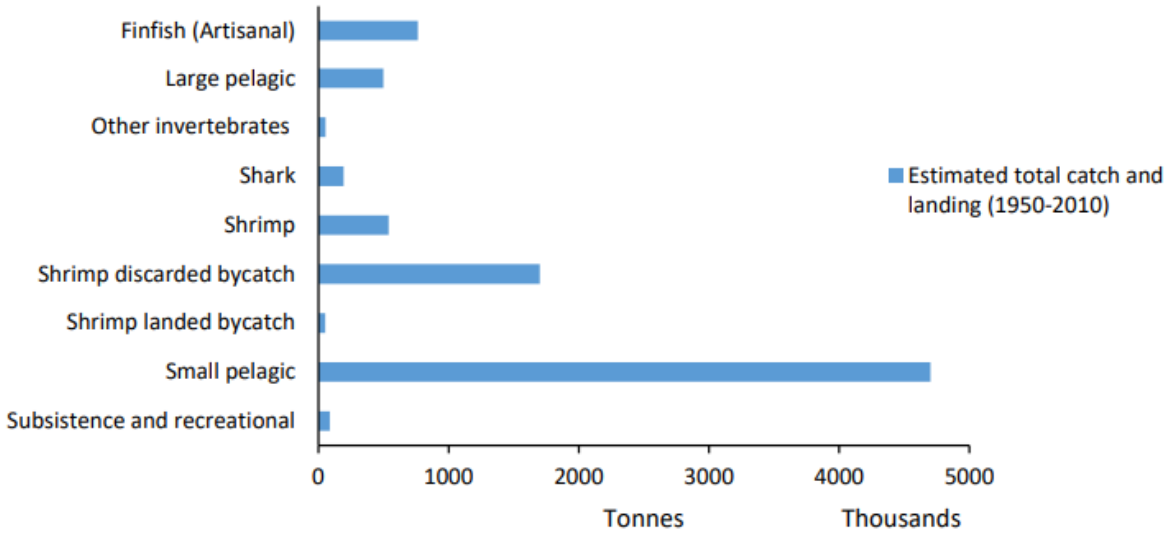


Figure 2. Estimated total catch and landing of the main fisheries in Panama, between 1950 and 2010. Shrimp fishery bycatch has an estimated ratio of 1:7 between the catch and the discard (Harper et al., 2014).

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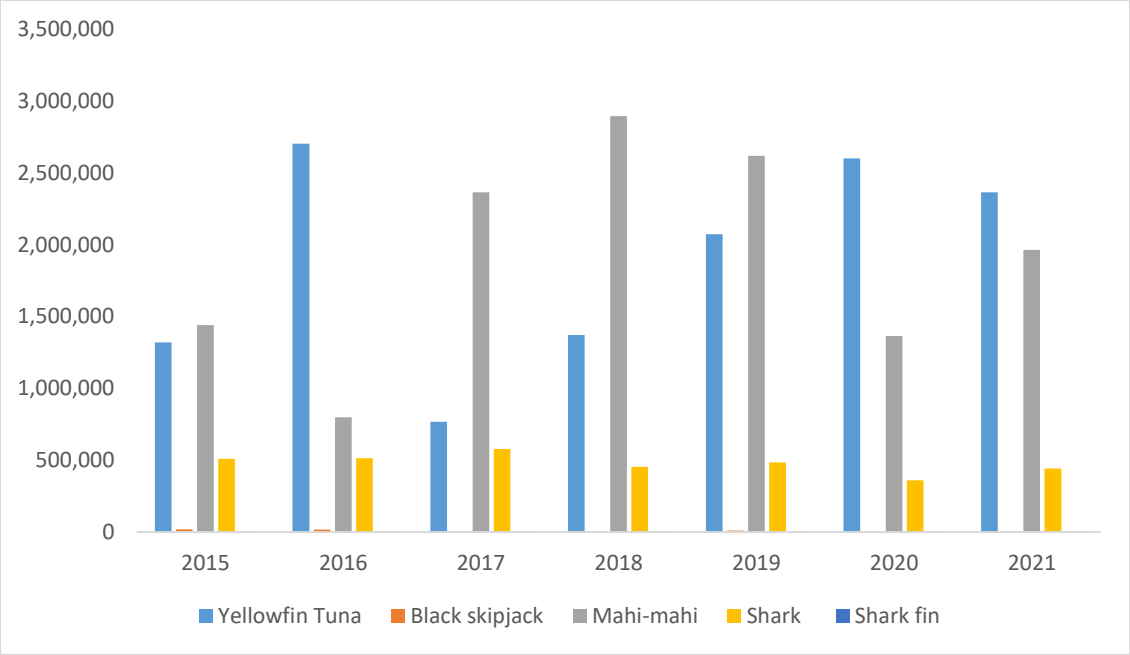


Figure 3. Estimated total catch and landing of the main fisheries in Panama, between 2015 and 2021. Shrimp fishery bycatch has an estimated ratio of 1:7 between the catch and the discard (ARAP, 2023)

Target species

Indicate the target species, their local name and international common names, their scientific name, and a brief description of the species (e.g., distribution, main habitat, level in trophic chain).

English common name	Local common name	Scientific name	CITES listing	IUCN Red List status
Mahi-mahi	Pez dorado	*Coryphaena hippurus*	Not Evaluated	Least Concern
Yellowfin Tuna	Atún de aleta amarilla	*Thunnus albacares*	Not Evaluated	Least Concern

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Western White Shrimp	Camarón blanco	*Litopenaeus occidentalis*	Not Evaluated	Not Evaluated

Fishing areas

According to Panama's Fisheries Law, the fishing areas for large pelagic species such as mahi-mahi, tuna, and sharks are subject to regulations established by the Panamanian Aquatic Resources Authority (ARAP). While the law does not provide a specific list of fishing areas, it sets restrictions and conservation measures to ensure the sustainability of fisheries.

According to the fishing regulations in Panama, the specific fishing areas for large pelagic species in the Pacific are not explicitly mentioned. The law focuses more on restrictions. However, it is important to note that Panama's territorial waters extend up to 12 nautical miles from its coastline, and within this zone, certain restrictions and regulations apply to fishing activities, including general fishing restriction areas, and special fishing restricted areas as special marine protected areas (figure 4). Marine protected areas and protected areas, in general, are subject to these general provisions as long as they do not conflict with specific regulations established in the rules that create them and in their respective management plans if they have them.

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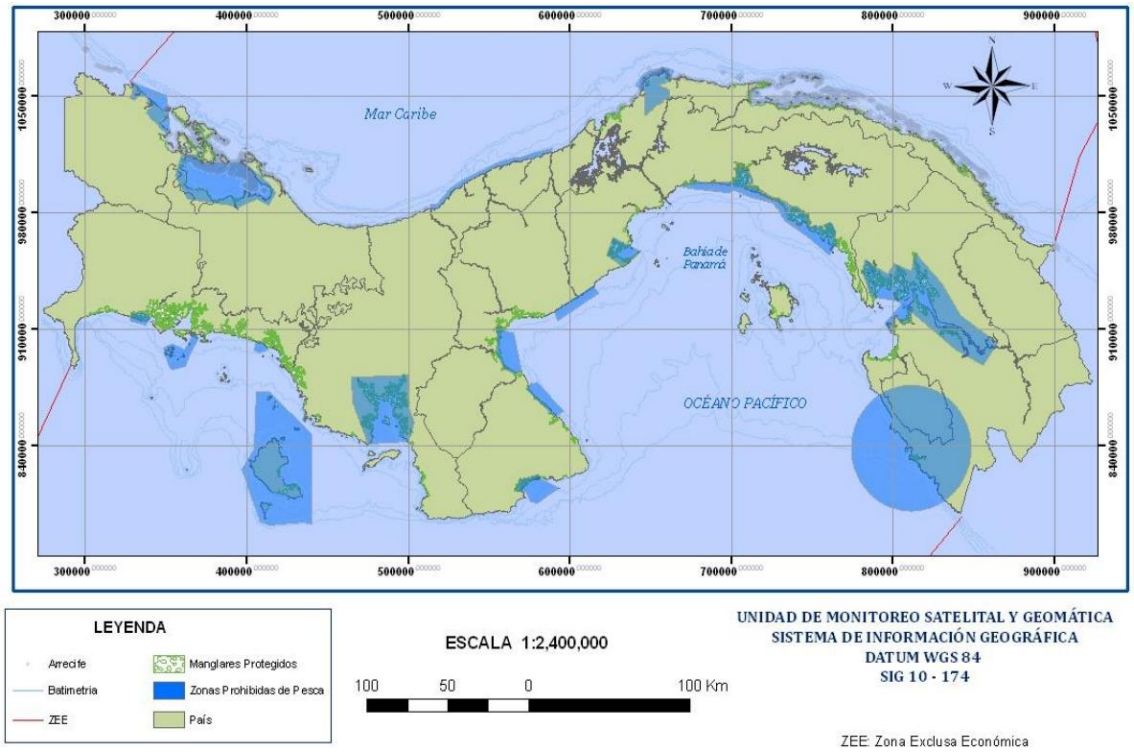


Figure 4. Prohibited fishing zones in the Pacific Ocean of Panama.

However, the fishing law does not specify fishing areas in the Pacific of Panama, Pachecho (2015) described the ports and fishing zones according to the FAO (2002) which were considered the most relevant, including those used as departure and arrival ports for vessels participating in the observer program within their study (figure 5).

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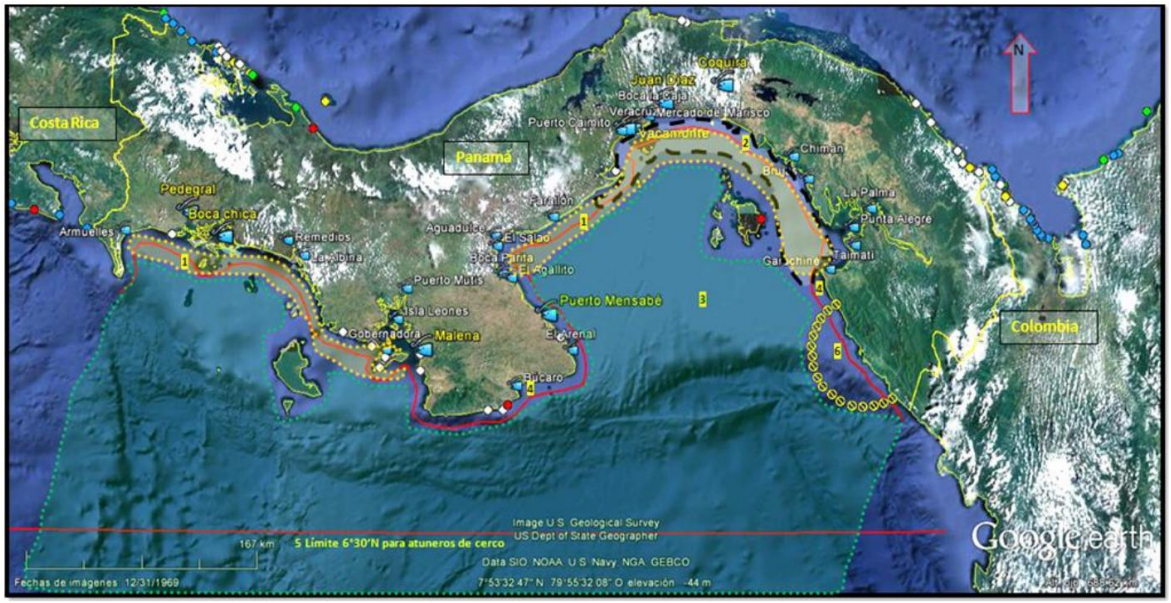


Figure 5. The blue fish head symbol represents the 31 most relevant ports according to FAO (2002). The larger fish head icons with yellow letters indicate the departure and arrival ports for observers assigned to part of the longline fleet between 2005 and 2010. Fishing zones are as follows: 1) Yellow dotted areas represent trawling zones for shrimp fishing; 2) The green dotted area corresponds to the zone used by the longline fleet; 3) the "artisanal" fleet with mixed gear (gillnets and hook-and-line) generally operates near the coast within the area between the mainland and the red line marked along the entire Pacific coast on the 10-fathom contour; 4) the semicircle marked to the east of the Gulf of Panama is an exclusive zone for recreational fishing.

Stock status

The following is information about the status of the target species populations:

Target specie	Type of stock	Geographic extent
Mahi-mahi	Regional	Eastern Tropical Pacific Ocean -EPT-

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Yellowfin Tuna	Regional	The Eastern Tropical Pacific -EPT-

Stock assessment

The competent authority responsible for examining and assessing the condition of fish stocks is ARAP. This public entity is obligated to carry out ongoing evaluations of the exploitation status of fisheries resources with the support of national or foreign scientific entities with expertise.

Current stock status

According to the IATTC, Mahi-mahi stock status is Maximum sustainably fished (MSY) (IATTC, 2021). Besides, researchers conducted a stock assessment and implemented a management strategy evaluation (Aires-da-Silva et al., 2016; Valero et al., 2016). Both studies were exploratory and contributed to the understanding of the population dynamics and history of exploitation of dolphinfish in the region. However, these studies highlighted the importance of strengthening data collection programs throughout the EPO to obtain more information on catch statistics, including recreational catch, and estimates of likely unreported catches.

Regarding the Yellowfin tuna in Eastern Tropical Pacific the IATCC suggest the stock is overfished (IATTC, 2021). In 2021 the IATTC presented the results for the Stock status indicators (SSIs; time series of data used as supplements to, or in the absence of, stock assessments), based on both purse-seine and longline data presented for the yellowfin tuna - YFT-. Most SSIs based on the floating-object fishery suggest that the fishing mortality of all this species has increased, mainly due to the increase in the number of floating-object sets.

Fisheries management

Management arrangements

The ARAP is the entity responsible for ensuring compliance with laws and regulations related to coastal-marine issues, aquaculture, fishing, and related activities (ARAP, 2017). It also plays a crucial role in generating information on biological data, and catches, among others, for decision-making at the national level. This is done through consultation processes with organizations, communities, and families directly involved in fishing and aquaculture activities (Ley de Pesca No. 204, 2023).

Regarding the regulations governing the fishery, they are currently issued by ARAP as established by the Panamanian government. And as for the control of the fishery by a Regional Fisheries Management Organization (RFMO), Panama is part of several RFMOs, among which the Inter-American Tropical Tuna Commission (IATTC), the International Commission for the Conservation of Atlantic Tunas (ICCAT), and the North Pacific Fisheries Commission (NPFC) stand out for the region of interest.

Registries

Vessel register

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The vessel registry system is carried out by the National Maritime Authority and is public at

https://www.amp.gob.pa/servicios/registro-publico-de-naves/tipos-de-inscripcion/

Fishers register

Regarding the registration of fishermen, ARAP recognized that there is no precise data on the number of fishermen participating in fishing activity in the Republic of Panama. In order to update the information, a census was conducted in different stages. The first stage was carried out in 2019, and the second and third stages were reportedly initiated in the same year. However, information regarding the results of this exercise could not be found. Additionally, there is evidence that the INEC (National Institute of Statistics and Census) is planning the National Agricultural and Fisheries Census 2024.

It is important to mention that the most recent information available is over 10 years old and comes from the Structural Survey of Artisanal Fishing and Aquaculture in Central America 2009-2011, conducted by the Organization of the Fisheries and Aquaculture Sector of Central America -Ospesca-.

Traders register

In Panama, there are different sources of statistical data where information about the trade in the country's fishing industry can be obtained. These sources include the following: the Comptroller General of the Republic of Panama, the Authority of Aquatic Resources of Panama (ARAP), the Ministry of Agricultural Development (MIDA), and the National Customs Authority (ANA). However, the information generated from these entities is limited to periodic technical reports, depending on the institution, and even to direct inquiries.

Processors register

The Ministry of Agricultural Development (MIDA) in Panama is responsible for overseeing various aspects of agricultural and fisheries activities in the country. The MIDA plays a crucial role in regulating and promoting the fisheries sector, including fish trading. Nonetheless, specific information about a fish trader register maintained by MIDA is not readily available.

On the other hand, the Authority of Aquatic Resources of Panama (ARAP), through its Inspection, Surveillance, and Control Department, is the entity responsible for issuing the following certificates related to the export of shark fins:

- Certificate of Shark Fin Export (Domestic Service): This certificate is required for the export of shark fins within the territory of Panama.
- Certificate of Shark Fin Export (International Service): This certificate is necessary for the export of shark fins to international destinations.

These certificates are issued by ARAP to ensure compliance with regulations and restrictions established at both national and international levels regarding the trade of shark fins. Obtaining these certificates is necessary to ensure that shark fin exports are carried out in accordance with current regulations and with the aim of promoting the conservation and sustainable management of marine resources in Panama.

Monitoring

Vessel monitoring

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According to Administrative Resolution 101-99 and Executive Decree No. 126 of September 12, 2017, all national and foreign-flagged vessels with Fishing Licenses must incorporate the satellite monitoring system in order to precisely determine their geographical position (Autoridad Marítima de Panamá, Dirección General de Recursos Marinos y Costeros, 2010; MIDA, 2017).

Furthermore, within the same framework, ARAP has a monitoring system that, starting in 2019, shares the vessel tracking system data of the country on the Global Fishing Watch map (Global Fishing Watch, 2023), making monitoring more effective than it used to be.

Monitoring of landings

The authority responsible for monitoring landings on the coasts of Panama is ARAP, the fisheries authority in the country. However, recent information regarding landings published by ARAP is not readily available online. Local organizations have reported that regional information on landings can be accessed through ARAP's regional offices, although data collection may present challenges in these cases.

These landings occur at more than 250 sites spanning the entire Pacific coast of Panama. Unfortunately, due to logistical constraints, ARAP faces difficulties in accessing these locations. As a result, data on fish catch volumes often rely on export documentation obtained during pre-export procedures. It is important to note that these figures may not accurately represent the total weight of catches, as they only account for exportable products and do not include fish consumed domestically. For additional information, customs offices can be a valuable source of data.

Aggregate information on marine species landings by port has been found for state ports administered by the AMP (Panama Maritime Authority). This information is available on the AMP's transparency platform and the open data platform of Panama. However, since the data is aggregated, it does not provide detailed information on the species, the fishing fleets involved, or the flag states, which is currently unavailable. https://www.amp.gob.pa/transparencia/estadistica/desembarque-de-especies-marinas-segun-puerto/

Onboard monitoring

In Panama, the ARAP has established that the country will adopt Conservation and Management Measure CMM 2018-05, which came into effect on February 12, 2019, regarding the Regional Observer Program (ROP). In this regard, the government entity informs that starting from January 1, 2023, it is necessary for all vessels flying the Panamanian flag, registered in the vessel registry of the Commission, and engaged in the transshipment of regulated fisheries resources by the WCPFC, to carry on board an observer from the ROP authorized by the Commission. However, it also takes into account that, since it is not possible to have an observer provided by the ROP, then the secretariat of the PNA Observer Agencies may assist in contacting one of the regional programs for observer placement to ensure coverage of transshipment activities (Arap, 2022).

Electronic monitoring

According to the Panama report, the Application of CIAT Resolution C-17-02, in 2017 was adopted and implemented the measure that establishes that all Panamanian-flagged vessels over six gross tons must have a beacon or Vessel Monitoring System (VMS) device and be received at the fisheries control and monitoring center of ARAP, where speed and fishing activity data in the area they are located are included (Comisión Interamericana del Atún Tropical [CIAT], 2017). This is the only official electronic tracking system for the country's vessels and starting in 2019, shares its data with Global Fishing Watch (Global Fishing Watch, 2023).

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Other types of monitoring

There are no other types of monitoring in the area.

Regulations

National Legal and Administrative Framework:

- Executive Decree 10 of February 28, 1985, "Regulating Shrimp Fishing in the Territorial Waters of the Republic."
- Executive Decree 124 of November 8, 1985, "Establishing provisions to regulate shrimp fishing."
- Executive Decree 126 of September 12, 2017, "Regulating fishing licenses for vessels using longline gear in the jurisdictional waters of the Republic of Panama and establishing other provisions."
- Regional Legal and Administrative Framework for Targeted Fisheries (fishing agreements, regional fisheries management organizations):
- Law 24 of February 16, 1954, "Approving the Convention between the United States of America and the Republic of Costa Rica for the establishment of the Inter-American Tropical Tuna Commission (IATTC)."

Resolutions and Recommendations issued by the IATTC.

- Law 74 of November 10, 1998, "Approving the International Convention for the Conservation of Atlantic Tunas, adopted in Rio de Janeiro on May 14, 1996."
- Resolutions and Recommendations issued by the International Commission for the Conservation of Atlantic Tunas (ICCAT).
- Law 64 of October 29, 2008, "Approving the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of December 10, 1982, relating to the conservation and management of straddling fish stocks and highly migratory fish stocks, adopted in New York on August 4, 1995."

Management plans

- National Action Plan for Sustainable Fisheries https://arap.gob.pa/avances-plan-de-accion-pesca-sostenible-en-panama/
- Fishery Research Plan 2019-2024 https://www.gacetaoficial.gob.pa/pdfTemp/28803/73706.pdf
- National Action Plan for the Management and Conservation of Sharks and Rays s (Resolución ADM/ARAPN°014-2018) https://faolex.fao.org/docs/pdf/pan179419.pdf

Among other management plans

- Action Plan to Reduce Impact on Marine Mammals (Resolution ADM/ARAP No. 055-2021)
- National Plan to Reduce Impact on Seabirds (Resolution ADM/ARAP No. 039-2022)

Fisheries agreements

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Panama has entered into various bilateral and multilateral agreements pertaining to fisheries. These agreements aim to promote sustainable fishing practices, conservation of the resources, and cooperation among nations in the management of fisheries resources.

- Panama is a member of the Inter-American Tropical Tuna Commission (IATTC). The IATTC works towards ensuring sustainable fishing practices and implementing measures to prevent overfishing.
- Panama is a member of the International Commission for the Conservation of Atlantic Tunas (ICCAT). The ICCAT sets fishing quotas, promotes research, and implements measures to prevent illegal, unregulated, and unreported fishing.
- Panama is part of the Central American Fisheries and Aquaculture Organization (OSPESCA). OSPESCA aims to enhance sustainability, resource management, and development in the sector.

During the Our Ocean conference in 2023, Panamá mention the following commitments

- Creation of La Esmeralda Coomanagement zone in the Republic of Panama.
- Panama proposed an International Day Against Abandon, Lost, Discarted Fishing Gear.
- Panama subscribes to the Illegal, Unreported and Unregulated Fishing Action Alliance Pledge.
- Panama Adopts the Transparency and Technology Leadership Statement.

Bycatch

Currently, numerous governmental and non-governmental organizations, regional fisheries management organizations, United Nations organizations, and regional common markets such as the European Union are calling on states with fishing responsibilities to take measures for the mitigation and management of incidental catches (bycatch) in their fisheries. One of the key issues in longline fisheries improvement is the problem of sea turtle bycatch.

Under the current regulations in Panama, any species that must be returned to the sea by law or is exclusively reserved for activities such as sport fishing, including the families Isthiophoridae and Xiphiidae, are included (Executive Decree No. 33 of August 20, 1997).

In Panama, one of the most extensively studied fisheries regarding the issue of sea turtle bycatch is likely the longline fishery. From 2005 to 2010, the "Program for the Reduction of Incidental Capture of Sea Turtles in Longline Fisheries" was implemented to address this concern. Researchers have reported that pelagic longline fishing operations frequently encounter sea turtles as the most prevalent non-commercial bycatch. Notably, a significant percentage (87%) of turtles incidentally captured in the Eastern Pacific Regional Sea Turtle Program (EPRSTP) were released with minimal or no injuries. Additionally, it demonstrated remarkable success in ensuring the survival of over 98.5% of these turtles, releasing them back into the wild (Andraka et al., 2013; Pacheco, 2013).

Parga (2012) argues that the use of circle hooks in conjunction with improved practices in gear retrieval and proper hook removal techniques can effectively reduce injury and post-release mortality. It has also been demonstrated that circle hooks, specifically size c16, result in a higher proportion of external hooking in sea turtles compared to traditional "J-type" hooks (Pacheco and Pons, 2012; Pacheco, 2013).

Among the shark species by-catch by artisanal fishing in Panama, *Sphyrna lewini* is the most affected, particularly due to the capture of neonates and juveniles (Robles et al., 2015; Arriatti et al., 2021). Guzmán et al. (2020), in a combined analysis of artisanal and industrial fishing in the Panamanian Pacific, reported that between 63% and 99% of the total catch from small-scale and industrial fishing consisted of immature individuals. Vega (2023) reported incidental shark captures

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with surface longlines, primarily used for mahi-mahi fishing during the peak months for mahi-mahi fishing. Additionally, by-catch was reported indicating that the highest incidental catch with bottom longlines and gillnets occurred between May-June and August-November.

Interaction with ETP species

List the endangered, threatened, and protected species (ETP) that are captured or interact with the fishery (e.g., sharks, marine mammals, marine turtles, seabirds). Summarise estimates of capture and research papers | reports. Indicate if there are specific measures | or regulations to manage and report ETP bycatch.

English common name	Local common name	Scientific name	CITES listing	IUCN Red List status
Leatherback Turtle	Tortuga Laúd	*Dermochelys coriacea*	Appendix I	Vulnerable
Scalloped Hammerhead	Tiburón martillo	*Sphyrna lewini*	Appendix II	Critically Endangered
Loggerhead Turtle	Tortuga cabezona	*Caretta caretta*		Vulnerable

Interaction with protected areas

The fishery does not interact with protected areas.

Impacts on the marine environment

- **Overfishing:** Overfishing poses a significant risk to the marine ecosystem in the Pacific Ocean of Panama. It can lead to the depletion of fish populations, disrupt the balance of the food chain, and negatively impact the overall health and biodiversity of the marine environment. In recent years, the fishing industry in Panama has experienced a decline in production. This can be attributed to the overexploitation of coastal marine resources and the presence of illegal, unreported, and unregulated (IUU) fishing activities (Castrejón, 2020). According to official records, the contribution of the fishing sector to Panama's Gross Domestic Product (GDP) was USD 326.3 million in 2004, accounting for 2.3% of the GDP. However, recent data from 2018 indicates a significant decrease to USD 182.2 million, representing only 0.37% of the GDP (National Institute of Statistics and Census of the Comptroller General of the Republic of Panama - INEC).
- **Pollution:** Pollution, including marine debris, chemical pollutants, and oil spills, poses a significant threat to the marine environment. It can harm marine organisms, disrupt ecosystems, and contribute to the degradation of water quality (Cortés & Reyes-Bonilla, 2017).

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- **Bycatch:** The incidental capture of non-target species, known as bycatch, is a major concern in the Pacific Ocean of Panama. Bycatch can include endangered or protected species, such as sea turtles, sharks, and marine mammals. Implementing effective bycatch mitigation measures, such as the use of specialized fishing gear and improved fishing practices, is essential to minimize the negative impact on these species (Araúz, 2017; Pacheco, 2013).
- **Climate Change:** Climate change is causing rising sea temperatures, ocean acidification, and changes in marine currents, which can have profound effects on the marine ecosystems of the Pacific Ocean. These changes can disrupt the distribution and abundance of marine species, affect coral reef health, and contribute to the loss of biodiversity (Lluch-Cota et al, 2019).
- **Illegal, Unreported, and Unregulated (IUU) Fishing:** IUU fishing undermines sustainable fisheries management and conservation efforts. It can lead to the overexploitation of fish stocks, disrupt ecosystems, and threaten the livelihoods of local fishing communities. Strengthening monitoring, control, and surveillance measures, as well as promoting international cooperation, is crucial for addressing IUU fishing in the Pacific Ocean of Panama.
- **Marine Fish Invasion:** Recent engineered expansions of the Panama and Suez canals have accelerated the introduction of non-native marine fishes and other organisms between their adjacent waters (Castellanos-Galindo et al, 2020).

FIPs

Indicate if there are FIPs in this fishery. List the FIPs. Information from FisheryProgress

FIP name	Type	Status	FIP lead entity	FIP identification number
Panama large pelagics - longline (Marpesca)	Comprehensive	Stage 3: FIP Implementation	Key Traceability	11639
Eastern Pacific large pelagics - longline (Martec)	Comprehensive	Stage 4: Improvements in Fishing Practices or Fishery Management	Key Traceability Ltd.	14707

Initiatives working with the fishery

- Fortalecimiento de las OSC pesqueras como actores de gobernanza y desarrollo para la inclusión social, la sostenibilidad marina y la prosperidad equitativa en el Golfo de Montijo, Panamá - MARVIVA
- Mejoras en la recolección de datos de tiburones para las pesquerías costeras del OPO: ABNJ2. -IAATC-
- Desarrollo de alianzas con los actores locales para la pesca sostenible en el Gran Golfo de Chiriquí, Panamá - MARVIVA

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- Empoderar a las ciudades costeras y los gobiernos locales en Costa Rica y Panamá para combatir la basura marina a través del rechazo de plásticos de un solo uso y la mejora de los sistemas de gestión de residuos- MARVIVA.
- Towards Joint Integrated, Ecosystem-based Management of the Pacific Central American Coastal Large Marine Ecosystem (PACA)- WWF.
- Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems - UNDP.
- Improved Research, Policy, and Advocacy in Costa Rica, Panama, and Colombia to Deter Seafood Fraud and Illegal International Trade of Shark Products - MARVIVA.
- Conservation and sustainable use of biodiversity in coastal marine production landscape- GEF.

SWOT analysis for improving the management of the fishery and the condition of the fishery resources

List key strengths, weaknesses, opportunities, and weaknesses.

Strengths	Weaknesses
- Strategic position of Panamá for accessing the North American and European Union markets with fresh and frozen products. - Two Fishery Improvement Projects (FIP) for large pelagic in the Pacific Ocean are already in process. - The Law 204 of 2021, after more than 60 years of having a fragmented legal framework, the national fisheries legislation was updated. The newly approved law sets a roadmap for the sustainability of the fisheries sector with provisions that strengthen the fight against IUU fishing. However, it is necessary to progress in the necessary regulations for its proper implementation.	- Limited monitoring and data collection. - Weak governance. - Presence of illegal fishing activities. - The lack of financial and human resources, as well as institutional, technological, and operational capacities to effectively carry out control and surveillance actions. - Lack of interest from the fisheries management authorities.

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Opportunities	Threats
- The private sector is interested in the GMCII project development. - Sustainable fishing practices, management plans, and action plans can be developed.	- Lack of support from the government sector. - Lack of landing data registration due the high number of ports and the small number of personal in ARAP.

Literature

Andraka, S., Mug, M., Hall, M., Pons, M., Pacheco, L., Parrales, M., Rendón, L., Parga, M., Mituhasi, TSegura, Á., Ortega, D., Villagrán, E., Pérez, S., de Paz, C., Siu, S., Gadea, Caicedo, J., Zapata, LMartínez, J., Guerrero, P., & Vogel, N. (2013). Circle hooks: Developing better fishing practices in the artisanal longline fisheries of the Eastern Pacific Ocean. Biological Conservation, 160, 214-224. https://doi.org/10.1016/j.biocon.2013.01.019

Araúz, D. (2008). Caracterización de la Pesquerías Industrial y Artesanal del Camarón y Langosta en Panamá. Ospesca, FAO Suecia.

Araúz Ábrego, E. A. (2017). Diagnóstico de la situación de las tortugas marinas en Panamá y Plan de Acción Nacional para su Conservación. Panamá.

Autoridad de los Recursos Acuáticos de Panamá. (2017). Plan de Acción para la Pesca Sostenible, “Un Compromiso de Todos”. https://arap.gob.pa/wp-content/uploads/2017/01/PLAN-DE-ACCION-PARA-LA-PESCA-FINAL2.pdf

Autoridad de Recursos Acuáticos de Panamá. (2022). Observadores a bordo de buques panameños inscritos en el Registro de buques Comisión de Pesca WCPFC. https://arap.gob.pa/wp-content/uploads/2023/03/045-2022_ES-Observadores-a-bordo-de-buques-Registrados-en-la-WCPFC.pdf

Autoridad Marítima de Panamá, Dirección General de Recursos Marinos y Costeros. (2010). Plan de Acción Nacional de Panamá para Prevenir, Desalentar, y Eliminar la Pesca Ilegal, No Declarada y No Reglamentada (INDR). https://www.fao.org/faolex/results/details/ru/c/LEX-FAOC092047/

Castellanos-Galindo, G. A., Robertson, D. R., Sharpe, D. M., & Torchin, M. E. (2020). A new wave of marine fish invasions through the Panama and Suez canals. Nature Ecology & Evolution, 4(11), 1444-1446.

Castrejón, M., & Bucaram, S. J. (2020). Diagnóstico integral del sector pesca y acuicultura de la República de Panamá. Banco Interamericano de Desarrollo (BID).

Centro Desarrollo y Pesca Sustentable. (2013). Estudio de desempeño contra el estándar de sostenibilidad pesquera del Marine Stewardship Council, Pesquería de dorado con palangre en el pacífico panameño. Autor. http://hdl.handle.net/1834/8128

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Comisión Interamericana del Atún Tropical. (2017). informe de Panamá, Aplicación de la Resolución C-17-02 de la CIAT. https://www.iattc.org/GetAttachment/d194992c-8c5d-4f4d-8d7b-2d98ebdbcb4a/PAN-C-17-02_Esquema-y-acciones-de-cumplimiento-nacionales-actualizados.pdf

Cortés, J., & Reyes-Bonilla, H. (2017). Human influences on Eastern Tropical Pacific coral communities and coral reefs. Coral reefs of the Eastern Tropical Pacific: persistence and loss in a dynamic environment, 549-563

Global Fishing Watch. (7 de junio de 2023). Panamá publica los datos de seguimiento de embarcaciones en el mapa de Global Fishing Watch. https://globalfishingwatch.org/es/historias/panama-publica-los-datos-de-seguimiento-de-embarcaciones-en-el-mapa-de-global-fishing-watch/

Guzman, H. M., Díaz-Ferguson, E., Vega, A. J., & Robles, Y. A. (2015). Assessment of the dolphinfish Coryphaena hippurus (Perciformes: Coryphaenidae) fishery in Pacific Panama. Revista de biologia tropical, 63(3), 705-716.

Kirchner, C., Quilez, G., & Ambrosio, L. (2020). Ecuador Mahi mahi (Coryphaena hippurus) longline fishery. Bureau Veritas Iberia.

IATTC (2021). Stock Assessment of the dolphinfish (Coryphaena hippurus) in the South-EastPacificOcean -13th meeting. Arizona, United States of America. 57p. https://www.iattc.org/GetAttachment/6d3cf4f6-

IATTC (2021). Status of the Tuna and Billfish Stock in 2021. Inter-American Tropical Tuna Commission -Assessment Report 23. California, United States of America. 359p. https://www.iattc.org/GetAttachment/84d7907b-d570-4861-a769-d9158d03dfb6/No-23-2022_Status-of-the-tuna-and-billfish-stocks-in-2021.pdf

Ley No. 204. (2021). Que regula la pesca y acuicultura en la República de Panamá y dicta otras disposiciones. 18 de marzo de 2021. No. 29244-A.

Ministerio de Comercio e Industrias. (2021). Análisis de la tipología de productos exportables de Panamá en el periodo 2010-2020. Autor.

Ministerio de Comercio e Industrias. (2022). Análisis de la Evolución de la Exportación de los Principales Productos de la Pesca y su Tendencia y Desempeño en los Mercados Internacionales. Autor.

Ministerio de Desarrollo Agropecuario. (2017). Decreto Ejecutivo N° 126. Que regula la licencia de pesca para naves de servicio interior que utilizan el arte de pesca denominado palangre en las aguas jurisdiccionales de la República de Panamá y dicta otras disposiciones.

Organización de las Naciones Unidas para la Alimentación y Agricultura. (2007). Organisation des Nations Unies pour l'alimentation et l'agriculturerofil de la Peche par Pays. FID/CP/ARG: La República de Panamá. Autor.

Organización de las Naciones Unidas para la Alimentación y Agricultura. (2018). Hojas de datos de perfiles de los países, Panamá 2018. Autor.

Pacheco, L. M. (2013). La pesca con palangre pelágico en el pacífico panameño. Aspectos operativos de la selectividad de los anzuelos y repercusiones en la captura incidental de tortugas marinas [Tesis de maestría, Universidad de Alicante]. http://hdl.handle.net/10045/36118

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Parga, M.L. 2012. Hooks and sea turtles: a veterinary's perspective. Bull. Mar. Sci. 88: 731-741.

República de Panamá, Asamblea Legislativa LEGISPAN. (1959). Decreto ley No. 17. Por el cual se reglamenta la pesca y se aprueba la exportación de productos pesqueros en la República de Panamá.

República de Panamá, Asamblea Legislativa LEGISPAN. (1997). Decreto Ejecutivo No. 33. Por medio del cual se reglamenta la pesca de ciertas especies y se adoptan otras disposiciones.

Robles, Y. A., Montes, L. A., & Vega, Á. J. (2015). Caracterización de la captura de tiburones por la pesca artesanal en los manglares de David, Golfo de Chiriquí, Pacífico de Panamá. Tecnociencia, 17(1), 11-30.

Rodriguez, Y., Tavares, R., & Alvarado, S. (2021). Assessment of the artisanal shark fishery in the Pacific coast of Panama highlights a high proportion of immature and threatened species. Pan-American Journal of Aquatic Sciences, 16(2), 189-195.

Ross-Salazar, E. (2014). Artes, métodos e implementos de pesca. Fundación MarViva.

Scientific Advisory Committee of the Inter-American Tropical Tuna Commission. (2020). Document sac-12-03 the tuna fishery in the eastern pacific ocean in 2020. Author.

Valverde, R. A. (2012). Estudio sobre la producción pesquera industrial, comercialización y exportación, en la República de Panamá desde 1995 al 2008. Centros: Revista Científica Universitaria, 1(1), 116-147.

Vega, A. J., Robles, Y. A., Quezada, F., Montes, L., Del Cid, A., & Quintero, O. (2023). Incidencia de elasmobranquios en la pesca artesanal en los golfos de Chiriquí y Montijo, pacífico panameño. *Scientia*, *33*(1), 144-172.

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GMC2 project

Fishery profile: Panama. Shrimps from trawlers and artisanal gear.

Overview of the country´s fisheries sector

The fisheries sector in Panama is crucial in the country's coastal regions, where 80% of the population resides. This sector, encompassing fishing and aquaculture activities, serves as a significant source of employment and contributes directly to Panama's economic development (Castrejón & Bucaram, 2020; Food and Agriculture Organization [FAO], 2007).

Panama's fishing activity is primarily concentrated in the Pacific Ocean, accounting for 95% of the country's fishing operations, with the remaining 5% taking place in the Caribbean Sea (FAO, 2018). The fishing sector is divided into five subsectors: industrial fishing in jurisdictional waters, industrial fishing in international waters, artisanal fishing, sports fishing, and spearfishing. According to Panamanian legislation, vessels with a gross tonnage (GT) exceeding 10 tons are classified as industrial vessels, while those with a GT below 10 are classified as artisanal vessels (Castrejón & Bucaran, 2020; Decreto Ley 17, 1959). The Panamanian fishing fleet primarily consists of artisanal vessels, estimated at 2,351 in 2017, while the industrial fleet comprised 453 vessels during the same year.

To ensure the regulation of fishing activities in the region, the Fishing Law provides specific guidelines regarding fishing gear, permitted species, and fishing efforts based on the scale of exploitation. This law establishes the following fisheries artisanal/small-scale, medium-scale, large-scale fishing, and international service fishing (Ley de Pesca No. 204, 2023).

Based on the most recent publication available data from 2018, the fisheries and aquaculture sector contributed 0.37% to the national GDP, amounting to USD 245.4 million. Of this contribution, fishing accounted for 74.2% (USD 182.2 million), while aquaculture contributed 25.8% (USD 63.2 million) (Castrejón & Bucaram, 2020). In 2015, the fishing sector was estimated to have generated approximately 43,027 jobs directly and indirectly, with the majority (37,277) in marine fishing and the rest (5,750) in inland fishing (Castrejón & Bucaram, 2020). In the case of the industrial fishing subsector, the tuna and finfish fishery provide the highest number of employment opportunities (FAO, 2014a).

Regarding fish production in the country, the majority (over 95%) of catches within the exclusive economic zone originate from the Pacific Ocean. These catches are attributed to industrial shrimp fishing, industrial fishing of large and small pelagic species, industrial and artisanal shark fishing, artisanal invertebrate fishing, and recreational fishing (Castrejón & Bucaram, 2020).

In general, Panama's exports of fishery products have the Americas as their main destination, accounting for 66.1% of the total, with the United States being at the top of the list. Following with a lower percentage (18.4%) is Europe, where the main export destinations

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are Denmark and Spain. In turn, 14.9% is Asia where Taiwan leads the exports. And finally, there are Africa and Oceania, receiving less than 1% of the country's total fishery products (Ministerio de Comercio e Industrias [Mici], 2022).

Panama was first cited with a 'yellow card' by the EU carding scheme for IUU fishing in November 2012. This was later revoked in October 2014 when the country was deemed to have successfully taken measures to address illegal fishing. But in December 2019, Panama was reissued a 'yellow card' for failing to adequately address IUU fishing.

Institutional framework

The national fisheries institutional framework of Panama consists of various entities responsible for the regulation, management, research, surveillance, and control of fisheries resources. The key components of this framework are as follows:

National Fisheries Authority: The national fisheries authority in Panama is the Autoridad de los Recursos Acuáticos de Panamá (ARAP), also known as the Panama Aquatic Resources Authority. ARAP is the main regulatory and administrative body overseeing fisheries and aquaculture activities in the country. It is responsible for issuing fishing licenses, enforcing fishing regulations, and promoting sustainable fishing practices (Panama Aquatic Resources Authority [ARAP], 2017).

Fisheries Research Institutions: Panama has fisheries research institutions that contribute to the scientific understanding of fish stocks, ecosystems, and sustainable fishing practices. These institutions conduct research, data collection, and analysis to support evidence-based decision-making in fisheries management. Notable research institutions include the Smithsonian Tropical Research Institute (STRI).

Fisheries Surveillance and Control: Fisheries surveillance and control are carried out by various entities to ensure compliance with fishing regulations and deter illegal, unreported, and unregulated (IUU) fishing activities. ARAP plays a significant role in monitoring fisheries activities in collaboration with other entities as the Panamanian Coast Guard, under the authority of the National Maritime Authority (Autoridad Maritima de Panama -AMP-).

Seafood Safety Authority: The authority responsible for ensuring seafood safety and quality in Panama is the Ministry of Health (MINSA) and the Ministry of Agricultural Development (MIDA). These entities set standards, conduct inspections, and enforce regulations related to the safety, hygiene, and labeling of fishery products.

According to ARAP, in the Pacific region of Panama, there are Indigenous Peoples, Ethnic Groups, and Communities actively engaged in fishing practices. Two notable associations in this region are the Asociación de Pescadores Artesanales y Agroturística de Cucunatí

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(APAGROCU) and the Asociación de Pescadores Artesanales de Río Platanares (APAGROCU). These communities primarily focus on fishing shrimp and finfish, which they subsequently trade in both national and international markets.

Regulatory framework

Property of Fisheries Resources: In Panama, fisheries resources are considered public property owned by the state. The state, represented by the National Fisheries Authority (ARAP), has the responsibility of managing and regulating the use of these resources to ensure their sustainable exploitation and conservation.

The national fisheries regulatory framework in Panama includes several key laws, regulations, and policies:

Fisheries Law (Ley de Pesca No. 204, 2023): This law establishes regulations pertaining to fishing gear, permitted species, fishing efforts, and licensing requirements for different scales of fishing operations.

Policy on the Integration of Fisheries and Aquaculture: This policy aims to promote the sustainable integration of fisheries and aquaculture activities, emphasizing responsible resource management and economic development.

Policy on Aquatic Resources of Panama for Fisheries and Aquaculture: This policy provides guidelines and strategies for the sustainable utilization and conservation of aquatic resources, ensuring their long-term viability.

Pact for Agriculture of the Republic of Panama: This pact includes commitments and measures to support the agricultural sector, including fisheries and aquaculture, promoting its growth and competitiveness.

Code of Conduct for Responsible Fisheries: Panama adheres to the Code of Conduct for Responsible Fisheries, developed by the Food and Agriculture Organization (FAO), which provides principles and guidelines for sustainable fishing practices.

Sustainable Development Goals (SDGs): Panama aligns its fisheries sector with the SDGs, particularly those related to marine resource conservation, poverty eradication, and sustainable economic growth.

Aichi Biodiversity Targets: These targets, developed under the Convention on Biological Diversity, are aimed at conserving biodiversity and ecosystems, including those related to fisheries and aquaculture.

National Dialogue for Sustainable Fisheries: This dialogue involves stakeholders from the fisheries sector to discuss and develop strategies for sustainable fishing practices and resource conservation.

CITES: Panama is a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which regulates the international trade of endangered or threatened fish species.

Indigenous Peoples, Ethnic Groups, or Communities: Panama recognizes the rights of indigenous peoples, ethnic groups, and local communities in the fisheries sector. These groups often have fishing territories or traditional fishing rights that are respected and considered in fisheries management and decision-making

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processes. Specific regulations, policies, or plans may be in place to address their specific needs and aspirations, although further research or consultation is necessary to obtain specific details.

Fisheries Sector in Protected Areas: The General Environmental Law establishes that marine-coastal resources are national heritage subject to the provisions of the Panama Aquatic Resources Authority (ARAP) (Article 94 and 95 of Law No. 41 of 1998, modified by Law No. 44 of 2006). On the Pacific coast of Panama, there are 20 marine protected areas (AMPs) located along the coastal zone, each under different management categories. These AMPs have specific regulations and management plans in place to ensure the conservation and sustainable use of marine resources within their boundaries.

International Agreements and Conventions:

United Nations Convention on the Law of the Sea (UNCLOS) of 1982: Panama has signed and ratified the UNCLOS, which establishes the rights and responsibilities of countries regarding the use and conservation of marine resources.

Agreement on Port State Measures (PSMA): Panama has signed and ratified the PSMA, an international treaty aimed at preventing, deterring, and eliminating illegal, unreported, and unregulated fishing.

International Labour Organization (ILO) Instruments: Panama has ratified the Work in Fishing Convention of 2007 (C188) and the Work in Fishing Recommendation of 2007 (R199) adopted by the ILO. These instruments aim to improve the working conditions and welfare of fishers.

Regional Fisheries Management Organizations (RFMOs): Panama is a member of several RFMOs, including the Inter-American Tropical Tuna Commission (IATTC) and the International Commission for the Conservation of Atlantic Tunas (ICCAT). These organizations collaborate on the management and conservation of shared fish stocks in the respective regions.

Since 2018, Panama has been a member of the Open Government Partnership (OGP), demonstrating its commitment to being more open to its citizens through the implementation of principles and practices that promote transparency and access to information, as well as civic participation, accountability, and public integrity.

Since 2017, Panama has been a member of the Construction Sector Transparency Initiative (CoST), which is one of the leading global initiatives to improve transparency and accountability in public infrastructure.

Since 2019, Panama has been collaborating with the Global Fishing Watch (GFW) to make its fishing and carrier vessels' tracking data accessible to the public through the GFW map platform. This initiative aims to enhance transparency in the fishing industry by providing public access to vessel tracking information.

As of January 2023, the Panamanian government has not committed to joining the Transparency International Fisheries Transparency Initiative (FITI).

Overview of the Fishery

Fishing operations

Shimp fishery

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The shrimp fishery is one of the biggest fishing industries in Pacific of Panama, and more specifically, the white shrimp (Penaeidae). The industrial fishing sector, including shrimp, accounted for 88% of this total landing (Figure 1), the artisanal sector 10% and subsistence with the recreational fishing just over 1% (Harper, Guzmán, Zylich, & Zeller, 2014). The figures 2 shows the shrimp fishery landing provided from ARAP during this year.

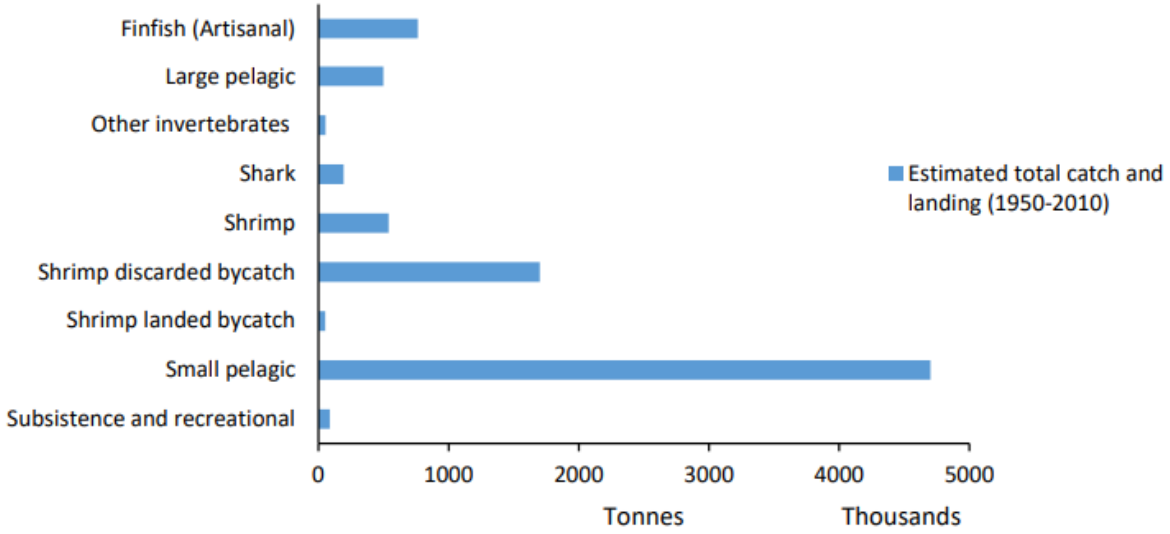


Figure 1. Estimated total catch and landing of the main fisheries in Panama, between 1950 and 2010. Shrimp fishery bycatch has an estimated ratio of 1:7 between the catch and the discard (Harper et al., 2014).

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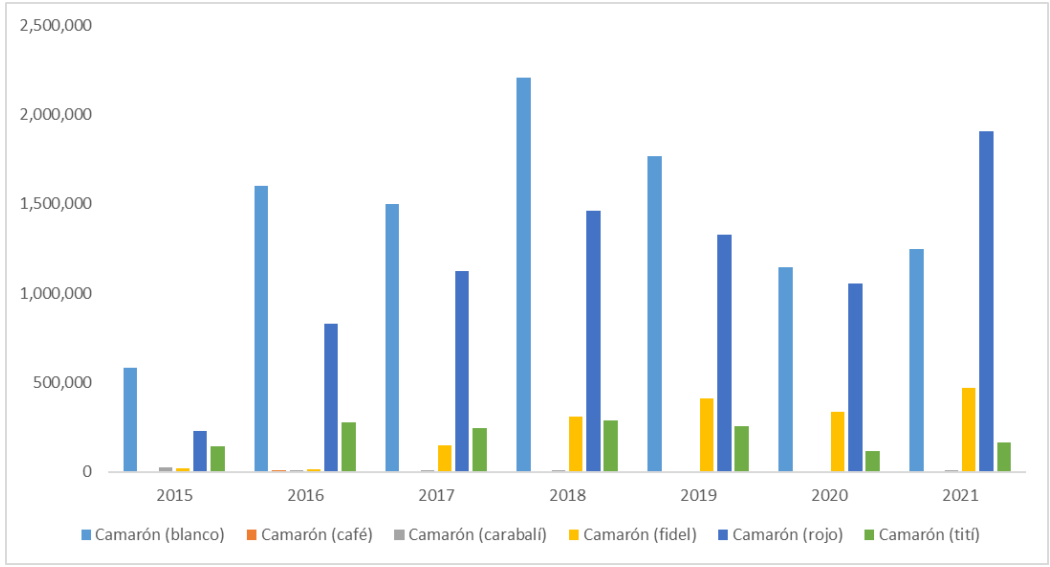


Figure 2. Estimated total catch and landing of the shrimp fisheries in Panama, between 2015 and 2021 (ARAP, 2023)

The shrimp fishery on the Pacific coast of Panama is primarily concentrated in the Gulf of Panama and the Gulf of Chiriquí. The fishing season for shrimp occurs mainly from May to July and October to December (Pruett et al., 1975). In the 1970s, management measures were implemented to prevent over-exploitation of shrimp resources. These measures included restrictions on the number and power of vessels and limitations on the harvest season. For example, in 1973, there were 232 shrimp vessels with engines limited to 250 horsepower, and the fishing season was restricted from mid-February to mid-April. However, the enforcement of these measures was ineffective, and some measures were eventually abandoned, except for the seasonal bans, which continue to be enforced (Pruett et al., 1975).

To address conservation concerns, more regulations have been put in place. Since 2005, all shrimp trawl vessels are required to be equipped with Turtle Exclusion Devices (TEDs). Additionally, all shrimp trawlers must depart from and land at accredited ports to improve regulatory compliance. Failure to comply with these regulations can result in substantial fines, particularly for repeat offenses (Martinez et al., 2005).

The industrial shrimp fishery has been historically significant in terms of economic value and job generation for Panama. It primarily targets three species of white shrimp: *Litopenaeus occidentalis*, *L. stylirostris*, and *L. vannamei*. However, other species such as titi shrimp, red shrimp, and fidel shrimp are also incidentally caught during shrimp fishing operations (Castrejón & Bucaram, 2020).

The shrimp fisheries generate around 5,000 direct jobs and more than 20,000 indirect jobs. In 2016 generated an FOB export value of 38.3 million USD (Figure 3). The white shrimp shows the highest market price (Ehrhardt, 2012). The market price of white shrimp was between 3.63 USD to 4.08 USD/kg (ACODECO, 2018).

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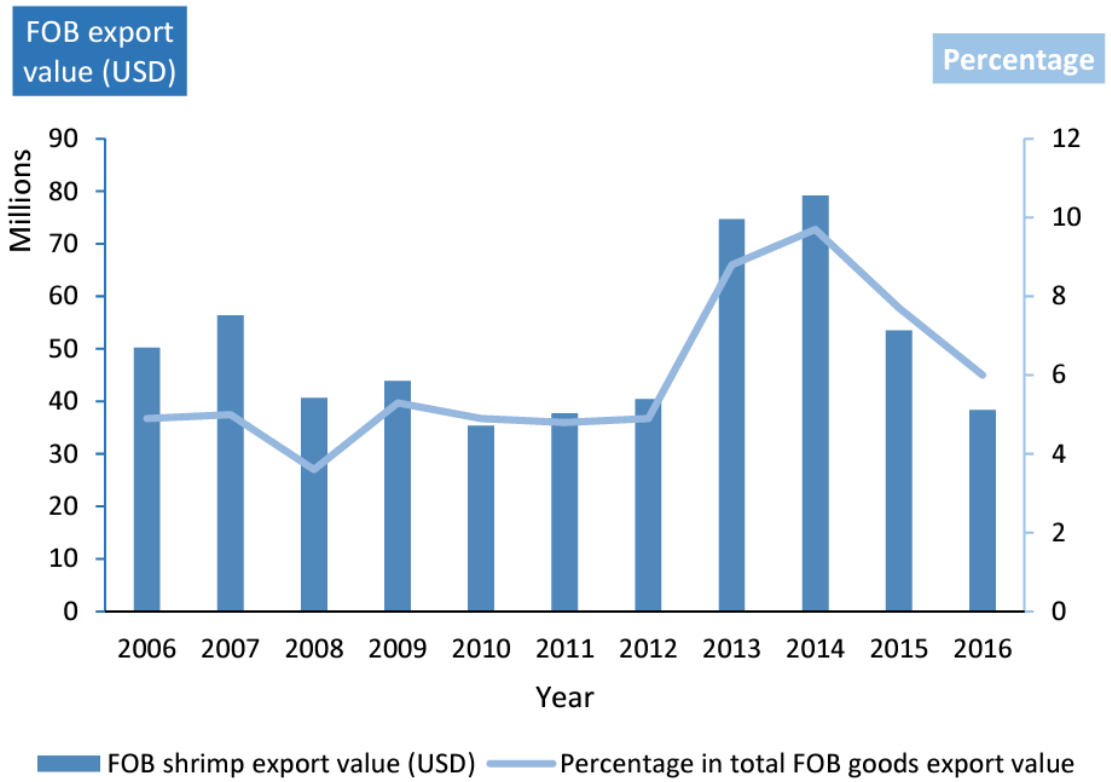


Figure 3. FOB total shrimp export value in Panama (left axis) and its percentage in the FOB total export value (right axis), from 2006 to 2016. Source: (INEC, 2017).

Despite the shrimp fishery economic importance, total catches have declined considerably and steadily since early 80s from around 7000 tons to less than 1100 tons in 2016. However, two peaks are observed in 1997 and 2008, but the catch declines steadily the following years (Figure 4) (López, 2007; INEC, 2016).

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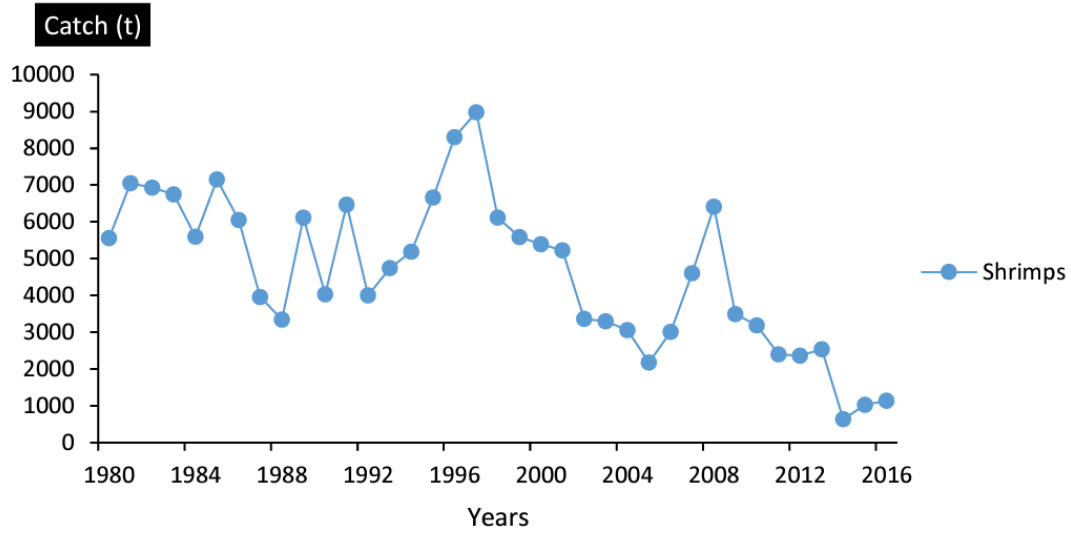


Figure 4. Industrial and artisanal annual landings of shrimps (tonnes) from 1980 to 2016 (AMP, 2017) and (INEC, 2016).

In addition, it is reported that in 2018 a fleet composed of 150 vessels represented a 50% decrease compared to the number of vessels reported in the 1990s (Figure 5) (Castrejón & Bucaram, 2020). This decrease is attributed to factors associated with the decline in shrimp catch rates, increased fishing costs, poor condition of the vessels, and the decrease in shrimp prices internationally, among other factors (ARAP, 2017; FAO, 2018; Valverde, 2012).

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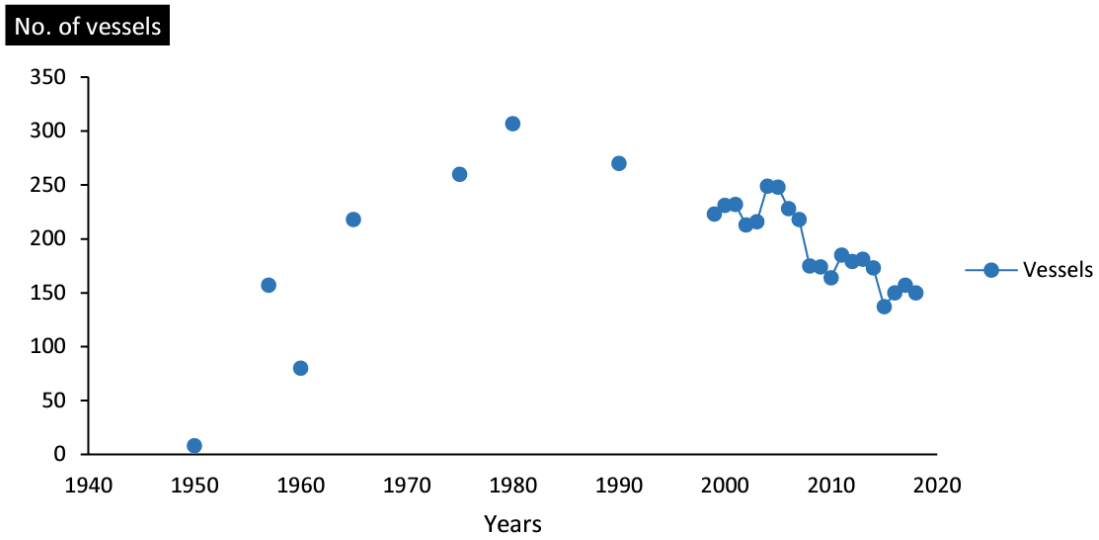


Figure 5. Number of vessels of the industrial shrimp fleet in Panama, from 1950 to 2018. From 2005, there is a trend in decreasing the effort, reducing the number of vessels in the industrial shrimp fleet. (AMP, 2017; ARAP, 2018; INEC, 2016).

The vessels used in the fishing fleet are typically wooden with iron or fiberglass hulls, measuring approximately 20 to 25 meters in length, and equipped with engines ranging from 210 to 390 horsepower. They use semi-pelagic trawl nets with four panels and each boat employs two nets with a Turtle Excluder Device (TED) (Araúz, 2008). On the other hand, in artisanal fishing, the main fishing gear used for shrimp capture is the trammel net, which is a less selective fishing gear that tends to contribute to the overexploitation of fish species (Castrejón & Bucaram, 2020). The shrimp vessels have a crew of 5 people and make 1.36 trips per month, the average trip is about 17 days (Ehrhardt, 2012).

Regarding international markets for shrimp products, Panama has 33 export destinations, and the top three are the United States (50.8%), Vietnam (11.1%), and Spain (10.6%) (MICI, 2021).

Target species

Indicate the target species, their local name and international common names, their scientific name, and a brief description of the species (e.g., distribution, main habitat, level in trophic chain).

English common name	Local common name	Scientific name	CITES listing	IUCN Red List status

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Western White Shrimp	Camarón blanco	*Litopenaeus vannamei*	Not Evaluated	Not Evaluated
Western White Shrimp	Camarón blanco	*Litopenaeus occidentalis*	Not Evaluated	Not Evaluated
Western Blue Shrimp	Camarón azul	*Litopenaeus stylirostris*	Not Evaluated	Not Evaluated

Fishing areas

According to Panama's Fisheries Law, the fishing areas for shrimp fishery are subject to regulations established by the Panamanian Aquatic Resources Authority (ARAP). While the law does not provide a specific list of fishing areas, it sets restrictions and conservation measures to ensure the sustainability of fisheries.

According to the fishing regulations in Panama, the specific fishing areas for shrimp fishery in the Pacific are not explicitly mentioned. The law focuses more on restrictions. However, it is important to note that Panama's territorial waters extend up to 12 nautical miles from its coastline, and within this zone, certain restrictions and regulations apply to fishing activities, including general fishing restriction areas, and special fishing restricted areas as special marine protected areas (figure 6). Marine protected areas and protected areas, in general, are subject to these general provisions as long as they do not conflict with specific regulations established in the rules that create them and in their respective management plans if they have them.

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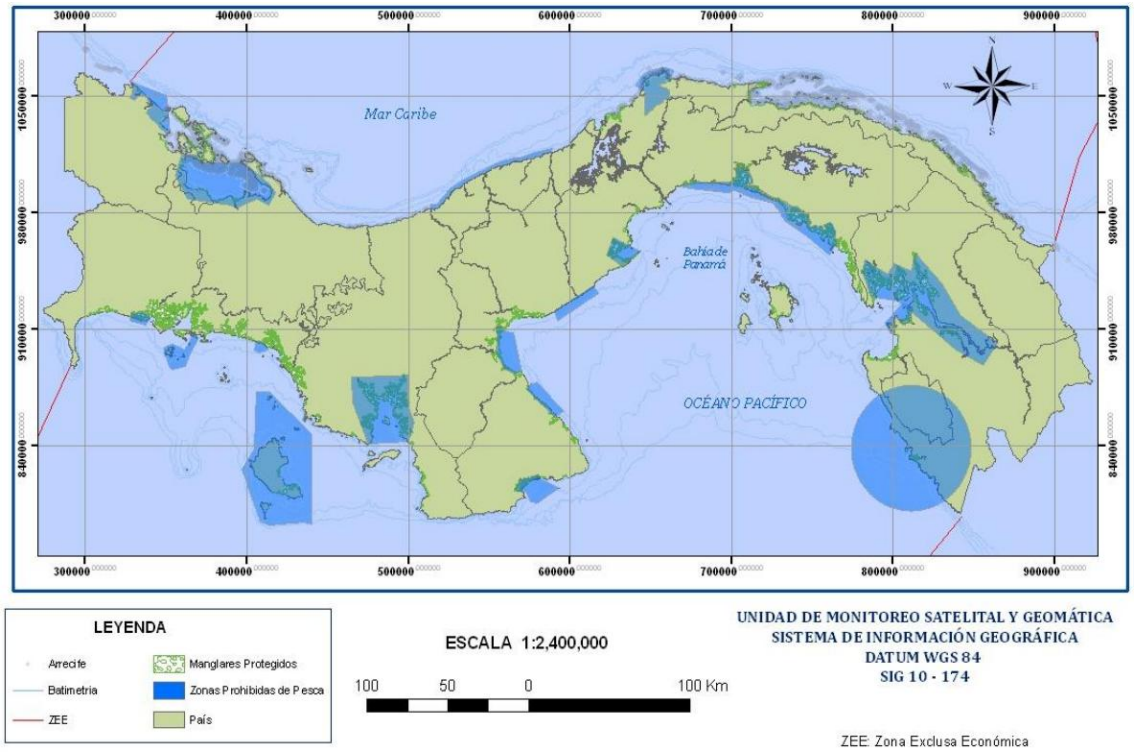


Figure 6. Prohibited fishing zones in the Pacific Ocean of Panama.

Pachecho (2015) described the ports and fishing zones according to the FAO (2002) which were considered the most relevant, including those used as departure and arrival ports for vessels participating in the observer program within their study (figure 7).

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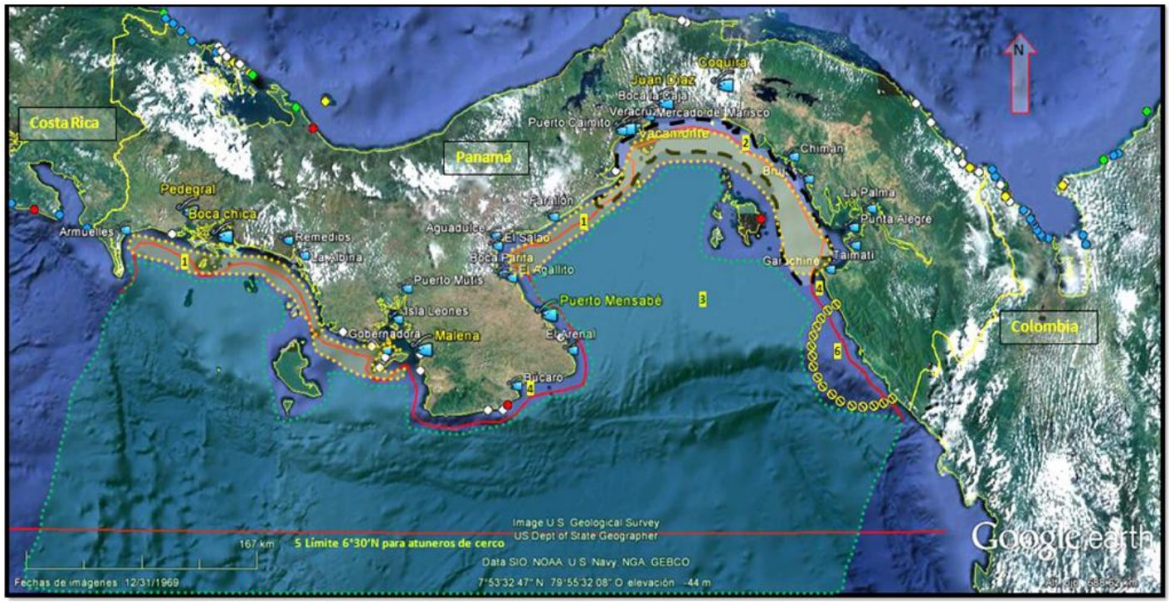


Figure 7. The blue fish head symbol represents the 31 most relevant ports according to FAO (2002). The larger fish head icons with yellow letters indicate the departure and arrival ports for observers assigned to part of the longline fleet between 2005 and 2010. Fishing zones are as follows: 1) Yellow dotted areas represent trawling zones for shrimp fishing; 2) The green dotted area corresponds to the zone used by the longline fleet; 3) the "artisanal" fleet with mixed gear (gillnets and hook-and-line) generally operates near the coast within the area between the mainland and the red line marked along the entire Pacific coast on the 10-fathom contour; 4) the semicircle marked to the east of the Gulf of Panama is an exclusive zone for recreational fishing.

The shrimp fishery in Panama is concentrated on the Pacific coast, mainly in the Gulf of Panama and the Gulf of Chiriqui. The industrial fleet, dedicated to white shrimp fishing, make their entire catch in three zones: Chiriqui (5%), Chame (5%), and Darién (90%) (Figure 7) (AMP, 2017).

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Figure 7. Fishing zones (orange shadows areas) for the industrial white shrimp fishery. Source: (AMP, 2017).

Stock status

The following is information about the status of the target species populations:

Target specie	Type of stock	Geographic extent
Litopenaeus occidentalis	Regional	Eastern Tropical Pacific Ocean -EPT-

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Litopenaeus stylirostris	Regional	Eastern Tropical Pacific Ocean -EPT-
Litopenaeus vannamei	Regional	Eastern Tropical Pacific Ocean -EPT-

Stock assessment

The competent authority responsible for examining and assessing the condition of fish stocks is ARAP. This public entity is obligated to carry out ongoing evaluations of the exploitation status of fisheries resources with the support of national or foreign scientific entities with expertise.

Current stock status

There is no stock assessment information for the target species in the area.

Fisheries management

Management arrangements

The ARAP is the entity responsible for ensuring compliance with laws and regulations related to coastal-marine issues, aquaculture, fishing, and related activities (ARAP, 2017). It also plays a crucial role in generating information on biological data, and catches, among others, for decision-making at the national level. To achieve this goal, ARAP has used the ecosystem approach in fisheries (EAF), integrating stakeholders in all fisheries management decisions and regulations (ARAP, 2018; Ley de Pesca No. 204, 2023).

ARAP has a Research and Development Department responsible for making scientific recommendations for the management of fisheries resources. These recommendations can be issued along with universities, research institutions such as the Smithsonian Tropical Research Institute (STRI), scientific consultants, environmental NGOs, and the fishing industry. The board of ARAP is made up of representatives from the government, fishing industry, academics, scientists, and environmental NGOs.

Other fishing management measures in Panama are: the issuance of licenses for different types of fishing (artisanal and industrial), satellite monitoring is applied for industrial vessels, and closed periods have been established for different species of shrimp that last four months in the year, establishment of forbidden areas for fishing, reduction of effort (size of the fleet and fishing days) and restrictions on fishing gears (size and number of hooks, quantity of nets used) and utilisation of the turtle excluder device (TED) (ARAP, 2018). In 2023, the ARAP established the shrimp fishing closure withing the closure executive Decree 158, 2003. The fishing closured comprehended the period from February 1st at 12:01 am to April 11 at 12:00 am.

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In addition, Panama is part of several RFMOs, among which the Inter-American Tropical Tuna Commission (IATTC), the International Commission for the Conservation of Atlantic Tunas (ICCAT), and the North Pacific Fisheries Commission (NPFC) stand out for the region of interest.

Regarding the shrimp fishery, it has been document that the historical decrease in white shrimp landings has not been reversed by the historical implementation of administrative measures aimed at restricting exploitation and protecting the resource. The fisheries were closed for two months in the dry and the rainy season, starting in 1975. First period: 1 February to 11 April; second period: 1 September to 11 October. During the closure periods, the industrial shrimp fishery takes the opportunity to provide maintenance to the vessels and change the fishing nets.

During this time, approximately 5% of this fleet could obtained special permission, issued by the fishing Authority, for finfish in those periods. In addition, the artisanal fleet also continues its fishing activity on finfish. Since the 1990s the fishery has been reduced to less than 20 days during the most important months of reproduction of the species. In the 2000s, Marine Protected Areas (MPA) were created when some areas were closed to fishing activities. Due to these reasons, the traditional shrimp industry is at an economic crossroads that could be having very important social impacts (Ehrhardt, 2012).

Registries

Vessel register

The vessel registry system is carried out by the National Maritime Authority and is public at

https://www.amp.gob.pa/servicios/registro-publico-de-naves/tipos-de-inscripcion/

Fishers register

Regarding the registration of fishermen, ARAP recognized that there is no precise data on the number of fishermen participating in fishing activity in the Republic of Panama. In order to update the information, a census was conducted in different stages. The first stage was carried out in 2019, and the second and third stages were reportedly initiated in the same year. However, information regarding the results of this exercise could not be found. Additionally, there is evidence that the INEC (National Institute of Statistics and Census) is planning the National Agricultural and Fisheries Census 2024.

It is important to mention that the most recent information available is over 10 years old and comes from the Structural Survey of Artisanal Fishing and Aquaculture in Central America 2009-2011, conducted by the Organization of the Fisheries and Aquaculture Sector of Central America -Ospesca-.

Traders register

In Panama, there are different sources of statistical data where information about the trade in the country's fishing industry can be obtained. These sources include the following: the Comptroller General of the Republic of Panama, the Authority of Aquatic Resources of Panama (ARAP), the Ministry of Agricultural Development (MIDA), and the National Customs Authority (ANA). However, the information generated from these entities is limited to periodic technical reports, depending on the institution, and even to direct inquiries.

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Processors register

The Ministry of Agricultural Development (MIDA) in Panama is responsible for overseeing various aspects of agricultural and fisheries activities in the country. The MIDA plays a crucial role in regulating and promoting the fisheries sector, including fish trading. Nonetheless, specific information about a fish trader register maintained by MIDA is not readily available.

Monitoring

Vessel monitoring

According to Administrative Resolution 101-99 and Executive Decree No. 126 of September 12, 2017, all national and foreign-flagged vessels with Fishing Licenses must incorporate the satellite monitoring system in order to precisely determine their geographical position (Autoridad Marítima de Panamá, Dirección General de Recursos Marinos y Costeros, 2010; MIDA, 2017).

Furthermore, within the same framework, ARAP has a monitoring system that, starting in 2019, shares the vessel tracking system data of the country on the Global Fishing Watch map (Global Fishing Watch, 2023), making monitoring more effective than it used to be.

Monitoring of landings

The authority responsible for monitoring landings on the coasts of Panama is ARAP, the fisheries authority in the country. However, recent information regarding landings published by ARAP is not readily available online. For the shrimp fishery there are three main landing sites: Vacamonte Fishing Port (Arraiján), accounting for 90%; Coquira Port (Chepo), accounting for 5%; and Mutis Port (Veraguas), accounting for 5%.

In these ports the Panama Maritime Authority (AMP), through the General Directorate of Ports and Auxiliary Industries, maintains a database regarding landings as it charges fees for discharges. However, the Panama Aquatic Resources Authority and the National Maritime Service conduct constant surveillance operations, and the Aquatic Resources Authority (ARAP) has inspectors stationed at the main ports where fishery products are landed.

Aggregate information on marine species landings by port has been found for state ports administered by the AMP (Panama Maritime Authority). This information is available on the AMP's transparency platform and the open data platform of Panama. However, since the data is aggregated, it does not provide detailed information on the species, the fishing fleets involved, or the flag states, which is currently unavailable.

https://www.amp.gob.pa/transparencia/estadistica/desembarque-de-especies-marinas-segun-puerto/

Onboard monitoring

In Panama, the ARAP has established that the country will adopt Conservation and Management Measure CMM 2018-05, which came into effect on February 12, 2019, regarding the Regional Observer Program (ROP). In this regard, the government entity informs that starting from January 1, 2023, it is necessary for all vessels flying the Panamanian flag, registered in the vessel registry of the Commission, and engaged in the transshipment of regulated fisheries resources by the WCPFC, to carry on board an observer from the ROP authorized by the Commission. However, it also takes into account that, since it is not possible to have an observer

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provided by the ROP, then the secretariat of the PNA Observer Agencies may assist in contacting one of the regional programs for observer placement to ensure coverage of transshipment activities (Arap, 2022).

Electronic monitoring

According to the Panama report, the Application of CIAT Resolution C-17-02, in 2017 was adopted and implemented the measure that establishes that all Panamanian-flagged vessels over six gross tons must have a beacon or Vessel Monitoring System (VMS) device and be received at the fisheries control and monitoring center of ARAP, where speed and fishing activity data in the area they are located are included (Comisión Interamericana del Atún Tropical [CIAT], 2017). This is the only official electronic tracking system for the country's vessels and starting in 2019, shares its data with Global Fishing Watch (Global Fishing Watch, 2023).

Other types of monitoring

There are no other types of monitoring in the area.

Regulations

National Legal and Administrative Framework:

- Executive Decree 10 of February 28, 1985, "Regulating Shrimp Fishing in the Territorial Waters of the Republic."
- Executive Decree 124 of November 8, 1990, "Establishing provisions to regulate shrimp fishing."
- Executive Decree 111 of October 15, 1990, “Prohibits, among other measures related to the protection of marine fauna, the fishing of tuna associated with marine mammals (dolphins) by all Panamanian-flagged tuna fishing vessels of 440 GT or more operating in Panamanian territorial waters and the Eastern Tropical Pacific”.
- Executive Decree 4 of January 31, 1992, “Reduce the mortality of sea turtles in Shrimp fishery”.
- Executive Decree 158 of December 31, 2003, “Through this executive decree, Executive Decree No. 55 of September 28, 1993, Executive Decree No. 88 of July 17, 2002, are repealed, and the thirteenth article of Executive Decree No. 124 of November 8, 1990, is modified”.
- Executive Decree 82 of April 1st, 2005, “Turtle Excluder Devices (TEDs) is mandated for all vessels engaged in fishing using trawl nets in all the jurisdictional waters of the Republic of Panama”. The use of TEDs is a requirement by the United States for shrimp exports.
- Executive Decree 126 of September 12, 2017, "Regulating fishing licenses for vessels using longline gear in the jurisdictional waters of the Republic of Panama and establishing other provisions."
- Regional Legal and Administrative Framework for Targeted Fisheries (fishing agreements, regional fisheries management organizations):
- Law 24 of February 16, 1954, "Approving the Convention between the United States of America and the Republic of Costa Rica for the establishment of the Inter-American Tropical Tuna Commission (IATTC)."

Resolutions and Recommendations issued by the IATTC.

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- Law 74 of November 10, 1998, "Approving the International Convention for the Conservation of Atlantic Tunas, adopted in Rio de Janeiro on May 14, 1996."
- Resolutions and Recommendations issued by the International Commission for the Conservation of Atlantic Tunas (ICCAT).
- Law 64 of October 29, 2008, "Approving the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of December 10, 1982, relating to the conservation and management of straddling fish stocks and highly migratory fish stocks, adopted in New York on August 4, 1995."

Management plans

- National Action Plan for Sustainable Fisheries https://arap.gob.pa/avances-plan-de-accion-pesca-sostenible-en-panama/
- Fishery Research Plan 2019-2024 https://www.gacetaoficial.gob.pa/pdfTemp/28803/73706.pdf

Among other management plans

- Action Plan to Reduce Impact on Marine Mammals (Resolution ADM/ARAP No. 055-2021)
- National Plan to Reduce Impact on Seabirds (Resolution ADM/ARAP No. 039-2022)
- National Action Plan for the Conservation of Marine Turtles in Panama 2017-2021 https://marviva.net/wp-content/uploads/2021/11/plan_conservacion_tortugas_marinas_panama_17-04.pdf

Fisheries agreements

Panama has entered into various bilateral and multilateral agreements pertaining to fisheries. These agreements aim to promote sustainable fishing practices, conservation of the resources, and cooperation among nations in the management of fisheries resources.

- Panama is a member of the Inter-American Tropical Tuna Commission (IATTC). The IATTC works towards ensuring sustainable fishing practices and implementing measures to prevent overfishing.
- Panama is a member of the International Commission for the Conservation of Atlantic Tunas (ICCAT). The ICCAT sets fishing quotas, promotes research, and implements measures to prevent illegal, unregulated, and unreported fishing.
- Panama is part of the Central American Fisheries and Aquaculture Organization (OSPESCA). OSPESCA aims to enhance sustainability, resource management, and development in the sector.

During the Our Ocean conference in 2023, Panamá mention the following commitments.

- Creation of La Esmeralda Co-management zone in the Republic of Panama.
- Panama proposed an International Day Against Abandon, Lost, Discarted Fishing Gear.
- Panama subscribes to the Illegal, Unreported and Unregulated Fishing Action Alliance Pledge.
- Panama Adopts the Transparency and Technology Leadership Statement.

Bycatch

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In the shrimp fisheries the bycatch is about 85% (1:7 shrimp to other catch) and shrimp makes up about 15% of the catch. Most of the catch is discarded back into the sea and just over 20% of the bycatch is landed and recorded as marine catches (Harper, Guzmán, Zylich, & Zeller, 2014).

Interaction with ETP species

List the endangered, threatened, and protected species (ETP) that are captured or interact with the fishery (e.g., sharks, marine mammals, marine turtles, seabirds). Summarise estimates of capture and research papers | reports. Indicate if there are specific measures | or regulations to manage and report ETP bycatch.

English common name	Local common name	Scientific name	CITES listing	IUCN Red List status
Leatherback Turtle	Tortuga Laúd	*Dermochelys coriacea*	Appendix I	Vulnerable
Loggerhead Turtle	Tortuga cabezona	*Caretta caretta*		Vulnerable

Interaction with protected areas

This fishery does not interact with protected areas.

Impacts on the marine environment.

- Overfishing: Overfishing poses a significant risk to the marine ecosystem in the Pacific Ocean of Panama. It can lead to the depletion of fish populations, disrupt the balance of the food chain, and negatively impact the overall health and biodiversity of the marine environment. In recent years, the fishing industry in Panama has experienced a decline in production. This can be attributed to the overexploitation of coastal marine resources and the presence of illegal, unreported, and unregulated (IUU) fishing activities (Castrejón, 2020). According to official records, the contribution of the fishing sector to Panama's Gross Domestic Product (GDP) was USD 326.3 million in 2004, accounting for 2.3% of the GDP. However, recent data from 2018 indicates a significant decrease to USD 182.2 million, representing only 0.37% of the GDP (National Institute of Statistics and Census of the Comptroller General of the Republic of Panama - INEC).
- Pollution: Pollution, including marine debris, chemical pollutants, and oil spills, poses a significant threat to the marine environment. It can harm marine organisms, disrupt ecosystems, and contribute to the degradation of water quality (Cortés & Reyes-Bonilla, 2017).
- Bycatch: The incidental capture of non-target species, known as bycatch, is a major concern in the Pacific Ocean of Panama. Bycatch can include endangered or protected species, such as sea turtles, sharks, and marine mammals. Implementing effective bycatch mitigation measures, such as the use of specialized fishing gear and improved fishing practices, is essential to minimize the negative impact on these species (Araúz, 2017; Pacheco, 2013).

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- Climate Change: Climate change is causing rising sea temperatures, ocean acidification, and changes in marine currents, which can have profound effects on the marine ecosystems of the Pacific Ocean. These changes can disrupt the distribution and abundance of marine species, affect coral reef health, and contribute to the loss of biodiversity (Lluch-Cota et al, 2019).
- Illegal, Unreported, and Unregulated (IUU) Fishing: IUU fishing undermines sustainable fisheries management and conservation efforts. It can lead to the overexploitation of fish stocks, disrupt ecosystems, and threaten the livelihoods of local fishing communities. Strengthening monitoring, control, and surveillance measures, as well as promoting international cooperation, is crucial for addressing IUU fishing in the Pacific Ocean of Panama.
- Marine Fish Invasion: Recent engineered expansions of the Panama and Suez canals have accelerated the introduction of non-native marine fishes and other organisms between their adjacent waters (Castellanos-Galindo et al, 2020).
- Trawling fishery: Tropical shrimp fisheries account for approximately 27% of the global discard catch (Eayrs, 2007; Martínez-Muñoz, 2012; Paramo et al., 2009). It is reported that the commercial shrimp fishery has low yields due to equipment inefficiency and overexploitation of Pacific resources, as this fishing technique is highly invasive and results in a high volume of demersal fish as bycatch.

FIPs

Indicate if there are FIPs in this fishery. List the FIPs. Information from FisheryProgress

FIP name	Type	Status	FIP lead entity	FIP identification number
Panama large pelagics - longline (Marpesca)	Comprehensive	Stage 3: FIP Implementation	Key Traceability	11639
Eastern Pacific large pelagics - longline (Martec)	Comprehensive	Stage 4: Improvements in Fishing Practices or Fishery Management	Key Traceability Ltd.	14707

Initiatives working with the fishery

- Fortalecimiento de las OSC pesqueras como actores de gobernanza y desarrollo para la inclusión social, la sostenibilidad marina y la prosperidad equitativa en el Golfo de Montijo, Panamá - MARVIVA
- Mejoras en la recolección de datos de tiburones para las pesquerías costeras del OPO: ABNJ2. -IAATC-
- Desarrollo de alianzas con los actores locales para la pesca sostenible en el Gran Golfo de Chiriquí, Panamá - MARVIVA

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- Empoderar a las ciudades costeras y los gobiernos locales en Costa Rica y Panamá para combatir la basura marina a través del rechazo de plásticos de un solo uso y la mejora de los sistemas de gestión de residuos- MARVIVA.
- Towards Joint Integrated, Ecosystem-based Management of the Pacific Central American Coastal Large Marine Ecosystem (PACA)- WWF.
- Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems - UNDP.
- Improved Research, Policy, and Advocacy in Costa Rica, Panama, and Colombia to Deter Seafood Fraud and Illegal International Trade of Shark Products - MARVIVA.

SWOT analysis for improving the management of the fishery and the condition of the fishery resources

List key strengths, weaknesses, opportunities, and weaknesses.

Strengths	Weaknesses
- Strategic position of Panamá for accessing the North American and European Union markets with fresh and frozen products. - Two Fishery Improvement Projects (FIP) for large pelagic in the Pacific Ocean are already in process. - The Law 204 of 2021, after more than 60 years of having a fragmented legal framework, the national fisheries legislation was updated. The newly approved law sets a roadmap for the sustainability of the fisheries sector with provisions that strengthen the fight against IUU fishing. However, it is necessary to progress in the necessary regulations for its proper implementation.	- Limited monitoring and data collection. - Weak governance. - Presence of illegal fishing activities. - The lack of financial and human resources, as well as institutional, technological, and operational capacities to effectively carry out control and surveillance actions. - Lack of interest from the fisheries management authorities.
Opportunities	Threats

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- The private sector is interested in the GMCII project development. - Sustainable fishing practices, management plans, and action plans can be developed.	- Lack of support from the government sector. - High by-catch volume

Literature

Andraka, S., Mug, M., Hall, M., Pons, M., Pacheco, L., Parrales, M., Rendón, L., Parga, M., Mituhasi, TSegura, Á., Ortega, D., Villagrán, E., Pérez, S., de Paz, C., Siu, S., Gadea, Caicedo, J., Zapata, LMartínez, J., Guerrero, P., & Vogel, N. (2013). Circle hooks: Developing better fishing practices in the artisanal longline fisheries of the Eastern Pacific Ocean. Biological Conservation, 160, 214-224. https://doi.org/10.1016/j.biocon.2013.01.019

Araúz, D. (2008). Caracterización de la Pesquerías Industrial y Artesanal del Camarón y Langosta en Panamá. Ospesca, FAO Suecia.

Araúz Ábrego, E. A. (2017). Diagnóstico de la situación de las tortugas marinas en Panamá y Plan de Acción Nacional para su Conservación. Panamá.

Autoridad de los Recursos Acuáticos de Panamá. (2017). Plan de Acción para la Pesca Sostenible, “Un Compromiso de Todos”. https://arap.gob.pa/wp-content/uploads/2017/01/PLAN-DE-ACCION-PARA-LA-PESCA-FINAL2.pdf

Autoridad de Recursos Acuáticos de Panamá. (2022). Observadores a bordo de buques panameños inscritos en el Registro de buques Comisión de Pesca WCPFC. https://arap.gob.pa/wp-content/uploads/2023/03/045-2022_ES-Observadores-a-bordo-de-buques-Registrados-en-la-WCPFC.pdf

Autoridad Marítima de Panamá, Dirección General de Recursos Marinos y Costeros. (2010). Plan de Acción Nacional de Panamá para Prevenir, Desalentar, y Eliminar la Pesca Ilegal, No Declarada y No Reglamentada (INDR). https://www.fao.org/faolex/results/details/ru/c/LEX-FAOC092047/

Castellanos-Galindo, G. A., Robertson, D. R., Sharpe, D. M., & Torchin, M. E. (2020). A new wave of marine fish invasions through the Panama and Suez canals. Nature Ecology & Evolution, 4(11), 1444-1446.

Castrejón, M., & Bucaram, S. J. (2020). Diagnóstico integral del sector pesca y acuicultura de la República de Panamá. Banco Interamericano de Desarrollo (BID).

Comisión Interamericana del Atún Tropical. (2017). informe de Panamá, Aplicación de la Resolución C-17-02 de la CIAT. https://www.iattc.org/GetAttachment/d194992c-8c5d-4f4d-8d7b-2d98ebdbcb4a/PAN-C-17-02_Esquema-y-acciones-de-cumplimiento-nacionales-actualizados.pdf

Cortés, J., & Reyes-Bonilla, H. (2017). Human influences on Eastern Tropical Pacific coral communities and coral reefs. Coral reefs of the Eastern Tropical Pacific: persistence and loss in a dynamic environment, 549-563

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Eayrs, S. (2007). Guía para reducir la captura de fauna incidental (bycatch) en las pesquerías por arrastre de camarón tropical. Fao.

Global Fishing Watch. (7 de junio de 2023). Panamá publica los datos de seguimiento de embarcaciones en el mapa de Global Fishing Watch. https://globalfishingwatch.org/es/historias/panama-publica-los-datos-de-seguimiento-de-embarcaciones-en-el-mapa-de-global-fishing-watch/

Ley No. 204. (2021). Que regula la pesca y acuicultura en la República de Panamá y dicta otras disposiciones. 18 de marzo de 2021. No. 29244-A.

Martínez-Muñoz, (2012). Estructura y distribución de la comunidad íctica acompañante en la pesca del camarón (Golfo de Tehuantepec. Pacífico Oriental, México). Tesis de Doctor en Ciencias del Mar. Universidad de Barcelona.

Ministerio de Comercio e Industrias. (2021). Análisis de la tipología de productos exportables de Panamá en el periodo 2010-2020. Autor.

Ministerio de Comercio e Industrias. (2022). Análisis de la Evolución de la Exportación de los Principales Productos de la Pesca y su Tendencia y Desempeño en los Mercados Internacionales. Autor.

Ministerio de Desarrollo Agropecuario. (2017). Decreto Ejecutivo N° 126. Que regula la licencia de pesca para naves de servicio interior que utilizan el arte de pesca denominado palangre en las aguas jurisdiccionales de la República de Panamá y dicta otras disposiciones.

Organización de las Naciones Unidas para la Alimentación y Agricultura. (2007). Organisation des Nations Unies pour l'alimentation et l'agriculturerofil de la Peche par Pays. FID/CP/ARG: La República de Panamá. Autor.

Organización de las Naciones Unidas para la Alimentación y Agricultura. (2018). Hojas de datos de perfiles de los países, Panamá 2018. Autor.

Pacheco, L. M. (2013). La pesca con palangre pelágico en el pacífico panameño. Aspectos operativos de la selectividad de los anzuelos y repercusiones en la captura incidental de tortugas marinas [Tesis de maestría, Universidad de Alicante]. http://hdl.handle.net/10045/36118

Parga, M.L. 2012. Hooks and sea turtles: a veterinary's perspective. Bull. Mar. Sci. 88: 731-741.

República de Panamá, Asamblea Legislativa LEGISPAN. (1959). Decreto ley No. 17. Por el cual se reglamenta la pesca y se aprueba la exportación de productos pesqueros en la República de Panamá.

República de Panamá, Asamblea Legislativa LEGISPAN. (1997). Decreto Ejecutivo No. 33. Por medio del cual se reglamenta la pesca de ciertas especies y se adoptan otras disposiciones.

Robles, Y. A., Montes, L. A., & Vega, Á. J. (2015). Caracterización de la captura de tiburones por la pesca artesanal en los manglares de David, Golfo de Chiriquí, Pacífico de Panamá. Tecnociencia, 17(1), 11-30.

Rodriguez, Y., Tavares, R., & Alvarado, S. (2021). Assessment of the artisanal shark fishery in the Pacific coast of Panama highlights a high proportion of immature and threatened species. Pan-American Journal of Aquatic Sciences, 16(2), 189-195.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Ross-Salazar, E. (2014). Artes, métodos e implementos de pesca. Fundación MarViva.

Valverde, R. A. (2012). Estudio sobre la producción pesquera industrial, comercialización y exportación, en la República de Panamá desde 1995 al 2008. Centros: Revista Científica Universitaria, 1(1), 116-147.

Vega, A. J., Robles, Y. A., Quezada, F., Montes, L., Del Cid, A., & Quintero, O. (2023). Incidencia de elasmobranquios en la pesca artesanal en los golfos de Chiriquí y Montijo, pacífico panameño. Scientia, 33(1), 144-172.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

GMC2 project fishery profile

Fishery: Large pelagic fish from deep-water longlines (espinel grueso) for export and domestic market.

Overview of the country´s fisheries sector

The fishing industry in Ecuador has undergone a continuous evolution, progressing from traditional manual methods to the utilization of motorized boats equipped with outboard or stationary engines, advanced technology, and various fishing gears for operations in both surface and deep-sea environments. The predominant fleets in Ecuador are purse seine, trawl, gillnet, and longline fleets (Brothers et al., 1999; INP, 2000; (Organización de las Naciones Unidas para la Acuicultura y Alimentación [FAO], 1994).

Of these fleets, the longline fleet holds significant socioeconomic importance and offers several benefits to fishermen, including lower fuel consumption, the ability to catch migratory species, and a high degree of selectivity in capturing the desired species. However, this fishery is also associated with incidental catches of several species, predominantly sharks, rays, and marine turtles (Báez et al., 2006; Gilman et al., 2005; Lewison et al., 2004; Parker et al., 2005). The longline fleet represents approximately 20% of Ecuador's total fishing fleet and comprises both artisanal vessels (made of fiberglass, wood, or a combination of materials) and industrial vessels (mother ships and naval steel vessels).

The fisheries sector plays a vital role in providing direct and indirect employment opportunities, given the local, regional, and export commercial value associated with targeted species. Researchers have reported that between 2008 and 2012, the total value of the primary large pelagic species (such as dolphinfish, yellowfin tuna, bigeye tuna, skipjack tuna and swordfish) caught and exported from artisanal fisheries to the United States (including both fresh and frozen fish markets) amounted to approximately 364 million US dollars (US National Marine Fisheries Service, Fisheries Statistics and Economics Division).

Institutional framework

The national fisheries institutional framework in Ecuador comprises various entities responsible for different aspects of fisheries management and regulation. The national fisheries authority is the governing body overseeing the sector, which is known as the Undersecretary of Fishery Resources (Subsecretaría de Recursos Pesqueros, SRP). The SRP is responsible for formulating and implementing policies, regulations, and strategies related to fisheries and aquaculture activities in order to guarantee the sustainable utilization of fisheries resources.

In addition to the SRP, there are other members of the national fisheries institutional framework including various institutions involved in different aspects of fisheries management and research. These institutions include:

Fisheries Research Institutions: The Public Institute For Acuaculture for Fisheries Research -IPIAP- is responsible for conducting scientific research, data collection, and analysis related to fisheries resources and their sustainability.

Fisheries Surveillance and Control: Entities responsible for monitoring and enforcing fisheries regulations and ensuring compliance with fishing practices. The Fisheries Control Directorate from the SRP and the Ecuadorian Navy, as the national maritime authority (NMA) are involved in the surveillance and control activities for the illegal, unreported, and unregulated (IUU).

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Seafood Safety Authority: The Regulatory, Control and Surveillance National Agency (La Agencia Nacional de Regulación, Control y Vigilancia Sanitaria-ARCSA) is responsible for ensuring the safety and quality of seafood products throughout the supply chain, including processing, packaging, and export.

Co-management arrangements exist in Ecuador's fisheries sector, involving collaboration and shared responsibilities between the government, fishing communities, and other stakeholders. These arrangements aim to promote sustainable fisheries practices, ensure community participation in decision-making processes, and protect the rights and interests of local fishing communities.

Regulatory framework

Ecuadorian National Fisheries Regulatory Framework:

Property of Fisheries Resources and Ownership:

In Ecuador, fisheries resources are considered part of the national patrimony and are owned by the state. The state has the authority to regulate and manage these resources to ensure their sustainable utilization, and it is regulated by the Undersecretary of Fishery Resources.

Main Pertinent National Laws, Regulations, and Policies:

Fisheries Law: The main legislation governing fisheries in Ecuador is the Organic Law for the development of Aquaculture and Fisheries (Ley Orgánica para el desarrollo de la Acuicultura y la Pesca). It establishes the legal framework for the management, conservation, and sustainable use of fisheries resources.

Food Safety Regulations: Ecuador has regulations in place to ensure the safety and quality of seafood products for both domestic consumption and export. These regulations are enforced by the Regulatory, Control and Surveillance National Agency (La Agencia Nacional de Regulación, Control y Vigilancia Sanitaria-ARCSA)

CITES Regulations: Ecuador is a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The country has regulations in place to regulate the trade of fishery products covered by CITES through the Ministry of Production, Foreign Trade, Investment and Fisheries and the Vice Ministry of Aquaculture and Fisheries.

Gender Issues in the Fisheries Sector:

In Ecuador, there is no specific data registry for the fisheries sector disaggregated by gender. The existing information for economic activities includes fishing as part of the broader category of Agriculture, Livestock, Hunting, Forestry, and Fishing. However, Ecuador has recognized the importance of gender issues in the fisheries sector. There are specific policies and programs in place to promote gender equality, women's empowerment, and the inclusion of women in decision-making processes related to fisheries management and development.

These initiatives align with international conventions such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the Inter-American Convention on the Prevention, Punishment, and Eradication of Violence against Women (Belem do Pará Convention), the Beijing Declaration and Platform for Action, and the Optional Protocol to the Convention on the Elimination of All Forms of Discrimination against Women. Additionally, Ecuador has signed International Labour Organization (ILO) conventions such as Convention No. 100 on Equal Remuneration, Convention No. 111 on Discrimination in Employment and Occupation, Convention No. 122 on Employment Policy, and Convention No. 156 on Workers with Family Responsibilities.

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Indigenous peoples, ethnic groups and communities in the Fisheries Sector:

In Ecuador, there are no indigenous people on the Pacific coast fishing the focus species of the GMCII project.

Regulations, Policies, and Plans for Fisheries in Protected Areas:

Ecuador has specific regulations, policies, and plans for fisheries activities in protected areas, focusing on the categories of national parks and marine reserves. These measures ensure that subsistence, commercial, and tourism fishing practices within these areas are sustainable and compatible with the conservation objectives of protected areas. Furthermore, as established in the Organic Law for the Development of Aquaculture and Fisheries, Chapter I, Article 2 "Scope of Application," all entities, organizations, and dependencies of the public sector, as well as individuals and legal entities, must mandatorily comply with everything related to said law within the spaces that comprise the National System of Protected Areas in coordination with the competent governing body (Corte Constitucional del Ecuador, 2020).

International Agreements and Memberships:

Ecuador has signed and ratified the following international agreements and conventions:

- United Nations Convention on the Law of the Sea of 1982 (UNCLOS)
- Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (PSMA)
- International Labour Organization (ILO) instruments: Work in Fishing Convention of 2007 (C188) and the Work in Fishing Recommendation of 2007 (R199)

Membership in Regional Fisheries Management Organizations (RFMOs):

Ecuador is a member of several Regional Fisheries Management Organizations (RFMOs), including but not limited to the Inter-American Tropical Tuna Commission (IATTC) and the South Pacific Regional Fisheries Management Organization (SPRFMO).

FITI Initiative:

Ecuador is part of the Fisheries Transparency Initiative (FiTI), being the seventh country to join worldwide and the first in Latin America. Currently, during the year 2023, the National Multi-Stakeholder Group of FiTI Ecuador is seeking to implement the FiTI work plan in order to present the first report by the end of 2024 (Gobierno del Ecuador, s.f.).

Overview of the fishery

Tuna Fishery

In Ecuador, the tuna industry is one of the main activities within the country's industrial fishing sector, estimated to provide approximately 144,000 jobs (direct and indirect) across the entire tuna value chain, becoming one of the main sources of income for the economy of the country (Ministerio de Comercio Exterior, 2017; Zambrano & Zambrano, 2020). This industry focuses on the capture of the following target species: yellowfin tuna (*Thunnus albacares*), bigeye tuna (*Thunnus obesus*), and skipjack tuna (*Katsuwonus pelamis*).

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In 2020, the largest catches of yellowfin tuna were in international waters, with a total of 30,113 tons, followed by catches in national waters (mainly in the Galapagos Islands) corresponding to a total of 5,835 tons, and finally, coastal waters catches, which amounted to 1,822 tons (Pacheco, 2021). Similarly, for the same year, a total catch of 35,264 tons of bigeye tuna was reported, with the majority being captured in international waters, totaling 33,737 tons, followed by catches in national waters, with a total of 1,464 tons, and finally, coastal waters catch, which amounted to 63 tons (Pacheco, 2021). Lastly, in the case of skipjack tuna, a total catch of 201,402 tons was recorded for 2020, representing 73.4% of the total tuna fishing catch in the country. Out of that total, most of the catches were in international waters, totaling 172,273 tons, followed by catches in national waters, which amounted to 25,651 tons, and finally, coastal waters catches reported a total of 2,478 tons (Pacheco, 2021).

Regarding the fishing fleet, until 2017, there were 114 vessels in the tuna fishing fleet, placing the country among the top in Latin America in terms of total catches made, according to data from the Inter-American Tropical Tuna Commission (CIAT). Furthermore, during the period from 2010 to 2015, according to FAO statistical information, Ecuador ranked sixth in tuna catches worldwide across all oceans (Ministry of Foreign Trade, 2017). However, in 2019, a 20% decrease in the quantity produced and the revenue generated by this industry was identified, which is attributed to environmental and legal regulations, energy costs, and generated clusters (Zambrano & Zambrano, 2020). However, for 2020, the tuna fishing fleet remained with 115 registered vessels (Pacheco, 2021).

In addition, for the period from 2010 to 2016, the export of tuna products represented 8.71% of the country's non-oil exports, with the European Union, the United States of America, Colombia, Argentina, and Chile being the main export destinations (Ministerio de Comercio Exterior, 2017).

Swordfish fishery

The *Xiphias gladius* commonly known as swordfish, holds significant commercial value in the fishing industry of Ecuador. With a strong demand both domestically and for export markets, the swordfish is a prized catch for the longline fleet operating in Ecuador's waters. This fishery sector comprises both artisanal and industrial operations, which together have contributed to a total landing of 3,388 tons of swordfish in 2017 alone (Loor-Andrade et al., 2017; SRP, 2019).

Notably, the fishing grounds off the Galapagos Islands exhibit a distinct pattern, with an average temperature between 19°C - 26°C. Researchers have highlighted the correlation between higher water temperatures above 19°C and an increase in catch per unit effort (CPUE) for swordfish, compared to areas with lower temperatures (Espíndola et al., 2011; Mejuto et al., 2014)

The handling of swordfish onboard needs rapid and meticulous treatment to ensure the delicacy and premium quality of this species. To ensure preservation, the fish is stored with crushed ice and carefully placed in plastic bags, safeguarding its freshness. In Ecuador, swordfish is presented in various forms for the export market. The most prominent type is fresh swordfish, either as whole (head and gut) or in sliced form, known as H&G (Head and Gut). This presentation has been highly valued (Martínez 2001).

Regarding export destinations, the United States of America stands as the primary buyer of Ecuador's swordfish. Historical records indicate that between 1989 and 2001, approximately 3,179 tons of swordfish, equivalent to a value of US$15,582,851, were exported

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to the United States (Anón 2001). It should be noted, however, that data for the period 2002-2004 is not available, as the institution responsible for processing and analyzing such information categorizes it under a broader classification of "whitefish" rather than specific species.

Shark fishery

In Ecuador, there are 68 registered shark species of which 30 are of commercial interest, and among these, due to an increase by 18 times the relative pressure of fishing three-fourths of the oceanic shark species are threatened (Pacoureau et al., 2021). Regarding the threats, the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) has included, in Appendix II, 14 shark species. Currently, 183 countries are part of the mentioned international trade agreement, including China and Ecuador (CITES 2022).

Despite the above mentioned, shark fishing and shark-related fishing gear are illegal in Ecuador. However, if sharks are caught accidentally, as by-catch, then they are permitted to be sold within the allowed limits established in the national and international regulations regarding threatened species (Correa, 2007). Nonetheless, in the case of incidental captures of live or dead specimens of the next specific species: whale shark (*Rhincodon typus*), basking shark (*Cetorhinus maximus*), great white shark (*Carcharodon carcharias*), porbeagle (Lamna nasus), mud shark (*Squalus acanthias*), oceanic whitetip shark (Carcharhinus longimanus), smooth hammerhead shark (*Sphyrna zygaena*), great hammerhead (*Sphyrna mokarran*), bonnethead (*Sphyrna tiburo*) and scalloped hammerhead shark (*Sphyrna lewini*).

Even though Ecuador has a current regulatory framework for management, monitoring programs, and relevant traceability mechanisms becoming a model for the region, it is still necessary to review, update, and strengthen these measures, as well as the coordination and capacity to fight illegal trafficking of vulnerable, threatened, and endangered shark species. Additionally, Ecuador illegally exports great quantities of sharks directly to China or via intermediary countries like Peru and then reexports all the shark fins to the Asian market (Dent & Shelley 2015; Núñez & Wuest 2019)

Mahi-mahi

The Mahi-mahi fishery in Ecuador primarily involves artisanal fisheries, specifically the multi-species longline fishery. This fishery targets various large pelagic fish species, including dorado, tuna, billfishes, and sharks. The Ecuadorian longline fleet utilizes two types of vessels: fiberglass vessels (fibras) and mother-ships (nodrizas) (Martínez-Ortíz & Zúñiga-Flores).

The distribution of Mahi-mahi catches is influenced by sea surface temperature (SST). The presence of mahi mahi is associated with the movement of equatorial and subtropical water masses from west to east along the Peruvian and Ecuadorian coasts. The peak abundance of dorado is typically observed between November and February. During this period, SST values range between 20 °C and 26 °C, with the 23 °C isotherm being particularly significant (Martínez-Ortíz & Zúñiga-Flores, 2012; Varela et al., 2016).

Mahi Mahi accounts for more than 65% of the estimated landings of large pelagic fish species by artisanal fisheries in Ecuador, and 35 to 40% of the exports of pelagic fish to the United States (Martínez-Ortiz and Zúñiga-Flores, 2012). Researchers constructed a historical monthly time series of Mahi Mahi catches taken by

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Ecuadorian fisheries during the January 1987-June 2015 period (Figure 1). In Ecuador, this specie is an important fishery resource, especially for its high demand in American markets. Artisanal boats play a significant role in its exploitation (Patterson & Martinez, 1991).

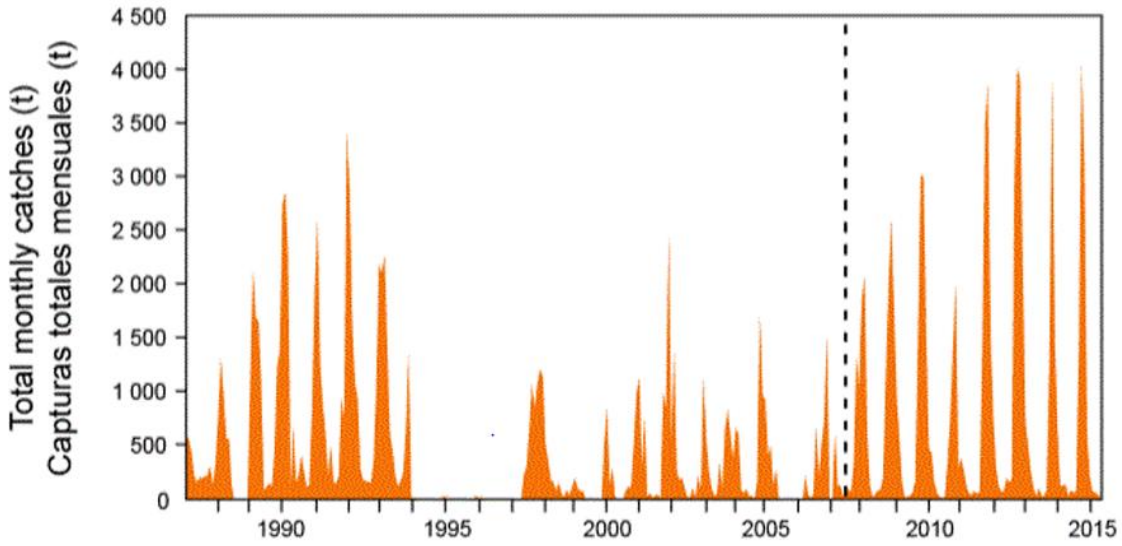


Figure 1. Total annual (top) and monthly (bottom) catches of Mahi Mahi by Ecuadorian artisanal fisheries, January 1987-June 2015, in tons.

The previous information describe the main species from the longlinge fisheries in Ecuador. Additional, in the Figure 2 shows the landings of the target species in the Large Pelagic Fish project, obtained from the Fisheries Research System (SRP), which were collected through interviews with captains of artisanal vessels from the main landing ports along the Ecuadorian continental coast. The fishing data were recorded monthly on a form called the Fishing Data Record.

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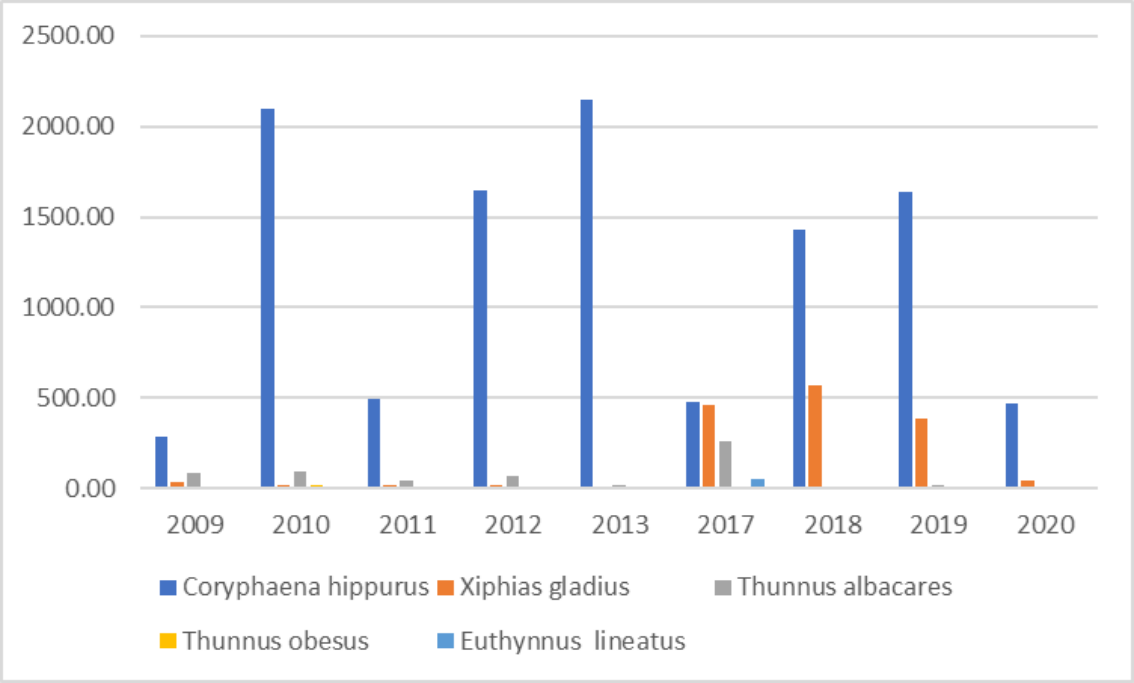


Figure 2. Total annual landings by port for large pelagic species during 2010-2020 (SRP, 2023).

Fishing operations

In Ecuador, the longline fishery is composed of both artisanal and industrial vessels. Artisanal vessels are typically constructed from materials such as fiberglass, wood, or a combination of both. These smaller-scale boats are commonly used by local fishermen who engage in traditional fishing practices. On the other hand, the industrial sector utilizes larger vessels known as mother ships or naval steel ships. These specialized boats are equipped with advanced technology and infrastructure to support extensive fishing operations. They have the capacity to store and process larger quantities of catch, enabling them to operate on a larger scale compared to their artisanal counterparts (SIAP, 2023).

The coexistence of artisanal and industrial vessels in the longline fishery reflects the diversity and inclusivity of the fishing industry in Ecuador. While artisanal fishermen contribute to the local economy and preserve traditional fishing practices, the industrial sector plays a significant role in meeting domestic and international demand for seafood products. Together, these two sectors contribute to the overall sustainability and economic viability of Ecuador's longline fishery.

In Ecuador, the artisanal fisheries for large pelagic species can be divided into two: the inshore and oceanic fleet, based on operational distance from the mainland coast and on fishing mode. The inshore component consists of small-sized fiberglass boats (7.5– 9.0 m) with a fishing range of 2– 3 days that operate independently

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in “inshore” waters between 40 to 200 nm from the coastline. According to the 2013 Ecuadorian census on fishing boats, a total of 21,798 fibras operated in Ecuadorian artisanal fisheries. The main landing ports are Esmeraldas, Manta, Puerto López, Santa Rosa, and Anconcito (Martínez-Ortiz et al., 2015).

The oceanic-artisanal fleet component consists of medium- to large-size “mother-ship” boats (locally known as “botes nodriza”, “barcos nodriza” or “nodrizas”; 7.6– 25.9 m). These nodrizas can tow from 1 to 12 small-sized fibras, thereby developing a group fishing strategy in the vicinity of the mother-ship. The longer fishing range of the nodrizas (up to 25 days) reaches 100° W beyond the Galapagos Archipelago, and as far west as 94° W to the south off the coast of Peru. According to the 2013 Ecuadorian census, there were a total of 317 nodrizas (SRP, VMAP, MAGAP. Manta, Ecuador.2014.). The main landing ports are Manta and Jaramijó.

Surface and deep longline are the dominant gears in the fishery depending on the target species: (i) a fishery for Mahi Mahi uses a surface longline (locally known as espinel fino) during warm months, and (ii) a fishery for tunas, billfishes, and sharks uses a deep water longline (locally known as espinel grueso) mainly during the cold months (Figure 1). The fishing areas are different. The operations for Mahi Mahi fishing concentrate on the coastal zone and in the oceanic area to the southwest (Martínez et al., 2015). In contrast, the operations with espinel grueso extend to the west, between the continental coast and the Galapagos archipelago and between Galapagos and the border with Costa Rica.

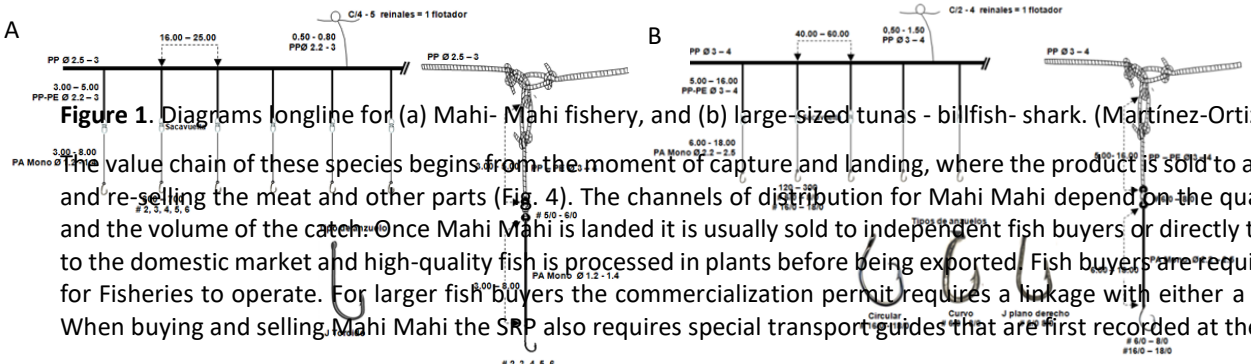


Figure 1. Diagrams longline for (a) Mahi- Mahi fishery, and (b) large-sized tunas - billfish- shark. (Martínez-Ortiz et al., 2015).

The value chain of these species begins from the moment of capture and landing, where the product is sold to a first intermediary who is responsible for processing and re-selling the meat and other parts (Fig. 4). The channels of distribution for Mahi Mahi depend on the quality of the product, the location of the landing port and the volume of the catch. Once Mahi Mahi is landed it is usually sold to independent fish buyers or directly to processing plants. Low-quality fish are distributed to the domestic market and high-quality fish is processed in plants before being exported. Fish buyers are required to obtain a permit from the Directorate General for Fisheries to operate. For larger fish buyers the commercialization permit requires a linkage with either a fishing vessel, a processing plant, or a cooperative. When buying and selling Mahi Mahi the SRP also requires special transport guides that are first recorded at the fishing ports where the product is landed.

In smaller ports, where only individual fibras operate, fish buyers aggregate product from several boats. They sell it to either a larger fish buyer or directly to a processing plant. In larger ports like Manta motherships sell directly to processing plants. Fishers from motherships receive a small part of their catch as part of their payment. Fish buyers will aggregate these small batches of high-quality fish from several motherships and then sell it directly to a processing plant or a larger buyer that then sells to a processing plant. Most processing plants for Mahi Mahi are in Manta, Guayaquil, and a few smaller ports. Most companies working with Mahi Mahi also process other fish species, including tuna and small pelagic.

Fresh Mahi Mahi is only headed and gutted (H&G) to prolong shelf life, while frozen Mahi Mahi is cut into fillets, loins, or portions. On the other hand, fresh tuna is sold in local markets, and canned tuna is exported.

Tuna and swordfish are also caught by TRANSMARINA C.A. – an Ecuadorian company operating in the ultra-frozen fish market worldwide. This company has 5 longline vessels and 2 purse seiners with a freezing capacity of -50ºC.

Fishing season per species

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Season	Especie	J	F	M	A	M	J	J	A	O	N	D
Grueso	Tuna											
	Billfish											
	Swordfish											
Fino /Dorado	Mahi-mahi											

Source: Largacha et al., 2005.

Target species

Indicate the target species, their local name and international common names, their scientific name, and a brief description of the species (e.g., distribution, main habitat, level in trophic chain).

English common name	Local common name	Scientific name	CITES listing	IUCN Red List status
Yellowfin tuna	Albacora o atún de aleta amarilla	*Thunnus albacares*	Not Evaluated	Least Concern
Bigeye tuna	Atún ojo grande	*Thunnus obesus*	Not Evaluated	Vulnerable
Skipjack tuna	Atún barrilete	*Katsuwonus pelamis*	Not Evaluated	Least Concern
Swordfish	Pez espada	*Xiphias gladius*	Not Evaluated	Near threatened

Fishing areas

In Ecuador, the artisanal fisheries for large pelagic species can be divided into two: the inshore and oceanic fleet (Figure 2).

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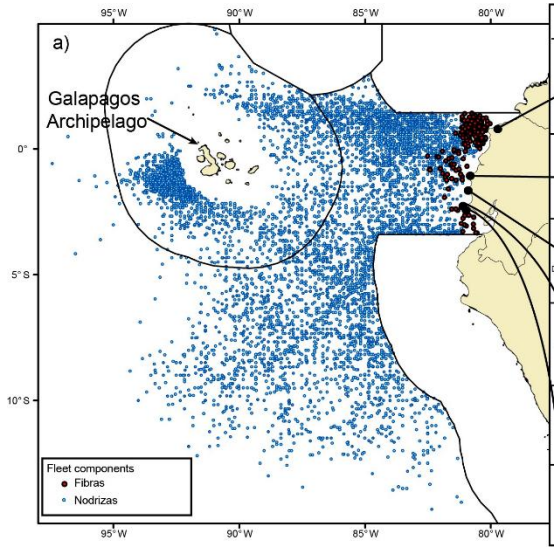


Figure 2. Map of the geographical location of longline sets. Blue dots correspond to sets by nodrizas and red dots to independent fibras. (Martínez-Ortiz et al., 2015).

The figure 3 shows the effective fishing sets conducted by the large pelagic drift longline fleet, which operates within the latitudes of 4° N to -3° S and longitudes of -83° W to -102° W. The fishing activities take place at a distance ranging from approximately 500 to 800 nautical miles, measured from the coastal profile of Ecuador.

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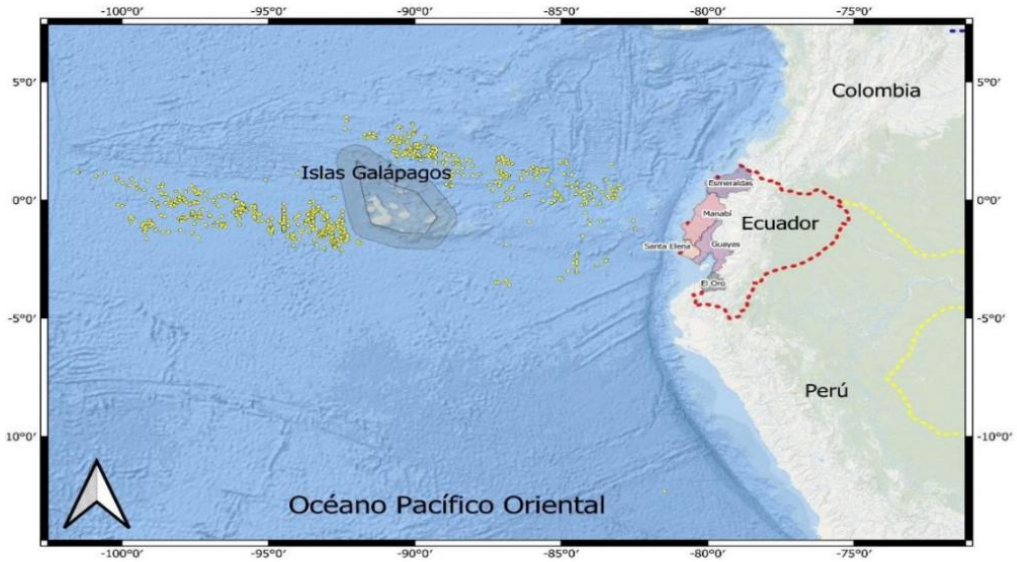


Figure 3. The operation of the large pelagic longline fleet in Ecuador espinel grueso (Programa de observadores a bordo de la Subsecretaría de Recursos Pesqueros, 2023).

Figure 4 shows the effective fishing sets conducted by the small pelagic longline fleet, which operates primarily from October to April. The fishing activities are concentrated within the following geographical coordinates: latitudes ranging from -3° S to -13° S, and longitudes ranging from -84° W to -97° W. The fishing grounds are located at approximately 700 nautical miles from the coastal profile of Ecuador.

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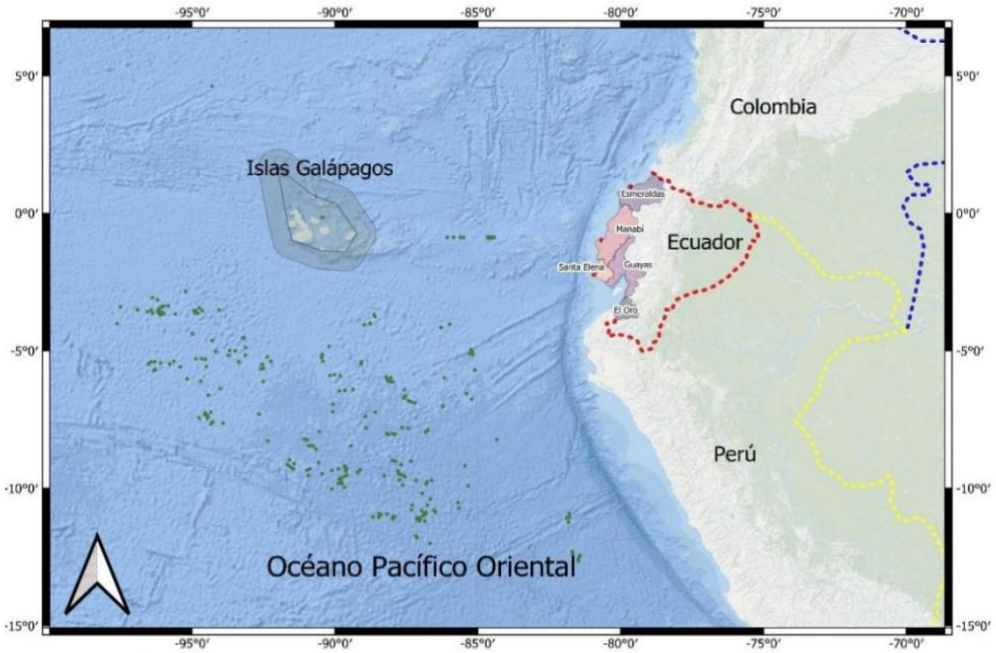
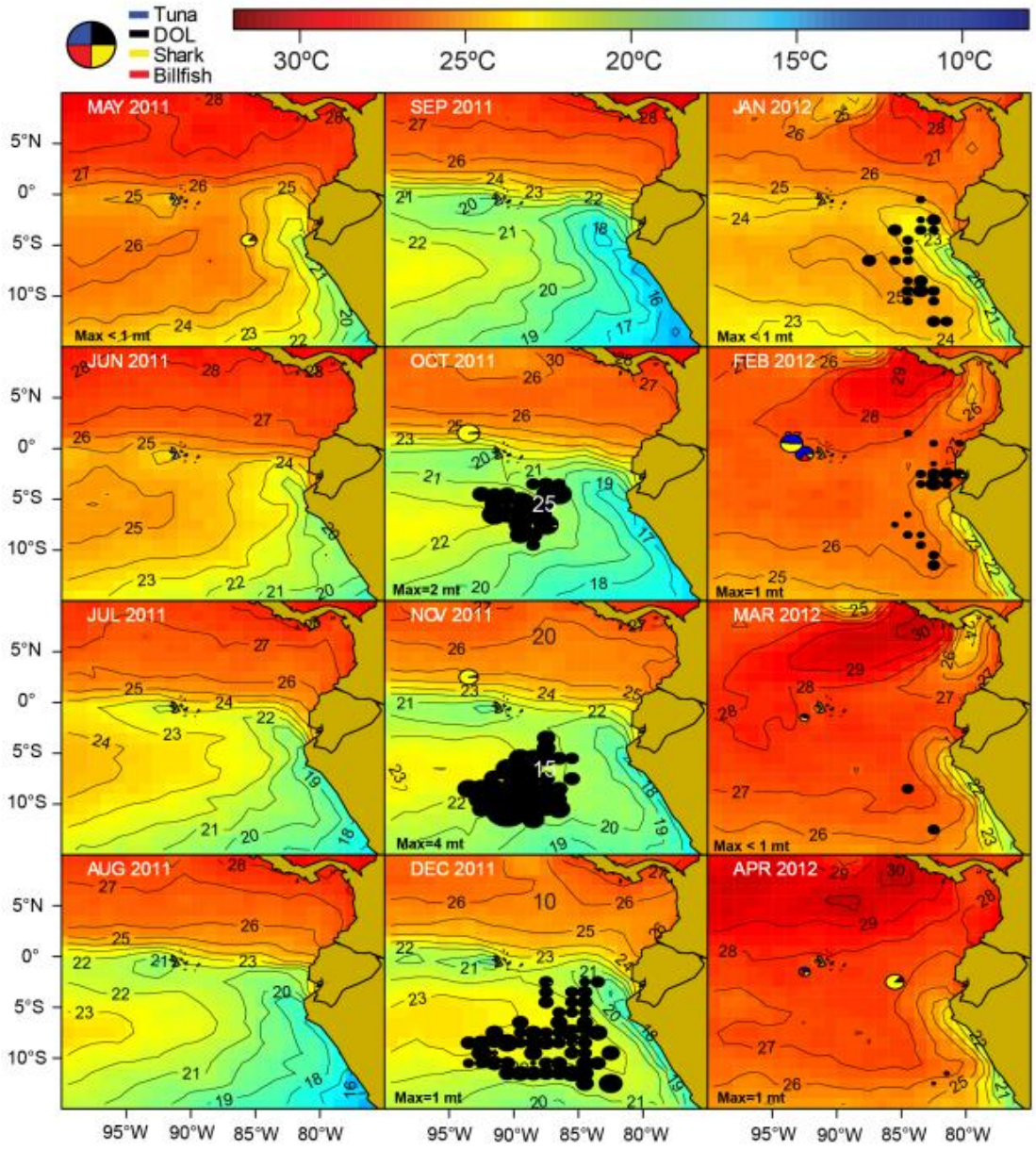


Figure 4. The operation of the large pelagic longline fleet in Ecuador espinel fino (Programa de observadores a bordo de la Subsecretaría de Recursos Pesqueros, 2023).

The figures 5- 8 shows the spatio-temporal distribution of the catches by the Ecuadorian artisanal longline fishery by the different species in 2012.

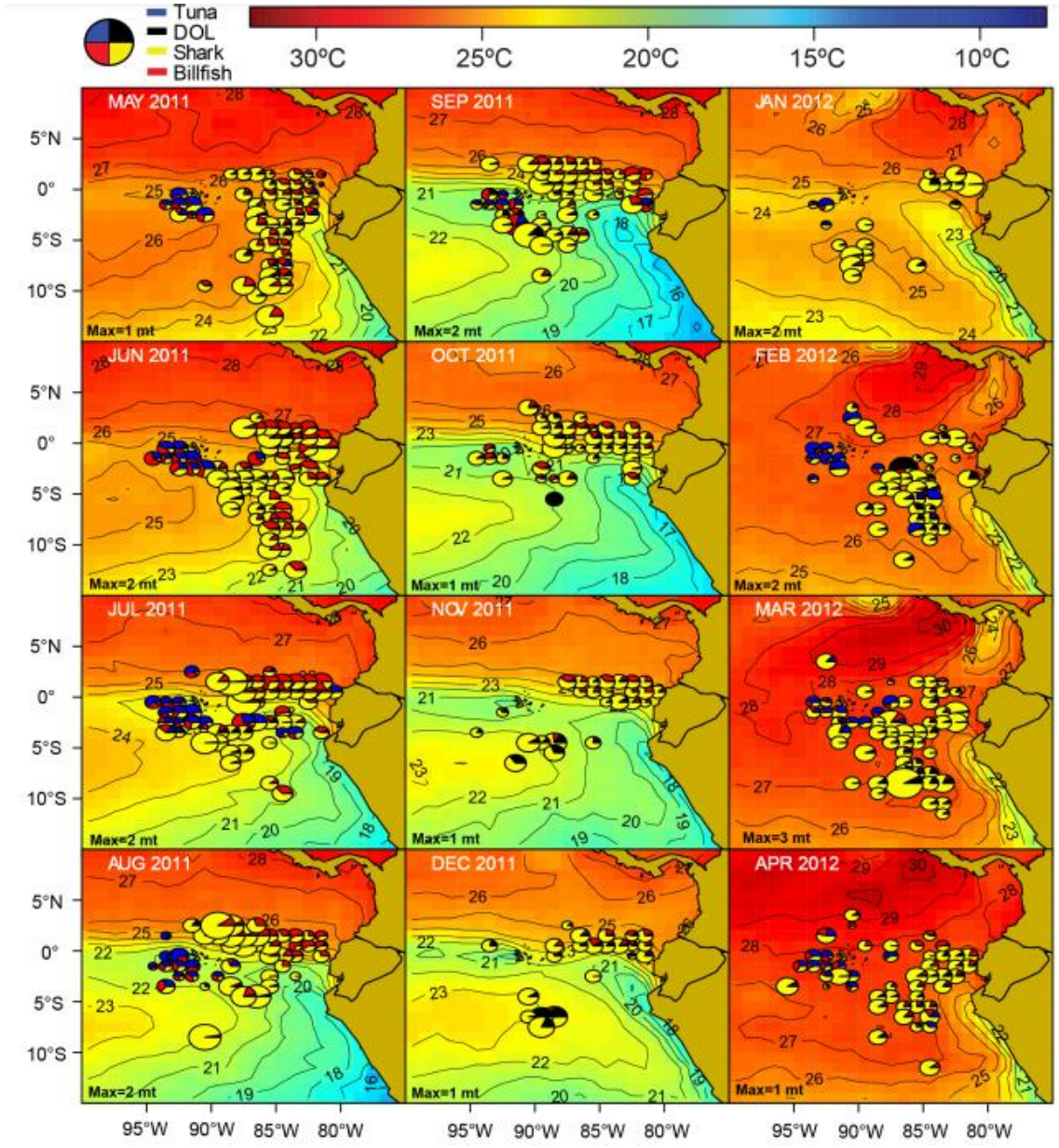
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Figure 5. Spatio-temporal distribution of the catches by the Ecuadorian artisanal longline fishery targeting dolphifih (*C. hippurus*, DOL). The area of the pies is proportional to the DOL catch rates (Martínez-Ortiz et al., 2015).

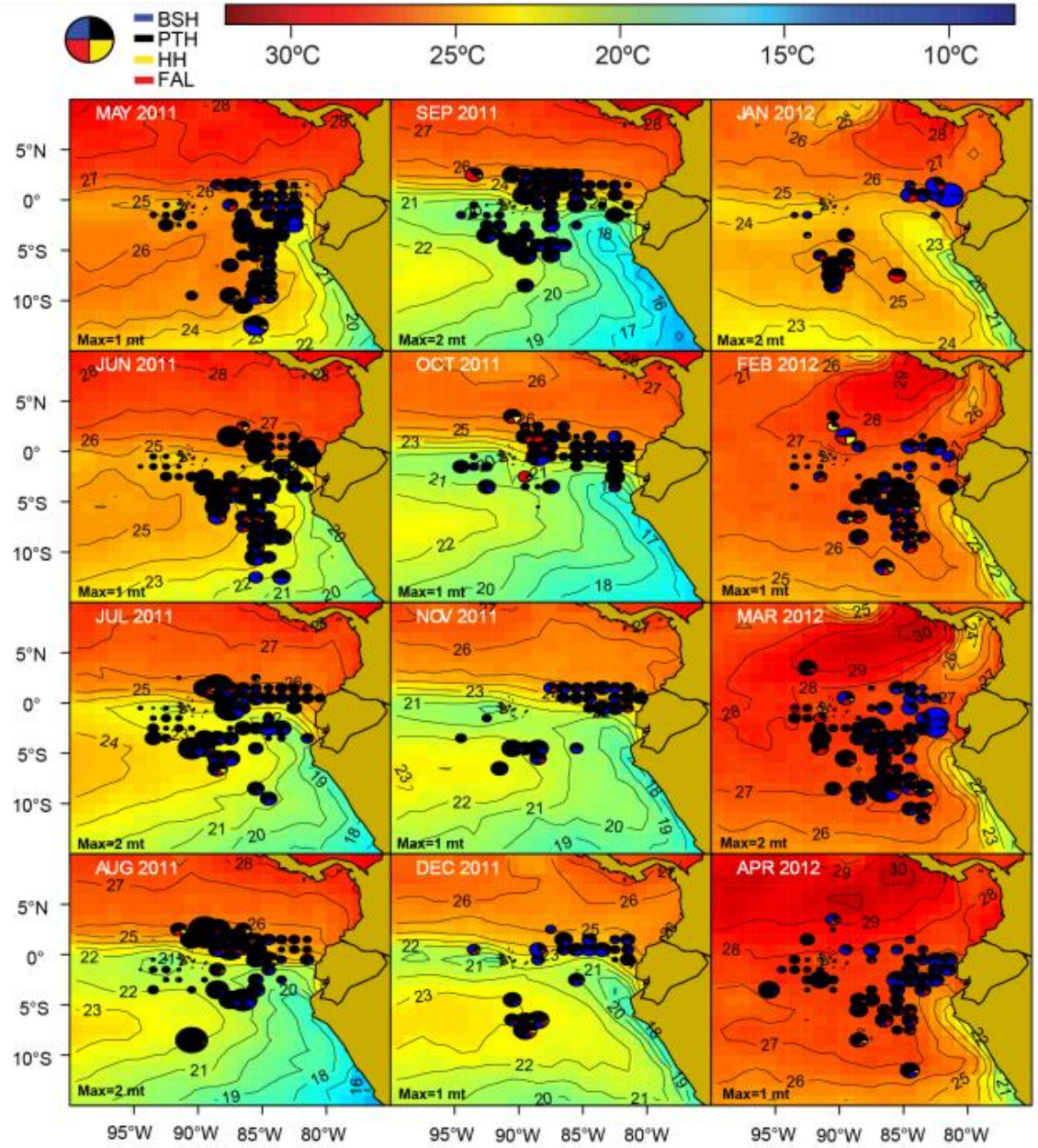
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Figure 6. Spatio-temporal distribution of the catches by the Ecuadorian artisanal longline fishery targeting tuna-billfish-sharks (TBS). The area of the pies is proportional to the catch rates of four main species groups (dolphifish, tuna, billfish and sharks) (Martínez-Ortiz et al., 2015).

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Figure 7. Spatio-temporal distribution of the catches by the Ecuadorian artisanal longline fishery targeting tuna-billfish-sharks (TBS). The area of the pies is proportional to the catch rates of the four principal shark species (pelagic threasher shark (PTH), blue shark (BSH), silky shark (FAL) and hammerhead sharks (HH)). (Martínez-Ortiz et al., 2015).

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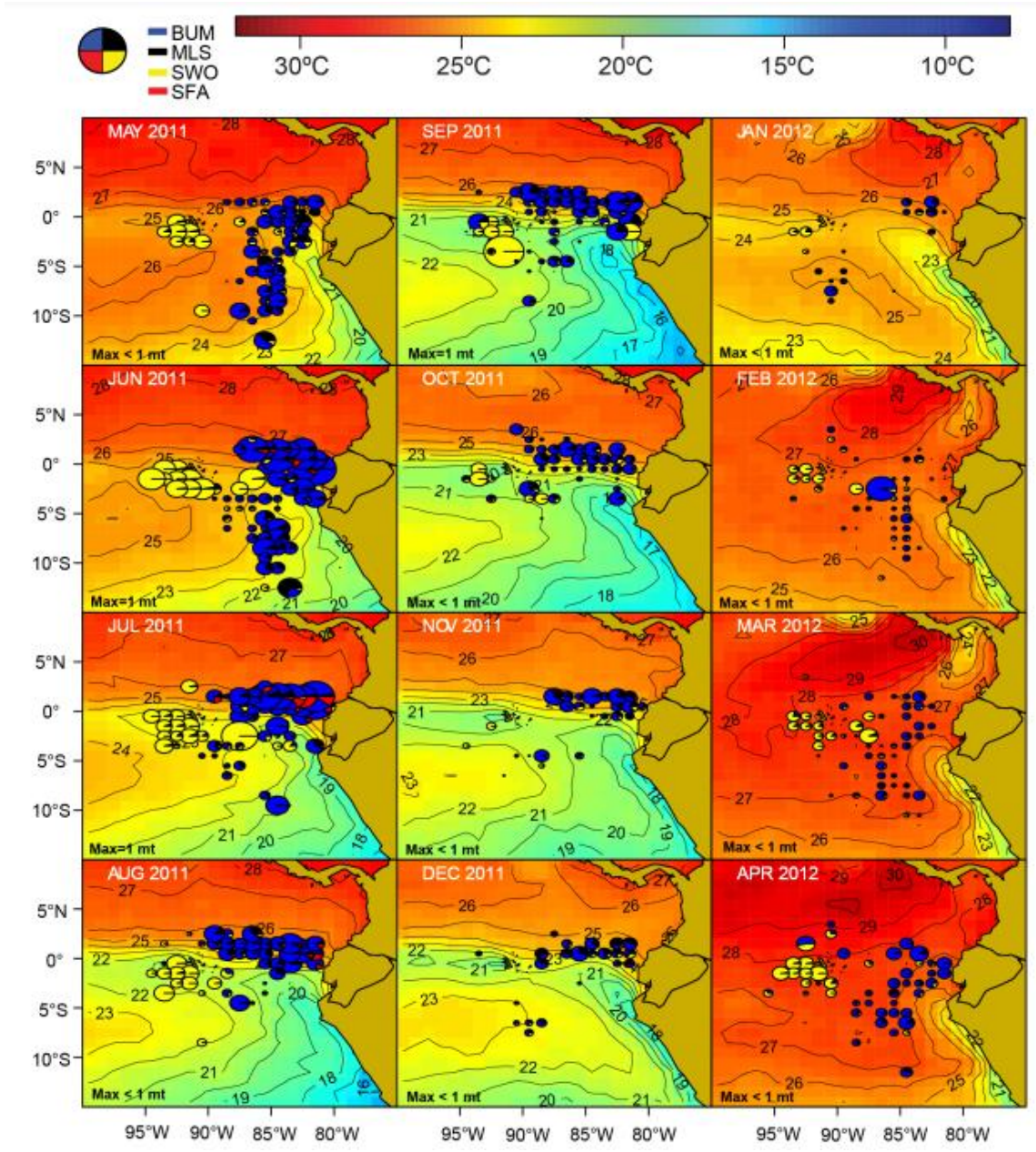


Figure 8. Spatio-temporal distribution of the catches by

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the Ecuadorian artisanal longline fishery targeting tuna-billfish-sharks (TBS). The area of the pies is proportional to the catch rates of the four principal billfish species (blue marlin (BUM), swordfish (SWO), stripped marlin (MLS) and Indo-Pacific sailfish (SFA)). (Martínez-Ortiz et al., 2015).

Stock status

The following is information about the status of the target species populations:

Target specie	Type of stock	Geographic extent
Yellowfin Tuna	Regional	The Eastern Tropical Pacific -EPT- Some studies, suggests that there might be multiple stocks of yellowfin in the EPO and throughout the Pacific Ocean. However, movement rates between these putative stocks, as well as across the 150°W meridian, cannot be

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		estimated with currently available tagging data.
Bigeye tuna	Regional	The Eastern Tropical Pacific -EPT-
Skipjack tuna	Regional	The Eastern Tropical Pacific -EPT-
Swordfish	Regional	Northern and Southern, Pacific Oceanic the Eastern Tropical Pacific -EPT- As many as six stocks may exist in the Pacific Ocean, but the exact boundaries of these stocks, as well as their exchange rates. In the early 2000s, the IATTC produced indicators for swordfish in five areas of the EPO: two areas north of 10°N, separated at 125°W, a central area between 10°N and 5°S,

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		and two areas south of 5°S, separated at 90°W.

Stock assessment

The responsibility for stock assessment in Ecuador's fisheries lies with the Public Institute for Aquaculture for Fisheries Research -IPIAP-. The IPAIP is the governmental organization that is primarily responsible for conducting research, data collection, and analysis to assess the status of fish stocks and fisheries resources in Ecuador (Canales et al., 2019; Minte-Vera, 2019).

Current stock status

According, the IATTC the Yellowfin tuna in Eastern Tropical Pacific suggest the stock is overfished (IATTC, 2021). Mahi-mahi is Maximum Sustainable Fished (MSY) (IATTC, 2021). However, there is a critical need for shark population assessments to better inform shark management and conservation. Unfortunately, to date, it has not been possible to assess the condition of the shark in the EPO due to the lack of reliable fishery statistics for all major fisheries (IATCC, 2019).

However, in 2021 the IATTC present the results for the Stock status indicators (SSIs; time series of data used as supplements to, or in the absence of, stock assessments). The indices of relative abundance for large silky sharks in the EPO were developed from bycatch-per-set data collected by on-board observers from purse-seine sets on floating objects. The number of sharks recorded by observers as released alive has increased recently. The indices indicated a somewhat less pessimistic long-term trend.

Regarding the stock assessment of the swordfish, the Eastern Pacific Ocean assessment of the area south of 5°S in 2009, is the most recent assessment done by the IATTC in the south EPO. The key results from that assessment—conducted using Stock Synthesis—were that (1) the swordfish stock in the South EPO was not experiencing overfishing and was not overfished. In addition, the total annual longline fishing effort for the main longline fleets in the northeastern Pacific Ocean increased from about 25 million hooks in 2007 to about 50 million hooks in 2013 and about 43 million hooks in 2016-2020. The last five-year average remains significantly below the 2001–2003 average of 63 million hooks. Based on the latest stock assessment for part of the north EPO, and the long period of relatively stable catches that have averaged 3,553 mt over the past 10 years, swordfish are probably not overfished, and overfishing is most likely not occurring in the North EPO (IATTC, 2021).

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Fisheries management

Management arrangements

In Ecuador, the fisheries authority is the Ministry of Production, Foreign Trade, Investments, and Fisheries, through the Undersecretariat of Fisheries Resources (SRP). The SRP is the entity responsible for formulating and implementing strategies, plans, programs, and projects aimed at regulating, developing, strengthening, and controlling the country's fishing activities (Ministerio de Producción, Comercio Exterior, Inversiones y Pescas, n.d.). This is achieved thanks to biological information and landing data generated by various experienced entities, such as the Public Institute for Aquaculture for Fisheries Research -IPIAP, the National Chamber of Fisheries (CNP), the Tuna Conservation Foundation (Tunacons), the Association of Ecuadorian Tuna Fishers (Atunec), and even individual fishermen themselves.

Regarding the control of the fishery by Regional Fisheries Management Organizations (RFMOs), Ecuador is a member of the Inter-American Tropical Tuna Commission (CIAT) and the South Pacific Regional Fisheries Management Organization (SPRFMO), which stand out for the area of interest.

Registries

Vessel register

The vessel registration system is carried out by the Undersecretariat of Fisheries Resources (SRP), and is public at:

https://srp.produccion.gob.ec/registro-nacional-de-embarcaciones/

Fisher's register

The fishermen registration is carried out by the SRP and is public at:

https://srp.produccion.gob.ec/registro-nacional-de-pescadores-y-comerciantes/

Trader's register

The registration of traders, just like that of vessels and fishermen, is managed by the SRP. Therefore, it is also public, and in fact, it is located in the same link as the fishermen's registration (https://srp.produccion.gob.ec/registro-nacional-de-pescadores-y-comerciantes/)

Processors register

The registration of processing units is also managed by the SRP and is public at:

https://srp.produccion.gob.ec/registro-nacional-de-empresas-pesqueras/

Monitoring

Vessel monitoring

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Ecuador has a vessel monitoring system that is managed by the Satellite Monitoring Center (CMS) of the Subsecretariat of Fisheries Resources (SRP) and operates 24 hours a day, 365 days a year (Ministerio de Producción, Comercio Exterior, Inversiones y Pescas, n.d). This system involves the installation and tracking of a Satellite Monitoring Device (DMS), which, according to Agreement No. MPCEIP-SRP-2022-0150-A, must be available on all industrial fishing vessels and mother longliners, regardless of their Gross Tonnage (TRB) (Zambrano, 2022). Furthermore, the resolution of this agreement states that the DMS to be used for this purpose can only be acquired from companies that have been qualified as "Authorized Providers" by the General Directorate of Merchant Marine and the Coast, through the respective certificate (Zambrano, 2022).

Monitoring of landings

In Ecuador, there is a system in place to monitor landings in the fisheries sector. The responsibility for monitoring landings lies with the the Subsecretariat of Fisheries Resources (SRP). The SRP oversees the survey of data related to fish landings in the country.

Fishery inspectors are deployed throughout the territory in Fishery landings, operating 24 hours a day, 365 days a year, in rotating shifts of 8 hours per day. They carry out planned or requested controls and inspections. Certificates of Monitoring and Control of Fish Landing (CMCDP).

It is important to note that designated landing ports are authorized by the fisheries authorities to receive and process fishery products. CMCDPs provide documentary evidence and an official record certifying that the catches have undergone the required controls and comply with current fisheries regulations.

The coverage of the monitoring system can vary depending on the specific fisheries and regions. The SRP collaborates with various stakeholders, including fishing communities, fishing vessel owners, and processors, to gather landing data. The monitoring efforts aim to capture data on species, quantities, and locations of landings.

Onboard monitoring

In Ecuador, there is a system of onboard monitoring using observers in some fisheries. The coverage of onboard monitoring can vary depending on the specific fisheries and management measures in place. Observers are typically deployed on fishing vessels to collect data on catch composition, fishing effort, bycatch, and other relevant information. The presence of onboard observers helps to improve data accuracy and provides valuable insights into the fishing operations.

Electronic monitoring

Ecuador is currently implementing electronic monitoring systems in its fishing vessels. These allows for the recording of catches, including species, quantity, weight, fishing zones, and coordinates during fishing operations. The integration of electronic monitoring systems aims to establish effective fisheries management strategies. It is crucial that the information generated by these systems, whether or not coupled with technology, is integrated.

However, fisheries authorities reported that electronic monitoring is not highly effective due fishermen prefers to do a bicacora on paper.

Other types of monitoring

There are no other types of monitoring.

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Regulations

Constitutional and regulatory framework of the National Action Plan for the Management of the Ecuadorian Drift Pelagic Longline Fishing Fleet.

- Art. 71.- Nature has the right to full respect for its existence and the maintenance and regeneration of its life cycles. The State will encourage natural and legal persons, and groups, so that they protect nature, and will promote respect
- Art. 281.- Food sovereignty is a strategic objective and an obligation of the state to ensure that people achieve self-sufficiency in healthy and culturally appropriate food on a permanent basis. For this, it will be the responsibility of the State: 1. Promote the production, agri-food, and fishing transformation of small and medium-sized production units, communities, and the social solidarity economy
- Art. 397.- Establish effective mechanisms for the prevention and control of environmental pollution, recovery of degraded natural spaces, and sustainable management of natural resources.

International treaties and Agreements. Laws of the United Nations Convention on the Law of the Sea (UNCLOS) framed in the National Action Plan for the Management of the Fishing Fleet of Drift Longline from Ecuador.

- Art. 61 Conservation of living resources: The coastal State shall determine the allowable catch of the living resources in its exclusive economic zone.
- Art. 62 Use of living resources: The State will determine its ability to capture the living resources of the exclusive economic zone. when the coastal State does not have the capacity to exploit all the allowable catch, will give other States access to the surplus of the allowable catch, through agreements or other arrangements and in accordance with the laws and regulations
- Art. 143 Marine scientific research. The Authority will promote and encourage the conduct of marine scientific research in the area and will coordinate and disseminate the results of such research and analysis when available.

Organic Law for the Development of Aquaculture and Fisheries (LODAP).

- Art. 5.- The natural wealth existing in the jurisdictional aquatic and terrestrial spaces are national assets and constitute sources of wealth for the country due to their strategic importance in guaranteeing food sovereignty, and the nutrition of the population, due to the socioeconomic benefits derived from them, as well as geopolitical and genetic importance. Its sustainable and sustainable use will be regulated and controlled by the State, in accordance with the Constitution, international treaties, this Law, and other applicable regulations in force.
- Art. 13.-The designated branch ministry will be the authority and governing body of the national aquaculture and fisheries policy. Responsible for the planning, regulation, control, coordination, management, and evaluation of the National System of Aquaculture and Fisheries, focused on the sustainable development of aquaculture and fishing activities and the sustainable and sustainable use of hydrobiological resources. Its management will be decentralized in the national territory.
- Art. 96.- Fisheries management measures will be established under the principle of governance, sustainability and sustainability of hydrobiological resources, obtaining greater social, economic and environmental benefits, with an ecosystem approach.
- Art.105.- The fishing activity may only be carried out using fishing gear and gear expressly authorized by the entity rector.

CITES Permits or certificates

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- Art. 121.- Ban on international trade in CITES species. - The international trade of species listed in CITES Appendices I, II and III that are listed in the national legislation on closed seasons, conditional
- use, or in other lists of species whose commercialization is prohibited at the national level is prohibited.
- Art. 772.- Guidelines for the use of marine resources.
- Art. 774.- Marine governance. - Marine and coastal management for sustainable development will be guided by the principles of marine governance, which will be understood as a comprehensive approach to inter-institutional and intersectoral administration articulated with the national goals established for the fulfillment of the national objectives of sustainable development in relation to everything related to the conservation of marine biodiversity and sustainable use of living and non-living resources.

Management plans

- Regulations to the Organic Law for the Development of Aquaculture and Fisheries framed in the National Action Plan for the Management of the Pelagic Drift Longline Fishing Fleet of Ecuador.
    - Art. 8.- Dialogue tables as an instrument for the participation of the public-private sectors specific to each fishery, in decision-making in a participatory, transparent, inclusive, multidisciplinary, and scientifically-based way, for the design, socialization, and dissemination of Plan proposals of National Action (PAN) of the fishing sector, which ensures the sustainability of the fishery with responsibility and awareness of all the actors.
    - Art. 11.- The National Action Plans (PAN) aim to achieve sustainable management of fishing resources and will be directed by the governing body. Its design and implementation will be based on the principle of inter-institutional participation and the principle of an ecosystem approach to resource management.
- Observer program of the undersecretary of fishing resources
- National Action Plan for the Conservation and Management of Sharks of Ecuador (PAT-Ec 2020-2024)
- National Action Plan for the Conservation and Management of Golden Resource in Ecuador (PAN Dorado) 2019-2024.

Fisheries agreements

- Convenio marco de cooperación pesquera y acuícola. In which both countries agree on promoting mutual scientific, technological, administrative and fiscal assistance to ensure the sustainable use of hydrobiological resources.
- Global fishing watch. The agreement stands alongside a complementary partnership that Ecuador has with Canada to strengthen bilateral efforts to combat illegal fishing and enhance Canada's Dark Vessel Detection program, which is designed to detect fishing vessels whose location transmitting devices have been switched off, sometimes in an attempt to evade monitoring, control and surveillance.
- Comprehensive Economic Partnership Agreement (CEPA) - Ecuador and EU.

Bycatch

Despite the fact that the fishing gear used by this fleet, longline, is a highly specific and selective gear, the likelihood of incidental catch, particularly of elasmobranchs during the peak season, is very high. Incidental catch of sea turtles and rays, although in smaller numbers, is also common (Ministerio de Producción, Comercio Exterior, Inversiones y Pesca, 2023).

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In 2009-2010, 254 fishing operations were analyzed, comprising 537 sets. The study period was June-December 2009, January-December 2010. The common dolphin (*Delphinus delphis)* was the species with the highest incidence with 11 and 26 individuals in 2009 and 2010, respectively. In addition, two individuals of the short-finned pilot whale (*Globicephala macrorhynchus*), two of the genus Stenella and only one of the bottlenose dolphins (*Tursiops truncatus*) were recorded (Herrera et al., 2021).

Based on the information from the database of the Undersecretary of Fisheries for the period 2010 to 2019, from the artisanal sector that uses coarse surface longline for the capture of PPG as a fishing gear, 22,961 individuals of the genus were analyzed. Alopias, of which 18 790 corresponded to *A. pelagicus*, of which, the males presented a size range between 114 to 372 cm TL cm, while in females it was 115 - 364 cm TL. In relation to *Alopias superciliosu*s, 4 171 individuals were analyzed, the males presented a range of sizes between 126 - 365 cm TL and in females 131 - 423 cm TL (Herrera, 2020).

Based on the information from the Undersecretary of Fisheries, corresponding to the period 2010 to 2019, 9,186 individuals of *Carcharhinus falciformis* were analyzed, of which the males presented a range of sizes between 55 to 319 cm TL, while in the females it was from 61 to 262 cm TL. with an average height of 162 cm for both sexes (Herrera, 2021).

The results of his research classified the bycatch into 3 levels:

- Tier 1 Incidental/Accessory Species: Incidentally caught shark, turtle, and ray species with a frequency of occurrence ≥100 individuals.
- Tier 2 Incidental/Accessory Species: Incidentally caught shark, turtle, and ray species with a frequency of occurrence between ≥10 y <300 individuals.
- Tier 3 Incidental/Accessory Species: Incidentally caught shark, turtle, and ray species with a frequency of occurrence <10 individuals per study period.

During the 2009-2013 fishing period, the monitored Ecuadorian longline fleet captured a total of 200,423 individuals, grouped into 80 different species, including certain bird species (Castro in 2019).

Clasification	**Caracterization**
Tier 1 Incidental/Accesory Species	Elasmobranchs constitute the dominant segment of this level represented by 7 shark species of wide commercial importance, equivalent to almost a third of the total abundance. There is a supremacy of the species *Alopias pelagicus* with 15.64%, followed by one of the most abundant shark species in the world's oceans Prionace glauca whose representativeness is 7.9%. The turtles Lepidochelys olivacea and *Chelonia mydas* register frequencies of occurrence of less than 1%. The organism with the least dominance of this group is *Pteroplatytrygon violacea* with only 0.05% of the total

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	abundance.
Tier 2 Incidental/Accesory Species	It is estimated that for every 370 sets made by the fleet, the capture of 1 individual of Istiompax indica would be obtained, which despite being representative for this group barely represents 0.05% of the total abundance obtained during the study period. Some species of commercial interest stand out at this level, such as billfish, sharks and the Mahi-mahi.
Tier 3 Incidental/Accesory Species	In the group of species of level 3, the representativeness of the occurrence is much less than the predecessor level, reaching minimum limits where the catch obtained corresponds to a single organism for all the sets made during the study period, this applies to 23 species of the 48 registered. It stands out, as very particular and atypical cases, the presence of species of mammals, small epipelagic fish and certain species of seabirds captured, product of the effort exerted by the fleet.

Briones, 2019

Interaction with ETP species

English common name	Local common name	Scientific name	CITES listing	IUCN Red List status
Pelagic Thresher	Tiburón zorro, rabón bueno	Alopias pelagicus	Appendix II	Endangered
Bigeye Thresher	Tiburón zorro, rabón amargo	*Alopias superciliosus*	Apendix II	Vulnerable
Silky Shark	Tollo, mico, cazón	*Carcharhinus falciformis*	Appendix II	Vulnerable

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Oceanic Whitetip Shark	Tiburón oceánico	*Carcharhinus longimanus*	Apendix II	Critically Endangered
Shortfin Mako	Tiburón tinto, marrajo	*Isurus oxyrinchus*	Appendix II	Endangered
Blue Shark	Tiburón azul, tintorera	*Prionace glauca*	Appendix II	Near Threatened
Oceanic Manta Ray	Manta gigante	*Manta birostris*	Appendix II	Endangered
Pelagic Stingray	Raya pelágica	*Pteroplatytrygon violácea*	Out of the list	Least Concern
Green Turtle	Tortuga verde	*Chelonia mydas*	Appendix I	Endangered
Olive Ridley Turtle	Tortuga golfina	*Lepidochelys olivacea*	Appendix I	Vulnerable
Longfin Mako	Tiburón tinto tramado	*Isurus paucus*	Appendix II	Endangered
Loggerhead Turtle	Tortuga boba	*Caretta caretta*	Appendix I	Vulnerable
Galapagos Shark	Tiburón de galápagos	*Carcharhinus galapagensis*	Appendix II	Least Concern
Hawksbill Turtle	Tortuga carey	*Eretmochelys imbricata*	Appendix I	Critically Endangered

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Munk´s Pygmy Devil Ray	Manta diablo	*Mobula munkiana*	Appendix II	Vulnerable
Common Dolphin	Delfín	*Delphinus delphis*	Appendix II	Least Concer
Short-finned Pilot Whale		*Globicephala macrorhynchus*	Appendix II	Least Concern
Common Bottlenose Dolphin	Delfín nariz de botella	*Tursiops truncatus*	Appendix II	Least Concern
Bugeye Thresher	Zorro de anteojos	*Alopias superciliosus*	Appendix II	Vulnerable
Pelagic Thresher	Zorro Pelágico	*Alopias pelagicus*	Appendix II	Endangered

Interaction with protected areas

There are no specific fishing areas for the longline fleet, this is mainly about the mother vessels that make catches near the Galapagos Islands, an area where there is a high incidence of sharks.

Name	IUCN management category	WDPA ID	Link
Archipielágo de Colón (Galápagos)	IUCN Management Category Not Applicable	10708	https://www.protectedplanet.net/10708

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Impacts on the marine environment.

- **Illegal fishing**: longline fisheries targeting other species directly threaten mantas in Ecuador. Longline fishery can release tens of thousands of hooks dragged behind fishing vessels. In many instances, this technique leads to catches of nontargeted species, including vulnerable marine wildlife such as turtles, sharks, stingrays, and seabirds. Growing concern over Ecuador's unsustainable fisheries management resulted in a strong reaction from the European Union in 2019 (Bello, 2021).
- **Bycatch**: Incidental catch are particularly high for elasmobranchs during the peak season. Additionally, incidental catch of sea turtles and rays, although in smaller numbers, is also common.

FIPs

Indicate if there are FIPs on this fishery. List the FIPs. Information from FisheryProgress

FIP name	Type	Status	FIP lead entity	FIP identification number
Ecuador mahi-mahi - longline	Comprehensive	Stage 5: Improvements on the Water	WWF	90
Ecuador South Eastern Pacific swordfish - longline	Comprehensive	Stage 4: Improvements in Fishing Practices or Fishery Management	FIP for Swordfish - Independent Consultant	15810
Ecuador mahi-mahi - longline (ASOAMAN)	Basic	Stage 3: FIP Implementation	Asociación de Producción Pesquera de Armadores de Manta (ASOAMAN)	17337

Initiatives working with the fishery

- Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems - UNDP/ GEF.

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- Implementation of the Fisheries Transparency Initiative FiTI
- Beyond 30x30: Securing resilience in the Eastern Tropical Pacific through enhanced transboundary cooperation - GEF.
- Fortalecimiento del trabajo decente en el sector pesquero enEcuador y Perú- International Labour Organization -ILO-.
- Sustainable management of tuna fisheries and biodiversity conservation in the areas beyond national jurisdiction -IATTC/ GEF-.

SWOT analysis for improving the management of the fishery and the condition of the fishery resources

List key strengths, weaknesses, opportunities and weaknesses.

Strengths	Weaknesses
- Improve shark management by working with buyers in destination markets. - The government is working on a longline fishery plan	- Develop effective participation in the co-management platform. - Lack of organization within the various groups. - The artisanal fleet is a large group, but it is not organized.
Opportunities	**Threats**
- Public and Private stakeholders showed interest to implement FIPs (Mahi-mahi and Tuna). - Public and Private stakeholders showed interest to work on governance platforms. - Artisanal fleets showed interest to join ASOAMAN Nodrizas fleets.	- The inability of the fisheries authority to control illegal fishing activities. - It could be challenging to achieve effective coordination between WWF and SFP due to differences regarding their approaches to work.

Literature

Bello, M. (2022). Ecuador on the Frontier of a Changing Ocean: Understanding the Impacts of Illegal, Unreported, and Unregulated Fishing on Ecuador's International Economic Relations.

Briones, E. (2019). La pesca de pelágicos grandes con palangre de superficie en el Océano Pacífico Oriental: Análisis espacial, caracterización y variabilidad interanual de las capturas extraídas por la flota del Ecuador [Tesis de maestria, Universidad de Alicante].

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Corte Constitucional del Ecuador. Ley Orgánica para el Desarrollo de la Acuicultura y Pesca. 17 de abril de 2020 (Ecuador).

Canales, C. M., Jurado, V., Peralta, M., Chicaiza, D., Elías, E., Preciado, M., Hurtado, M., Landívar, E., Alemán, C., Sandoval, G. (2019). Evaluación de stock de peces pelágicos pequeños en la costa continental ecuatoriana. Cadenas Mundiales Sostenibles – Informe Científico No. 1. Honolulu: Sustainable Fisheries Partnership Foundation & Instituto Nacional de Pesca.

CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora). (2022). "List of Contracting Parties." CITES. https://cites.org/eng/disc/parties/chronolo.phpF

Dent, F., & Clarke, S. (2015). State of the global market for shark products. FAO Fisheries and Aquaculture technical paper, (590).

García, F., & Sandoval, M. (2007). Los pueblos indígenas del Ecuador: derechos y bienestar, Informe alternativo sobre el cumplimiento del Convenio 169 de la OIT. FLACSO Ecuador, OXFAM América.

Gobierno del Ecuador. (s.f.). Ecuador sigue promoviendo una mayor transparencia pesquera y se convierte en el primer país candidato a FiTI en la región. Noticias MPCEIP. https://www.produccion.gob.ec/ecuador-sigue-promoviendo-una-mayor-transparencia-pesquera-y-se-convierte-en-el-primer-pais-candidato-a-fiti-en-la-region/

Herrera, M., F. Félix y R. Zambrano. (2021). Mamíferos marinos en pesquerías ecuatorianas. Reporte Técnico, Instituto Público de Investigación de Acuicultura y Pesca. Guayaquil- Ecuador. Octubre, 17 pp.

Herrera, M. (2020). Dictamen de Extracción No Perjudicial (DENP) para el género Alopias en el Ecuador. Instituto Público de Investigación de Acuicultura y Pesca, Autoridad Científica CITES - Recursos Marinos. Guayaquil-Ecuador, 40 pp.

Herrera, M. (2020). Dictamen de Extracción No Perjudicial (DENP) para Carcharhinus falciformis en el Ecuador. Instituto Público de Investigación de Acuicultura y Pesca, Autoridad Científica CITES - Recursos Marinos. Guayaquil-Ecuador, 38 pp.

IATTC (2019). Updated Stock Status Indicators for Silky Sharks in the Eastern Pacific Ocean, 1994-2018. 10th MEETING, San Diego, California (USA). 11p. https://www.iattc.org/getattachment/40ad1e7e-2168-4997-

IATTC (2021). Stock Assessment of the dolphinfish (Coryphaena hippurus) in the South-EastPacificOcean -13th meeting. Arizona, United States of America. 57p. https://www.iattc.org/GetAttachment/6d3cf4f6-

IATTC (2021). Status of the Tuna and Billfish Stock in 2021. Inter-American Tropical Tuna Commission -Assessment Report 23. California, United States of America. 359p. https://www.iattc.org/GetAttachment/84d7907b-d570-4861-a769-d9158d03dfb6/No-23-2022_Status-of-the-tuna-and-billfish-stocks-in-2021.pdf

IATTC (2022). South EPO Swordfish Benchmark Assessment IN 2019. Inter-American Tropical Tuna Commission -100th meeting. Arizona, United States of America. 57p.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Largacha, E., Parrales, M., Rendon, L., Velasquez, V., Orozco, M., Hall, M.A., 2005. Working with the Ecuadorian Fishing Community to Reduce the Mortality of Sea Turtles in Longlines: The First Year: March 2004–March 2005. Western Pacific Regional Fishery Management Council, Protected Species Conservation. Transfer Technologies.

Martínez-Ortiz, J., Aires-da-Silva, A. M., Lennert-Cody, C. E., & Maunder, M. N. (2015). The Ecuadorian artisanal fishery for large pelagics: species composition and spatio-temporal dynamics. PLoS One, 10(8), e0135136.

Herrera, M. (2020). Dictamen de Extracción No Perjudicial (DENP) para el género Isurus en el Ecuador. Instituto Nacional de Pesca, Autoridad Científica CITES - Recursos Marinos. Guayaquil-Ecuador, 76 pp.

Ministerio de Comercio Exterior. (2017). Informe sobre el Sector Atunero Ecuatoriano. Autor

Ministerio de Producción, Comercio Exterior, Inversiones y Pesca. (n.d.). Subsecretaría de Recursos Pesqueros. https://srp.produccion.gob.ec/

Ministerio de Producción, Comercio Exterior, Inversiones y Pesca. (2022). Reporte de Ecuador sobre la conservación de tiburones capturados en asociación con las pesquerías en el OPO durante el año 2021, en cumplimiento a la Resolución C-05-03.

Ministerio de Producción, Comercio Exterior, Inversiones y Pesca. (2023). Plan de Acción Nacional para el ordenamiento de la flota pesquera de palangre pelágico de deriva del Ecuador.

Minte-Vera, C. V. (2019). Revisión de las evaluaciones de stocks de las principales especies de pelágicos menores de Ecuador. Cadenas Mundiales Sostenibles – Anexo de Informe Científico No. 1. Honolulu: Sustainable Fisheries Partnership Foundation & Instituto Nacional de Pesca.

Pacheco. J. L. (2021). Principales Especies de Atún Capturado por la Flota Atunera Cerquera Ecuatoriana Durante 2020. Instituto Público de Investigación de Acuicultura y Pesca.

Subsecretaría de Recursos Pesqueros. (2011). Embarcaciones de Arrastre Operativas a Diciembre. Autor.

Villón, C. (2007). Análisis del Sector Pesquero del Ecuador Continental. Subsecretaría de Recursos Pesqueros, Conservación Internacional.

Zambrano, J., & Zambrano, L. (2020). Análisis de la industria atunera: Clúster, cadena de valor productiva y productividad. 593 Digital Publisher CEIT, 5(5), 263-271. https://doi.org/10.33386/593dp.2020.5-1.358

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GMC2 project fishery profile

Fishery: Pomadafrom trawlers and bolsos.

Overview of the country´s fisheries sector

The fishing industry in Ecuador has undergone a continuous evolution, progressing from traditional manual methods to the utilization of motorized boats equipped with outboard or stationary engines, advanced technology, and various fishing gears for operations in both surface and deep-sea environments. The predominant fleets in Ecuador are purse seine, trawl, gillnet, and longline fleets (Brothers et al., 1999; INP, 2000; (Organización de las Naciones Unidas para la Acuicultura y Alimentación [FAO], 1994).

Of these fleets, the longline fleet holds significant socioeconomic importance and offers several benefits to fishermen, including lower fuel consumption, the ability to catch migratory species, and a high degree of selectivity in capturing the desired species. However, this fishery is also associated with incidental catches of several species, predominantly sharks, rays, and marine turtles (Báez et al., 2006; Gilman et al., 2005; Lewison et al., 2004; Parker et al., 2005). The longline fleet represents approximately 20% of Ecuador's total fishing fleet and comprises both artisanal vessels (made of fiberglass, wood, or a combination of materials) and industrial vessels (mother ships and naval steel vessels).

The fisheries sector plays a vital role in providing direct and indirect employment opportunities, given the local, regional, and export commercial value associated with targeted species. Researchers have reported that between 2008 and 2012, the total value of the primary large pelagic species (such as dolphinfish, yellowfin tuna, bigeye tuna, skipjack tuna and swordfish) caught and exported from artisanal fisheries to the United States (including both fresh and frozen fish markets) amounted to approximately 364 million US dollars (US National Marine Fisheries Service, Fisheries Statistics and Economics Division).

Another important fishery in Ecuador is the titi shrimp (*Protrachypene precipua*), commonly known as "pomada" locally. This fishery has been developed in the Gulf of Guayaquil for over 60 years and serves as an alternative source of employment for both men and women in the coastal areas of Ecuador (Bravo & Zambrano, 2014; Cobo & Loesch, 1966). The titi shrimp fishery consists of two components: an industrial trawl fishery and an artisanal bag fishery. Additionally, there are artisanal boats known as "changas'' that operate without regulation or legal oversight.

The value chain of the titi shrimp begins with its capture and landing in Posorja, where the product is sold to an initial intermediary responsible for processing at artisanal and community shrimp peeling sites. It is estimated that around 1,200 women work at these peeling sites. Subsequently, the peeled shrimp is sold to packing plants that prepare peeled frozen shrimp for both domestic consumption and export markets. The packing plants also source directly from fishing boats. Approximately 75% of the trawlers' landings are exported primarily to the United States and the European Union.

Institutional framework

The national fisheries institutional framework in Ecuador comprises various entities responsible for different aspects of fisheries management and regulation. The national fisheries authority is the governing body overseeing the sector, which is known as the Undersecretary of Fishery Resources (Subsecretaría de Recursos Pesqueros, SRP). The SRP is responsible for formulating and implementing policies, regulations, and strategies related to fisheries and aquaculture activities in order to guarantee the sustainable utilization of fisheries resources.

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In addition to the SRP, there are other members of the national fisheries institutional framework including various institutions involved in different aspects of fisheries management and research. These institutions may include:

Fisheries Research Institutions: The Public Institute for Acuaculture for Fisheries Research -IPIAP- is responsible for conducting scientific research, data collection, and analysis related to fisheries resources and their sustainability.

Fisheries Surveillance and Control: Entities responsible for monitoring and enforcing fisheries regulations and ensuring compliance with fishing practices. The Fisheries Control Directorate from the SRP and the Ecuadorian Navy, as the national maritime authority (NMA) are involved in the surveillance and control activities for the illegal, unreported, and unregulated (IUU).

Seafood Safety Authority: The Regulatory, Control and Surveillance National Agency (La Agencia Nacional de Regulación, Control y Vigilancia Sanitaria-ARCSA) is responsible for ensuring the safety and quality of seafood products throughout the supply chain, including processing, packaging, and export.

Co-management arrangements exist in Ecuador's fisheries sector, involving collaboration and shared responsibilities between the government, fishing communities, and other stakeholders. These arrangements aim to promote sustainable fisheries practices, ensure community participation in decision-making processes, and protect the rights and interests of local fishing communities.

Regulatory framework

Ecuadorian National Fisheries Regulatory Framework:

Property of Fisheries Resources and Ownership:

In Ecuador, fisheries resources are considered part of the national patrimony and are owned by the state. The state has the authority to regulate and manage these resources to ensure their sustainable utilization, and it is regulated by the Undersecretary of Fishery Resources.

Main Pertinent National Laws, Regulations, and Policies:

Fisheries Law: The main legislation governing fisheries in Ecuador is the Organic Law for the development of Aquaculture and Fisheries (Ley Orgánica para el desarrollo de la Acuicultura y la Pesca). It establishes the legal framework for the management, conservation, and sustainable use of fisheries resources.

Food Safety Regulations: Ecuador has regulations in place to ensure the safety and quality of seafood products for both domestic consumption and export. These regulations are enforced by the Regulatory, Control and Surveillance National Agency (La Agencia Nacional de Regulación, Control y Vigilancia Sanitaria-ARCSA)

CITES Regulations: Ecuador is a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The country has regulations in place to regulate the trade of fishery products covered by CITES through the Ministry of Production, Foreign Trade, Investment and Fisheries and the Vice Ministry of Aquaculture and Fisheries.

Gender Issues in the Fisheries Sector:

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In Ecuador, there is no specific data registry for the fisheries sector disaggregated by gender. The existing information for economic activities includes fishing as part of the broader category of Agriculture, Livestock, Hunting, Forestry, and Fishing. However, Ecuador has recognized the importance of gender issues in the fisheries sector. There are specific policies and programs in place to promote gender equality, women's empowerment, and the inclusion of women in decision-making processes related to fisheries management and development.

These initiatives align with international conventions such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the Inter-American Convention on the Prevention, Punishment, and Eradication of Violence against Women (Belem do Pará Convention), the Beijing Declaration and Platform for Action, and the Optional Protocol to the Convention on the Elimination of All Forms of Discrimination against Women. Additionally, Ecuador has signed International Labour Organization (ILO) conventions such as Convention No. 100 on Equal Remuneration, Convention No. 111 on Discrimination in Employment and Occupation, Convention No. 122 on Employment Policy, and Convention No. 156 on Workers with Family Responsibilities.

Indigenous peoples, ethnic groups, and communities in the Fisheries Sector:

In Ecuador, there are no indigenous people on the Pacific coast fishing the focus species of the GMCII project.

Regulations, Policies, and Plans for Fisheries in Protected Areas:

Ecuador has specific regulations, policies, and plans for fisheries activities in protected areas, focusing on the categories of national parks and marine reserves. These measures ensure that subsistence, commercial, and tourism fishing practices within these areas are sustainable and compatible with the conservation objectives of protected areas. Furthermore, as established in the Organic Law for the Development of Aquaculture and Fisheries, Chapter I, Article 2 "Scope of Application," all entities, organizations, and dependencies of the public sector, as well as individuals and legal entities, must mandatory comply with everything related to said law within the spaces that comprise the National System of Protected Areas in coordination with the competent governing body (Corte Constitucional del Ecuador, 2020).

International Agreements and Memberships:

Ecuador has signed and ratified the following international agreements and conventions:

- United Nations Convention on the Law of the Sea of 1982 (UNCLOS)
- Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (PSMA)
- International Labour Organization (ILO) instruments: Work in Fishing Convention of 2007 (C188) and the Work in Fishing Recommendation of 2007 (R199)

Membership in Regional Fisheries Management Organizations (RFMOs):

Ecuador is a member of several Regional Fisheries Management Organizations (RFMOs), including but not limited to the Inter-American Tropical Tuna Commission (IATTC) and the South Pacific Regional Fisheries Management Organization (SPRFMO).

FITI Initiative:

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Ecuador is part of the Fisheries Transparency Initiative (FiTI), being the seventh country to join worldwide and the first in Latin America. Currently, during the year 2023, the National Multi-Stakeholder Group of FiTI Ecuador is seeking to implement the FiTI work plan to present the first report by the end of 2024 (Gobierno del Ecuador, s.f.).

Overview of the fishery

Titi Shrimp fishery

Shrimp fishing in Ecuador is an important part of the country's economic activities, ranking 26th out of 46 branches of economic activities nationwide, contributing $801.45 million dollars, equivalent to 0.7% of GDP in 2020 (Sánchez et al., s.f.). The fishery of Titi shrimp (*Protrachypene precipua*) has been developed in Ecuador for over 60 years, providing employment opportunities for men and women in the coastal area of Ecuador through industrial and artisanal fishing activities. This resource is then processed and sold in both domestic and international markets (Bravo & Zambrano, 2014; Cobo & Loesch, 1966).

Nationally, the primary fishing area for Titi shrimp is the Gulf of Guayaquil, where the industrial fleet of trawlers and the artisanal passive bag net operate (Smayda, 1966). Guayaquil and Posorja are the main areas for fishing, processing, and export companies involved in this fishery. According to the Public Institute for Aquaculture and Fisheries Research, Posorja produced approximately 7,600 metric tons (t) of pomada shrimp annually in 2008, with approximately 80% of the production being exported.

According to data from 2021, the industrial shrimp fishery for that year recorded around 40 vessels that use trawling nets, while the artisanal fishery reported approximately 1,000 vessels that use passive bag nets, such as longlines (Stears, 2023).

Specifically for the capture of titi shrimp, the high season is estimated to be from April to June, while the low season runs from July to September. And according to data from the Central Bank of Ecuador, in 2019, traditional exports amounted to $8,337.7 million dollars, of which 46.7% was contributed by shrimp, with Asia, Europe, and the United States being its main export destinations.

According to SFP The landing data corresponds to the period 2005-2020. The data was built by landing records provided by the Public Institute for Aquaculture and Fisheries Research (IPIAP) (Figure 1).

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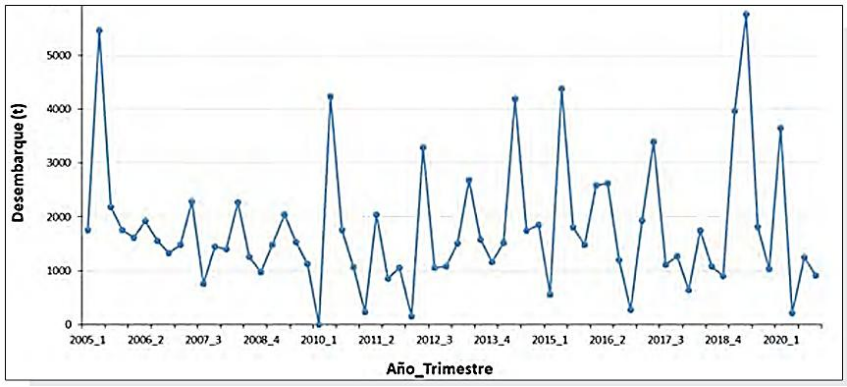


Figure 1. Reconstructed landing statistics of Titi shrimp from the Gulf of Guayaquil, Ecuador. Period 2005-2020 (Canales et al., 2021).

The figure 2 shows the standardized catch per unit of effort (CPUE) for Titi shrimp, period 2015 to 2020, using a model with fixed effects of Year-Subzone and Boat Cluster. Dotted lines represent the 95% confidence interval. The red dots represent the average nominal fishing yields.

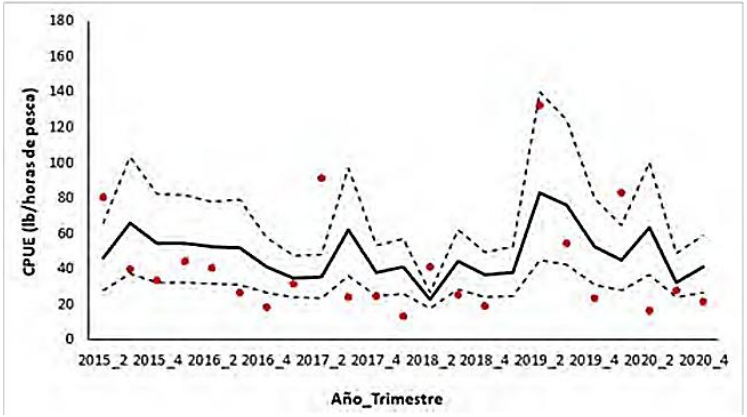


Figure 2. Catch per unit of effort (CPUE) estimated for titi shrimp during 2005 and 2020 (Canales et al., 2021).

Fishing operations

The Titi fishery has two components, an industrial trawl fishery, and an artisanal bag fishery. In addition, there exist artisanal boats called “changas” operating without control and illegally (Figure 3).

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Figure 3. A. Changas, and B. Bolso fishery for Titi Shrimp.

The artisanal fishers use “bolsos” (i.e., bag nets or stake nets) set on estuarine banks in the Gulf of Guayaquil. The operation of 1,014 bags belonging to 617 organized fishers (belonging to 25 fishing organizations) is authorized. The regulation assigns the fishers of each organization the fishing site and the number and type of bolsos allowed. An unquantified number of unauthorized bolsos are known to operate. The catch is sold in the domestic market and to packing plants mainly for export.

The industrial fleet operates since 1956. At that time there were five trawlers, currently, there are 38 vessels operating. Most vessel owners belong to the “Primero de Mayo” association. The industrial fishery is well-regulated and controlled. The fishing grounds are set, there is an annual quota of 500 t / trawler, and it is mandatory the use an electronic logbook, a vessel monitoring system, and turtle-excluding devices. Nowadays, the electronic logbook is not working, and captains prefer to use a notebook and pen for catching reports. An onboard observer program covers 20% of the fishing trips. The main landing port is Posorja.

Target species

Indicate the target species, their local name and international common names, their scientific name, and a brief description of the species (e.g., distribution, main habitat, level in trophic chain).

English common name	Local common name	Scientific name	CITES listing	IUCN Red List status
Titi shrimp	Camarón pomada	*Protrachypene precipua*	Not Evaluated	Not Evaluate

Fishing areas

The industrial Titi fleet operated within designated fishing areas known as "corralitos," as established in Article 2 of Ministerial Agreement 019 (6/2/2013). Figure 4 provides evidence that the highest fishing activity was concentrated in the corralito commonly referred to as the Cauchiche zone.

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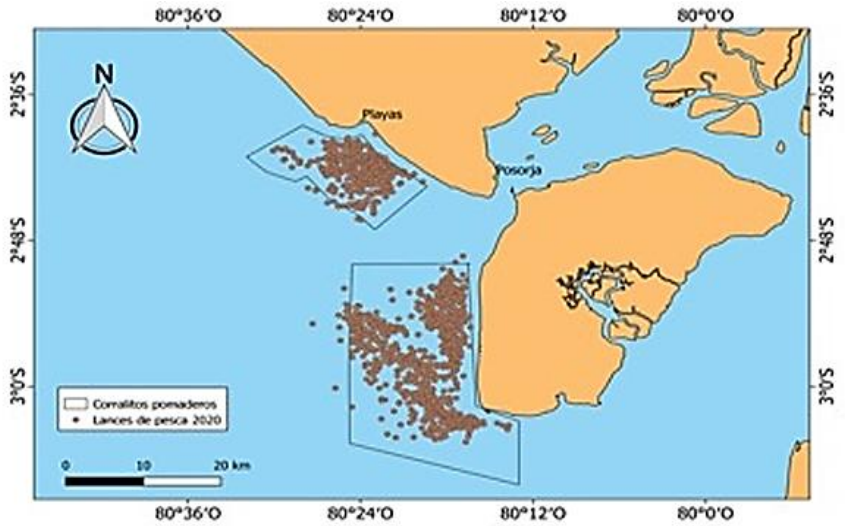


Figure 4. Fishing zones located in "corralitos" (rectangular areas) where the industrial pomada fleet from Posorja operates, based on recorded geographical coordinates**.**

Stock Status

The following is information about the status of the target species populations:

Target specie	Type of stock	Geographic extent
Titi shrimp	Regional	The Eastern Tropical Pacific - EPT-

Stock assessment

The responsibility for stock assessment in Ecuador's fisheries lies with the Public Institute for Aquaculture for Fisheries Research -IPIAP-. The IPAIP is the governmental organization that is primarily responsible for conducting research, data collection, and analysis to assess the status of fish stocks and fisheries resources in Ecuador (Canales et al., 2021).

Current stock status

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The stock assessment status of titi shrimp was conducted by Sustainable Fisheries Partnership -SFP- using biological parameters cited in the literature and estimates of landings generated from monitoring the fishing of this resource, carried out by the Public Institute for Aquaculture and Fisheries Research (IPIAP). The analysis was approached using two types of alternative models: one for limited data under equilibrium conditions (LBPA) and another, a statistical age-structured model with length-based data, adjusted to size compositions of catches, CPUE series, and quarterly landings (MESTOCKL) between 2005 and 2020. The results suggest a reduced population ranging from 15% to 20% of the virgin biomass (B0) and a fishing effort level (fishing mortality) between 4.2 and 6.4 times the reference value F40%. The results obtained by SFP explain the absence of large individuals. The current fishing pressure is concentrated on a juvenile population, and the scarce presence of specimens over 10 cm in total length suggests a considerable reduction in reproductive potential. For 2020, the average value of quarterly fishing mortality may have exceeded the reference mortality by 3.58 times (overfishing) (Canales et al., 2021).

Fisheries management

Management arrangements

In Ecuador, the fisheries authority is the Ministry of Production, Foreign Trade, Investments, and Fisheries, through the Undersecretariat of Fisheries Resources (SRP). The SRP is the entity responsible for formulating and implementing strategies, plans, programs, and projects aimed at regulating, developing, strengthening, and controlling the country's fishing activities (Ministerio de Producción, Comercio Exterior, Inversiones y Pescas, n.d.). This is achieved thanks to biological information and landing data generated by various experienced entities, such as the Public Institute for Aquaculture for Fisheries Research -IPIAP.

Due to the economic importance of the Titi shrimp fishery and the negative effects of its exploitation, the Ecuadorian government has introduced management measures for shrimp capture using trawl nets since the 1980s. Over the years, various regulations have been implemented, including exclusive zones for artisanal fishing (Ministerial Agreement No. 2305/06-08-1984), protected areas (Ministerial Agreement No. 134/24-07-2007), compliance with technical characteristics of fishing gear (Ministerial Agreement No. 019/09-03-2010), and a ban on trawling except for Titi shrimp (Ministerial Agreement No. 020/13-03-2012).

For this fishery, specific management, regulation, and control measures were established (Ministerial Agreement No. 426-A/05-10-2012 and 019/06-02-2013). These measures include an annual closed season from February 15th to April 15th, the establishment of "permitted fishing activity zones" for the industrial titi shrimp fleet, which are two areas in the Gulf of Guayaquil located beyond 1 nautical mile from the coast, and a daily catch limit of 5,000 lbs per boat (VAP, 2017).

Additionally, in order to obtain responsible and effective fisheries management, the Vice Ministry of Aquaculture and Fisheries with the collaboration of WWF – Ecuador and the participation of users of the Titi resource. In 2014 was developed the first National Action Plan for the Conservation and Management of the Titi Shrimp Resource in the Gulf of Guayaquil (PAN-Pomada), as a tool of guidelines that allows articulating the measures of Management among all sectors that take advantage of the resource. There has been only one stock assessment based on the information on the trawl fishery for 2014 – 2018 (Chicaiza et al., 2019). It was found that the resource is overfished.

Registries

Vessel register

The vessel registration system is carried out by the Undersecretariat of Fisheries Resources (SRP), and is public at: https://srp.produccion.gob.ec/registro-nacional-de-embarcaciones/

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Fishers register

The fishermen registration is carried out by the SRP and is public at: https://srp.produccion.gob.ec/registro-nacional-de-pescadores-y-comerciantes/

Trader's register

The registration of traders, just like that of vessels and fishermen, is managed by the SRP. Therefore, it is also public, and in fact, it is located in the same link as the fishermen's registration (https://srp.produccion.gob.ec/registro-nacional-de-pescadores-y-comerciantes/)

Processors register

The registration of processing units is also managed by the SRP and is public at: https://srp.produccion.gob.ec/registro-nacional-de-empresas-pesqueras/

Monitoring

Vessel monitoring

Ecuador has a vessel monitoring system that is managed by the Satellite Monitoring Center (CMS) of the Undersecretariat of Fisheries Resources (SRP) and operates 24 hours a day, 365 days a year (Ministerio de Producción, Comercio Exterior, Inversiones y Pescas, n.d). This system involves the installation and tracking of a Satellite Monitoring Device (DMS), which, according to Agreement No. MPCEIP-SRP-2022-0150-A, must be available on all industrial fishing vessels and mother longliners, regardless of their Gross Tonnage (TRB) (Zambrano, 2022). Furthermore, the resolution of this agreement states that the DMS to be used for this purpose can only be acquired from companies that have been qualified as "Authorized Providers" by the General Directorate of Merchant Marine and the Coast, through the respective certificate (Zambrano, 2022).

Monitoring of landings

In Ecuador, there is a system in place to monitor landings in the fisheries sector. The responsibility for monitoring landings lies with the Undersecretariat of Fisheries Resources (SRP). The SRP oversees the survey of data related to fish landings in the country.

Fishery inspectors are deployed throughout the territory in Fishery landings, operating 24 hours a day, 365 days a year, in rotating shifts of 8 hours per day. They carry out planned or requested controls and inspections. Certificates of Monitoring and Control of Fish Landing (CMCDP).

It is important to note that designated landing ports are authorized by the fisheries authorities to receive and process fishery products. CMCDPs provide documentary evidence and an official record certifying that the catches have undergone the required controls and comply with current fisheries regulations.

The coverage of the monitoring system can vary depending on the specific fisheries and regions. The SRP collaborates with various stakeholders, including fishing communities, fishing vessel owners, and processors, to gather landing data. The monitoring efforts aim to capture data on species, quantities, and locations of landings.

Onboard monitoring

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In Ecuador, there is a system of onboard monitoring using observers in some fisheries. The coverage of onboard monitoring can vary depending on the specific fisheries and management measures in place. Observers are typically deployed on fishing vessels to collect data on catch composition, fishing effort, bycatch, and other relevant information. The presence of onboard observers helps to improve data accuracy and provides valuable insights into the fishing operations.

Electronic monitoring

Electronic fishing logbooks has been formally adopted for Titi shrimp fishery in Gulf of Guayaquil in collaboration with WWF. The Titi shrimp fishing fleet is the first in Ecuador to use this technology to record data on fishing and catches. WWF provided technical advice to the Undersecretariat of Fisheries as well as the fishing sector.

Other types of monitoring

There are no other types of monitoring.

Regulation

- Constitution of the Republic of Ecuador.
  - Art. 14.- recognizes the right of the population to live in a healthy and ecologically balanced environment, which guarantees sustainability and good living, and the preservation of the environment, the conservation of ecosystems, biodiversity and the integrity of heritage are declared of public interest of the country, the prevention of environmental damage, the recovery of degraded natural spaces.
  - Ministerial Agreements No. 426-A/05-10-2012.
  - Ministerial Agreements No. 426-A/05-10-2012 and 019/06-02-2013
  - Ministerial Agreements No. 231/29-08-2014
  - Ministerial Agreement No. MPCEIP-SRP-2019-0030-A.
- Fisheries and Fisheries Development Law.
  - It states that the Titi Shrimp (*P. precipua*) resource has a social and economic importance of great impact within the artisanal and industrial fishing sector, whose fishery generates jobs and foreign exchange throughout the production chain.
  - Art. 4.- The State will promote scientific research and, especially, that which allows knowing the stocks of bio aquatic resources of possible exploitation, trying to diversify it and direct it to a rational use.

Management plans

- National Action Plan for the Management and Conservation of the Titi Shrimp Resource (*P. precipua*). World Wildlife Fund (WWF Ecuador)
- In April 2013, an inter-institutional cooperation agreement was signed between WWF, the National Fisheries Institute (INP) and the Primero de Mayo Association, an organization that brings together Titi fishermen, with the aim of carrying out preliminary scientific and necessary to establish the research baseline for a technical proposal for the comprehensive management of the ointment shrimp fishery in Posorja and whose Results were presented to the fishing authorities and users of the ointment resource in February 2014 in Guayaquil and Posorja.
- Action Plan for the Conservation and Management of Titi Shrimp Resource (*Protrachypene precipua*) in the Gulf of Guayaquil. Update 2021.

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- Fisheries Management Plan for the Artisan Activity of Fishing Ointed Shrimp with Nets Bag in the Lower Area Malvines, Gulf of Guayaquil.
- Protocol/Instructions for the Participatory Monitoring of the Commercial Catches of the Titi Shrimp (*Protrachypene precipua*). World Wildlife Fund.
- Training Manual for Follow-up Participatory of Commercial Captures of the ointment shrimp (*Protrachypene precipua*) World Wildlife Fund.

Fisheries agreements

- Convenio marco de cooperación pesquera y acuícola. In which both countries agree on promoting mutual scientific, technological, administrative and fiscal assistance to ensure the sustainable use of hydrobiological resources.
- Global fishing watch. The agreement stands alongside a complementary partnership that Ecuador has with Canada to strengthen bilateral efforts to combat illegal fishing and enhance Canada's Dark Vessel Detection program, which is designed to detect fishing vessels whose location transmitting devices have been switched off, sometimes in an attempt to evade monitoring, control and surveillance.
- Comprehensive Economic Partnership Agreement (CEPA) - Ecuador and EU.

Bycatch

According to the IUCN conservation status, most of the species found in the Bajo Negro area would be within the Least Concern (PM) category. However, according to the references obtained through the Fish Base on resilience and vulnerability, we found that the Catfish (*Bagre panamensis*) its vulnerability would be between medium and high; likewise, the barbón catfish (*Bagre pinnimaculatus*) appears with a medium-low resilience and a high vulnerability; Also with a medium high vulnerability are the nato (*Trachinotus kennedyi*), the tie fish (*Trichurus lepturus*), the chicken (*Prionotus stephanophrys*) the butterfly ray (*Gymnura marmorata*) which would be the species that should be considered for future studies within of a management plan (Martínez et al., 2017).

Interaction with ETP species

English common name	Local common name	Scientific name	CITES listing	IUCN Red List status
California Butterfly Ray	Raya mariposa	*Gymnura marmorata*	Not evaluated	Near Threatened
Cortez Numbfish	Raya electrica	*Narcine entemedor*	Not evaluated	Vulnerable
Spinytail Roun Ray	Raya redonda narigona	*Urotrygon aspidura*	Not evaluated	Near Threatened

Interaction with protected areas

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Tis fishery does not interact with protected areas.

Impacts on the marine environment.

- **Illegal fishing**: There are constant reports from the Environmental Authority and fishing communities living in the vicinity of protected areas regarding the practice of trawling in these zones. For example, in the Puntilla de Santa Elena Marine Coastal Fauna Production Reserve (Salinas) (Ministerio de Ambiente, s.f).

  On the other hand, Ministerial Agreement No. MPCEIP-SRP-2019-0030-A, dated April 25, 2019, prohibits the use of artisanal trawl nets (changas). However, these artisanal vessels continue operating illegally.

- **Bycatch**: The trawler fleet captures a great diversity and quantity of bycatch. This poses a significant problem for maintaining demersal fish stocks (e.g., corvina, snook, snappers, grunts) due to reduced juvenile recruitment and damage to the seabed (Kelleher, 2005.).

FIPs

Indicate if there are FIPs on this fishery. List the FIPs. Information from FisheryProgress

FIP name	Type	Status	FIP lead entity	FIP identification number
Ecuador Gulf of Guayaquil titi shrimp - bottom trawl	Basic	Stage 4: Improvements in Fishing Practices or Fishery Management	Cámara Nacional de Pesquería	13553

Initiatives working with the fishery.

- National Action Plan for the Management and Conservation of Titi Shrimp Resource. Ministry of Production, Foreign Trade, Investments, and Fisheries.
- Sustainable Global Chains of Seafood Products - Ecuador. Ministry of Production, Foreign Trade, Investments, and Fisheries of Ecuador, with technical support from the United Nations Development Programme (UNDP), Sustainable Fisheries Partnership (SFP), and funded by the Global Environment Facility (GEF).
- Coastal Fisheries Initiative Project. United Nations Development Programme (UNDP) and WWF-Ecuador. Manta, Ecuador.
- Design and implementation of a cost-effective tagging system for authorized bag-type nets used in the Titi shrimp fishery in the Gulf of Guayaquil - UNDP and WWF-Ecuador.
- Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems - UNDP/ GEF.

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SWOT analysis for improving the management of the fishery and the condition of the fishery resources.

List key strengths, weaknesses, opportunities and weaknesses.

Strengths	Weaknesses
- Ecuador is committed to being the first country in the Americas to comply with the FiTI Standard, to improve the accessibility, quality and credibility of national fishing information to achieve greater transparency in the fishing sector. - Ecuador announced the conservation of 8 Miles of coastal marine zones In Ecuador.	- Develop effective participation in the co-management platform. - Lack of organization withing the various groups.
Opportunities	**Threats**
- NATLUK has high interested to implement FIPs for Pomada. - Public and Private stakeholders showed interest to implement FIPs. - International market is demanding for Shrimp that comes from a FIP or certificated fishery.	- The inability of the fisheries authority to control of illegal fishing activities. - Illegal fishing operated by the changas - *artisanal boats that trawl shrimp illegally in Esmeralda and Guayaquil*-. - Transfer of fishing from Artisanal bag fishing to Industrial trawl boats.

Literature

Altamirano M (2018). Plan de Manejo Pesquero para la actividad artesanal de redes de bolso en la zona de Bajo Malvinas, Golfo de Guayaquil. WWF y la Asociación de Pescadores Artesanal y Especies Bioacuaticas y Afines Isla Escalante (APAREBAFIE). Ecuador. 40 pp.

Altamirano, M., & Mosquera, G (2021). Plan de Acción Nacional para el Manejo y la Conservación del Recurso Camarón Pomada (Protrachypene precipua). World Wildlife Fund (WWF Ecuador).

Bravo, M., y Zambrano, N. (2014). Estudio preliminar de la pesquería de camarón pomada (Protrachypene precipua) con bolsos artesanales.

Canales, C. M., Ibarra, M., & Chicaiza, D. (2021). Evaluación de la Población de camarón pomada (Protrachypene precipua) del Golfo de Guayaquil, Ecuador. Honolulu, Sustainable Fisheries Partnership Foundation e Instituto Público de Acuicultura y Pesca, Ecuador.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Cedeño, I,. & Villón, C. (2019). Manual de capacitación para el Seguimiento Participativo de Capturas Comerciales del Camarón pomada (Protrachypene precipua). World Wildlife Fund.

Chicaiza, D., Mendívez, W., Correa, J., Nicolaides, F., y García-Sáenz, R. (2019). Situación actual del stock y estructura poblacional del camarón pomada (Protrachypene precipua) capturado en el golfo de Guayaquil, durante el periodo 2014-2018: Perspectivas para su explotación sustentable. Guayaquil - Ecuador: Instituto Público de Investigación de Acuicultura y Pesca.

Chicaiza, D., García-Sáenz, R., & Mendívez, W. (2009). La pesquería de arrastre del camarón pomada (Protrachypene precipua) en la zona de Posorja-Ecuador durante 2008. Boletín Científico y Técnico, 20 (3), p. 1-13.

Cobo, y Loesch. (1966). Estudio estadístico de la pesca del camarón en el Ecuador y algunas características biológicas de las especies explotadas. Boletín Científico y Técnico del Instituto Nacional de Pesca. Vol. 1, No. 6, 46.

Corte Constitucional del Ecuador. Ley Orgánica para el Desarrollo de la Acuicultura y Pesca. 17 de abril de 2020 (Ecuador).

Gobierno del Ecuador. (s.f.). Ecuador sigue promoviendo una mayor transparencia pesquera y se convierte en el primer país candidato a FiTI en la región. Noticias MPCEIP. https://www.produccion.gob.ec/ecuador-sigue-promoviendo-una-mayor-transparencia-pesquera-y-se-convierte-en-el-primer-pais-candidato-a-fiti-en-la-region/

Kelleher, K. 2005. Discards in the world's marine fisheries. An update. FAO Fisheries Technical Paper. Rome, FAO. 2005. 131p

Martinez, J., Muñoz., D., Quinde, O., Daza,C., & Tigrero,J. (2017). composicion de especies en la pesqueria artesanal con redes de bolso en la zona de bajo negro, golfo de guayaquil, ecuador (septiembre 2016 - octubre 2017). WWF.

Ministerio de Ambiente. (s.f.) Impactos ambientales provocados por la pesquería de arrastre de camarón en Ecuador. Ecuador

Ministerio de Acuicultura y pesca. (2018). Informe de seguimiento a la pesqueria de camaron pomada (protrachypene precipua) de los desembarques en el puerto de posorja durante el cuarto trimestre del 2017.

Sánchez, A. M., Vayas, T., Mayorga, F., & Freire, C. (s.f.). Acuicultura y Pesca de Camarón. Universidad Técnica de Ambato, Observatorio Económica y Social de Tungurahua.

Stears, E. (2023). Ecudorian Fisheries and the U.S. MMPA Imports Rule. https://awionline.org/sites/default/files/uploads/documents/Ecuador-Assessment-051023.pdf

Subsecretaría de Recursos Pesqueros. (2011). Embarcaciones de Arrastre Operativas a Diciembre. Autor.

Viceministerio de Acuacultura y Pesca, Subsecretaría de Recursos Pesqueros, Instituto Nacional de Pesca. (2014). Plan de acción para la conservación y manejo del recurso camarón pomada (Protrachypene precipua) en el golfo de guayaquil. Autores.

Villón, C. (2007). Análisis del Sector Pesquero del Ecuador Continental. Subsecretaría de Recursos Pesqueros, Conservación Internacional.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Cedeño, I., & Villón, C. (2019). Protocol/Instructions for the Participatory Monitoring of the Commercial Catches of the Titi Shrimp (Protrachypene precipua). World Wildlife Fund.

Zambrano, J., & Zambrano, L. (2020). Análisis de la industria atunera: Clúster, cadena de valor productiva y productividad. 593 Digital Publisher CEIT, 5(5), 263-271. https://doi.org/10.33386/593dp.2020.5-1.358

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GMC2 project fishery profile

Fishery: Small pelagics

Country: Morocco

Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems.

Project Preparation Phase (PPG)

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Submitted by

Rolando Labraña Cornejo
Fisheries Consultant

June 2023

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Overview of the country´s fisheries sector

Morocco is one of the world's top fishing countries, with an annual average wild production (2017 - 2020) of almost 1.4 million metric tons. Within African countries, Morocco is the leading country export of fishing products, with an average of exports (2017 - 2020) of 2.279.780 (x 1000 USD) annually, representing 30.9% of total African exports (Veiga 2023).

In 2018, agriculture, forestry, and fishing accounted for 12.3% of the GDP (Veiga 2020). The most important captured species for Morocco between 2017 and 2020 was the European pilchard (Sardine), the Atlantic chub mackerel and Octopuses, etc. nei accounting for more than 80% of the catches. Regarding exports, Small pelagics (57%), Fish meal/fish oil (24%), and Octopus (6%) are the main groups exported (Veiga 2023). In addition, the most important seafood commodities were i) European sardine (frozen), ii) European sardine (prepared or preserved, not minced, nei) and iii) Fishmeals nei representing more than 66% of the exports. In terms of value, Small pelagics, Octopus, and Cuttlefish/squid were the groups with more value representing 42%, 22% and 12% respectively. Also, in terms of value, the most exported seafood commodities were European sardine (prepared or preserved, not minced, nei) (22.85%), Octopus (frozen) (21.67%) and European sardine (frozen) (8.05%) (Veiga 2023).

Regarding persons employed, at sea, employment reached approximately 120.509 (119.147 permanent jobs on board, and approximately 1.362 seasonal jobs of people authorized to fish without fleet (DPM 2021). In land, employment totalized nearly 116.904 (DPM 2021).

Institutional framework

Ministère de l'Agriculture et de la Pêche Maritime (DPMA)

Fisheries management in Morocco is the responsibility of the Ministry of Agriculture, Maritime Fisheries, Rural Development, Water and Forests, and specifically the Department of Maritime Fisheries (DPM). The DPM is responsible of the management of the fishery, setting of regulations, control, and enforcement.

Office National des Pêches (ONP)

The ONP is a public institution created in 1969, whose mission is the development of coastal and artisanal fishing and the organization of trade and marketing of sea fishing products. The ONP aims to be a public company of reference and a model of corporate citizenship, serving the development and increasing the competitiveness of the fishing industry[371].

Institut National de la Recherche Halieutique (INRH)

The INRH is the national research institute for marine and fisheries science and provides annual scientific advice to the DPM on small pelagic and other fisheries. The information is based on surveys, stock assessments and other type of research (Gascoigne 2019).

Comité de Coordination pour la pêcherie de sardine (comité conserve)

[371] http://www.onp.ma/mdg/

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The Comité de coordination pour la pêcherie de sardine leads the relationship between government, scientists and industry representatives for the management and development of the industry.

The Federation of Industries for the Processing and Valorization of Fishery Products (FENIP).

The FENIP is a professional organization that studies measures to develop fish product processing industries and improve the conditions of production, distribution and sale of products.

The National Union of Fish Canning Industries (UNICOP)

The UNICOP is a professional organization which aims to defend the interests of the profession and promote its expansion.

Co-management arrangements.

There is not a clear co-management framework for the management of fisheries in Morocco. However, according to the Decree No. 2.18.722 related to fisheries development and management plans (MP), MP are subject to consultation with the Chambers of Maritime Fisheries. In addition, the process for management decisions is based in the Procédure d'Aménagement des Pêcheries (Fisheries Management Procedure), and the steps are the following (see Gascoigne and Key Traceability 2020):

- Review stock status with reference points (INRH)
- Review other information as Catch-Per-Unit-Effort (CPUE), size-structure, information on recruitment (INRH)
- Present proposals on Total allowable catches (TAC) and other management options (e.g., closed areas) (INRH)
- Agree proposals with the Ministry (INRH, Ministry)
- Discuss and agree the proposals with industry stakeholders (INRH, Ministry, industry professionals)
- Set up the law and implement the agreed management measures (Ministry, Secrétariat General du Gouvernement).

Regulatory framework

Specific regulations, policies or plans for fisheries sector in protected areas.

All CCLME countries have adopted a policy for the creation of Marine protected areas (MPAs) (CCLME 2015). Morocco has set up MPAs of category VI "Protected Areas for the management of natural resources" of the IUCN. They are MPAs managed primarily for the sustainable use of natural ecosystems. Three pilot MPAs have been set up by the DPM in collaboration with the Partnership for Progress Agency (APP), in accordance with the national MPA strategy (CAR/ASP 2012).

The first legislation that Morocco had on the areas protected is the Dahir of 1934, relating to the creation of National parks. Today, the Law 22 – 07, relating to protected areas includes not only national parks, but also other categories of protected areas, recognized worldwide, by adapting the criteria applicable to the specific conditions of Morocco (CAR/ASP 2012).

Specific regulations, policies or plans for gender issues in the fisheries sector.

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Morocco have made important progress in terms of adherence to international and regional commitments on gender equality, signing the United Nations Convention on the Elimination of All Forms of Discrimination Against Women "CEDAW", the International Labor Organization (ILO) Convention No. 100 on equal remuneration for men and women and The International Labor Organization (ILO) Convention No. 111 on Discrimination in terms of employment and occupation, and the Beijing Declaration and Platform for Action (Estrada 2023). Morocco is dedicated to the inclusion of women in the artisanal fisheries sector and incorporates a gender perspective into development policies and programs (Nakamura et al 2021).

Morocco has signed and ratified the following international agreements:

- United Nations Convention on the Law of the Sea of 1982 (signed 1982 and ratified in 2007).
- Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing and
- International Labour Organisation instruments: Work in Fishing Convention of 2007 (C188) (Member since 13.06.1956), and
- Work in Fishing Recommendation of 2007 (R199).

Morocco is a member of the following Regional Fisheries Management bodies:

- International Commission for the Conservation of Atlantic Tunas (ICCAT).
- Committee for the Eastern Central Atlantic Fisheries (CECAF).
- Ministerial Conference on Fisheries Cooperation Among African States Bordering the Atlantic Ocean (ATLAFCO) (participating party).

Indigenous peoples, ethnic groups or communities in fisheries.

There are no specific regulations for indigenous peoples, since Morocco has not ratified the Convention 169 of the International Labour Organization (ILO) on Indigenous and Tribal Peoples in Independent Countries, nor adopted the United Nations Declaration on the Rights of Indigenous Peoples (IWGIA 2023).

The Moroccan Constitution recognizes the Amazigh identity of the Moroccan people. However, no laws exist recognizing the term Indigenous, with the exception of an implicit recognition in the dahir (law) of April 1919. In addition, the concept "local community" does not imply any legal or formal connotation. Nevertheless, Morocco has ratified the Paris Agreement (UNFCCC) and the Nagoya Protocol (CBD) (both international instruments clearly mention the term "Indigenous Peoples"), but the Moroccan government prefers to use the term "local community" (IWGIA 2023).

The Fisheries Transparency Initiative (FITI)

Morocco is not part of the FITI Initiative.

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Overview of the small pelagic fishery

Fishing operations

The sardine *Sardina pilchardus* is the dominant species in Morocco, with 76% of total catches of small pelagics for 2018. Between 1990 and 2018, the average catch of this species was around 736 300 tonnes and there is a general increasing trend since 2011. The catches reached 979 000 tonnes in 2018, a 7% decrease from 2017 (1 053 000 tonnes). The average catch of sardines over the last five years (2014-2018) is approximately 955 300 tonnes. The increase is mainly due to increased availability in Zones A+B and C (FAO, 2020) (see Figure 17; Table 25).

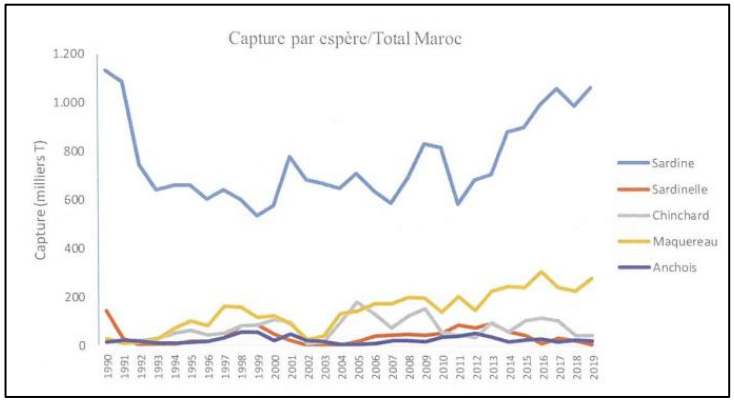


Figure 17. Annual landings of small pelagics during 1990 – 2019. Source: DPM/INRH (2020).

The mackerel *Scomber colias* represents about 17% of the total catch for small pelagics in 2017 and 2018 in Morocco. Catches of this species have also fluctuated during the period considered since 1990 with a general upward trend since 2012. Total catches in 2018 were around 224 400 tonnes compared to 240 000 tonnes in 2017, a decrease of about 7%. The average catch for this species in the last five years is 250 000 tonnes compared to 137 000 tonnes for the period 1990-2018 (FAO, 2020).

In the case of round sardinella *Sardinella aurita*, catches have fluctuated since the late 1990s. Total catches increased from 1 400 tonnes in 2004 to 94 000 tonnes in 2013. From 2013 to 2015, catches decreased to only 10 000 tonnes in 2016. In 2017, the catch increased slightly to 32 000 tonnes before declining in 2018 to 17 000 tonnes, a reduction of 46%. The average catch over the last five years is 30 500 tonnes, and 36 000 tonnes during the period 1990-2017. No catch was recorded for flat sardinella (*S. maderensis*) in Morocco in 2017 and 2018 (FAO 2020).

In 2019, the landings of small pelagics were 1 411 947 tonnes, increasing 8% from the landings of 2018 which were 1 298 929 tonnes. In 2019, the landings of small pelagics were dominated by the sardine with 75%, the chub mackerel which represented 20%, the Atlantic horse mackerel (chinchard) landed 3%, the anchovy 1% and the sardinella less the 1% (INRH 2020).

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Table 25. Total landings per species in 2019. Source: Adapted from DPM/INRH (2020).

Species	Total	% per species
Sardine	1 063 493	75
Maquereau	280 556	20
Chinchard	42 408	3
Sardinelle	5 860	0.4
Anchois	19 629	1
Total	1 411 974	100

The small pelagic fishery in Morocco is exploited by the following fleets (segments of the fishery) (see Gascoigne 2019):

• **Coastal fleet**: 688 medium-sized coastal seiners (surrounding nets), operating throughout the fishery (100 in the Mediterranean, 157 in the north Atlantic zone, 408 in the central zones and 92 in the south). The fish is conserved in plastic trays with ice.

• **RSW fleet** (refrigerated seawater): 24 vessels with refrigeration systems on board. These vessels use pelagic trawls as the fishing gear and only operates in the southern zone.

• **Pelagic freezer-trawlers**: large vessels operating in the southern zone under international fisheries agreements.

• **Artisanal fishery**: 1300 to 1600 registered small vessels (up to 3 tonnes, 7 metres) with small catches of sardines for local consumption, operating with small seines on the Atlantic coast. These vessels are mainly concentrated in the north and central zones.

• **'Other'**: exploitation of sardines mainly for bait – considered to be negligible.

In 2019, approximately 55% of the fleet that targeted small pelagics in the economic exclusive zone (EEZ) was achieved by the coastal fleet (senneurs cotiers), and 30% was fished by the RSW fleet (chalutiers type RSW). Finally, fleets from Russia and the EU captured respectively the remaining 9% and 4% (INRH 2020) (see Table 26).

Table 26. Small pelagic landings for 2019 by species and vessel type (Sardine, Mackerel, Horse Mackerel, Sardinella and Anchovies) (Source: DPM/INRH (2020)).

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	Sardine	Maquereau	Chinchard	Sardinelle	Anchois	Total	% Type Navire
Senneurs côtiers	643250	109362	6694	4325	19590	783221	55%
Chalutiers type RSW	319138	98130	9793	1319	3	428383	30%
Navires russes	71726	45722	7452	105		125005	9%
Navires UE	23241	23844	6255	108	14	53462	4%
Canots de pêche	6099	3478	384	3	8	9972	0,7%
Autres navires	40	20	11830	0	14	11905	0,8%
Total	1063493	280556	42408	5860	19629	1411947	

Main commodities and products and destinations

In 2021, the Sardine was mainly exported as canned sardines, representing 129 449 tonnes, and as semi-preserves (semi-conserves) reaching 13 225 tonnes. Mackerels were exported as canned mackerels representing a volume of 15 302 tonnes. Regarding anchovies, these were exported as semi-preserves reaching 15 233 tonnes. These products represented the main exports of small pelagics (DPM 2021).

Canned fish is mainly exported to the African market, followed by the European Union (EU) (the most important countries in terms of exports are the Netherlands, France and the United States of America). As for semi preserves, the main markets are the UE, Africa, and America (being the most important countries: Spain, France and Italy) (DPM 2021).

Target species

Sardine and mackerel are by far the most important of these species for the fishery (Figure 19). Anchovy, along with sardinella, are the least important in terms of catch volume, but is relatively valuable compared to most of the other species (Criquet 2022). Characteristics of the main small pelagics species are described below.

Sardine

Sardine (European pilchard) is by far the most important of these species for the fishery, being some of its main characteristics that these species are all fast-growing and short-lived, maturing young and reproducing in large quantities; they are highly mobile, and dependent on food resources; and that the distribution of their eggs, larvae and food are determined by environmental conditions which fluctuate each year (Gascoigne 2019). Regarding its morphology, *Sardina pilchardus* is an elongated, fusiform-shaped fish of oval section and laterally compressed. The sardine has a pointed snout and terminal mouth, reaching a length of 27 cm (90% of its total length can be reached during the first year). In the Northwest Africa region, the size of the Sardine increases from North to South, probably due to the trophic richness of the environment and the temperature of the upwelling phenomenon (Mounir et al. 2022).

The stock structure of the European pilchard population is distributed in the Northeast and Eastern Central Atlantic, the Mediterranean and Black Sea (FishSource 2023). Two assessment units are delineated by the FAO/CECAF Working Group on Small Pelagic Fish in Northwest Africa. The first stock is in zones "A + B" (Central) and the second stock is situated in zone "C" (Southern). The Central stock unit is distributed in waters from Cap Boujdour at 26ºN and north to the Moroccan port of Safi at 32ºN. The Southern stock unit is located in waters from Cap Boujdour and south through the southern limit of the species extent (FishSource 2023).

Round Sardinella

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Round Sardinella (*Sardinella aurita*) reproduction features several spawning maxima (Baldé, Sow, et al. 2019) separated by more or less pronounced rest periods, and strong inter-annual variability linked to climatic conditions. The species *S. aurita* (Valenciennes, 1847) lives in tropical and subtropical regions of the eastern Atlantic and is found in large concentrations along the west coast of Africa in three main areas (Roy et al. 1989): between southern Morocco (Western Sahara) and Guinea (26 ° -10 °N), Côte d'Ivoire and Ghana (7 ° - 5 °N) and further south between Gabon and southern Angola (0 ° -18 °S) (Froese & Pauly, 2016). In all regions, the species evolves preferentially in continental shelves where it prefers salty water (> 35 ‰) and warm temperatures (<24 °C) (Fréon, 1988). It is encountered near the surface of nearshore waters to a depth of 350 m beyond the continental shelf.

S. aurita is a gregarious species, whose individuals move in schools, making seasonal migrations (Boëly et al., 1982). Figure 18 illustrates the migratory movements of the West African stock, linked to water temperature and plankton richness (Whitehead, 1985). *S. aurita* populations in north-west Africa move parallel to the coast in search of convergence zones near upwellings (Boëly et al. 1982). These upwellings of cold water bring mineral salts that enable the development of phytoplankton and then zooplankton, which S*. aurita* feeds on.

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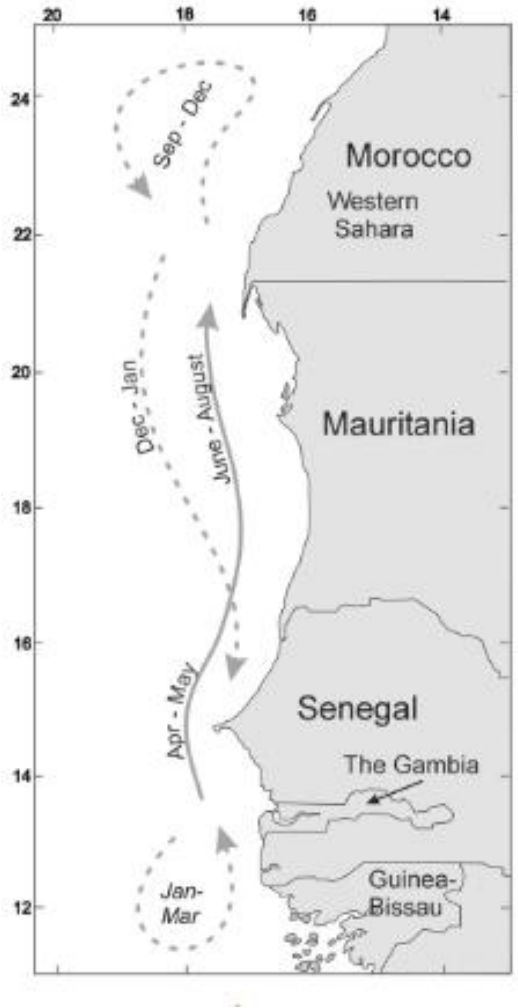


Figure 18. Migratory pattern of Sardinella aurita in West Africa, reflecting regional hydrographic characteristics and seasonality, i.e. upwelling seasonality with an annual alternation of warm (wintering season) and cold (upwelling season) water (Boëly, 1982; Zeeberg et al., 2008).

Flat sardinella

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Sardinella maderensis has a very coastal distribution, most often occupying depths of less than 50m. It is abundant in the warm season. The main nursery is north of Cap Timiris. *S. maderensis*, less migratory than *S. aurita*, is a species with tropical affinities, tolerating temperature ranges from 20 to 23°C (Conand & Fagetti, 1971; Marchal, 1991). However, according to Ben-Tuvia (1960), depending on the region, it can tolerate water temperatures ranging from 15°C (in Algeria) to 25°C and salinities ranging from 20 ‰ in the estuary of major rivers (Niger, Congo, Nile) to 40 ‰ in the eastern Mediterranean. Large individuals (> 24 cm) are poorly represented in Senegal, while in Mauritania the maximum size is 32 cm (fork length) (Fréon, 1988) *S. maderensis* feeds on plankton such as diatoms, dinoflagellates and crustacean larvae (Hilton-Taylor, 2000).

Sardinella maderensis is a pelagic fish of the Clupeidae family. It is found from the southern Mediterranean to Angola. This species is found from north to south of the Mauritanian EEZ.

Horse mackerel

Trachurus trecae has distinct breeding, feeding and wintering areas. Migration is probably determined by water temperature and the availability of prey organisms (Cheung et al., 2005). Its range extends from Morocco to Angola (Bianchi et al. 1999). *T. trecae* is a bentopelagic species, generally found near the bottom (15 - 22°C) between 20 and 100 m depth; sometimes also pelagic and near the surface at times (Bowker 2013). It breeds in warm-water regions off the coast of Mauritania and the Moroccan Sahara (Arkhipov, 2009). Juveniles are found in subtropical and tropical waters (Bowker 2013). The species' diet consists of fish, squid and crustaceans (FAO, 2018).

Black horse mackerel in general (*Trachurus sp,* Carangidae, L., 1758) are semi-pelagic fish, widely distributed in the sea and supporting large fisheries. They are generally found on the continental shelf: from the West African islands of Cape Verde (Crawford, 1981), to the northern Norwegian and North Seas (Knijn et al., 1993), as well as in the Mediterranean (Tsangridis & Filippousis, 1991) and Black Seas (Shiganova, 1998).

Anchovy

The stock structure of the European anchovy in Northwest Africa is not truly known, however an assessment unit in the subregion is considered by FAO to conduct stock assessments (FAO 2020). However, Bacha et al. (2014) recently identified 3 populations in: Algero-Provençal Basin, southern Alborán Sea and Northwest Atlantic (Morocco and Gulf of Cadiz); although the study does not cover the whole assessment unit area.

The species is captured in a small pelagic fishery that also targets European pilchard *S. pilchardus* (central and southern stocks), sardinella *Sardinella* spp., horse mackerel *Trachurus* spp. and chub mackerel *Scomber japonicus* (FishSource 2022).

Mackerel

The chub mackerel (*Scomber japonicus*) is a pelagic species occurring over the continental shelf and living tropical, subtropical, and partly moderate latitudes of all the three oceans (Habashi et al 1987).

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Table 27. Main target species of small pelagics for Morocco.

English common name	Local common name	Scientific name	CITES listing	IUCN Red List status
Sardine	Sardine	*Sardina pilchardus*	Does not appear	Least Concern
Round Sardinella	Sardinelle ronde	*Sardinella aurita*	Does not appear	Least Concern
Flat Sardinella	Sardinellle plate	*Sardinella maderensis*	Does not appear	Vulnerable under criteria A2d.
Horse mackerel	Chinchard	*Trachurus spp.*	Does not appear	Least Concern
Anchovy	Anchois	*Engraulis encrasicolus*	Does not appear	Least Concern
Mackerel	Maquereau	*Scomber japonicus*	Does not appear	Least Concern

Fishing areas

For small pelagics management purposes the coast is divided into zones; Mediterranean, north (nord), central (centre) A and B and south (sud) C (Figure 19). In terms of importance, the Atlantic coast represents around 98% of small pelagic landings, and the Mediterranean zone is negligible. In the Atlantic coast, 57% of the total landings comes from the southern zone C, and around 40% come from B and A zones, the north zone is likewise minor (Gascoigne 2019).

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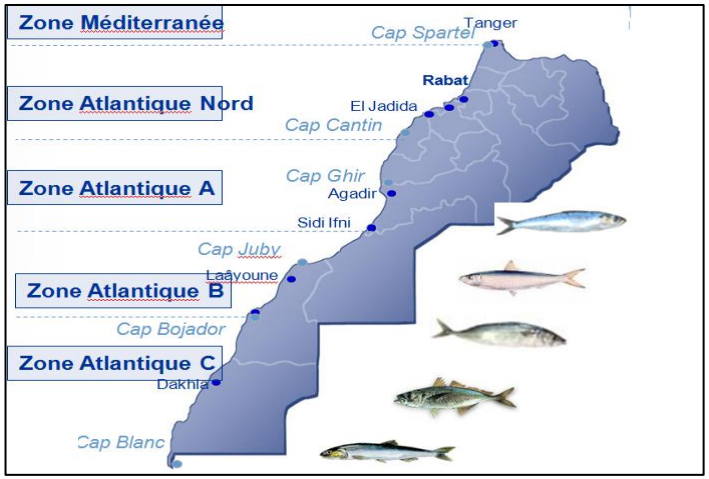


Figure 19. Fishing zones for management purposes around the Moroccan coast. For the sardine fisheries, the Atlantic coast zones A, B and C are concerned. Source: Gascoigne 2019.

Stock assessment

The FAO Fisheries Committee for the Eastern Central Atlantic (CECAF) is a regional structure for scientific cooperation on stock assessment and providing management recommendations. CECAF has a working group for small pelagics, composed of national scientists from Morocco, Mauritania, Senegal, Gambia and Spain. The Small Pelagic Working Group meets annually to review and analyze data and conduct stock assessments for each small pelagic stock. CECAF has a range of stock assessment techniques, but generally the choice of approach is severely limited by the data available (Gascoigne et al. 2021).

In Morocco, INRH use a range of techniques to evaluate stock status, trends and risks for small pelagic stocks. This includes a twice-yearly ground truthed acoustic survey (spring and autumn) covering the entire Atlantic coast; sampling of catches for size/frequency, demographic and biological analysis; and a range of stock assessment techniques (Criquet 2022). As for Anchovy, the most recent available stock assessment for anchovy was conducted in 2020 (DPM/INRH 2020, Cricket 2022).

Stock status

The total estimated biomass of small pelagics on spring 2019 in the Morocco's ZEE was 6.28 million tonnes, which decreased 12% from the biomass estimated during the spring 2018 (7.16 million tonnes). The biomass is largely dominated by the sardine with 70% of the total, follows the chub mackerel 16%, Atlantic horse mackerel (chinchards) 10%, anchovy 3% and sardinellas with 1% (DPM/INRH 2020).

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In Autumn 2019, the total estimated biomass for small pelagics in the Morocco's ZEE was 6.03 million, less than 11% compared to Autumn 2018 which was estimated at 6.78 million tonnes. The sardine dominated with 66%, the chub mackerel 15%, Atlantic horse mackerel (chinchard) 14%, anchovy 5% sardinellas 1% (DPM/INRH 2020).

According to the stock assessments of the FAO working group of 2021, the assessment of Sardine *Sardina pilchardus* for Zone A + B and C, are considered not fully exploited. As for the horse Mackerel, the three species evaluated were considered fully exploited, the sardinella was reflected overexploited and finally the anchovy was considered fully exploited (FAO 2021) (
Table 28).

Table 28. Assessments results of the FAO working group 2021. Source: FAO 2021.

Species	Area	Not fully exploited	Fully exploited	Overexploited
Sardine *(Sardina pilchardus)*	Zone A+B	V (2019)		
	Zone C	V (2019)		
Sardinella *(Sardinella aurita* and *S. maderensis)*	Whole subregion			V
Cunene horse mackerel *(Trachurus trecae)*	Whole subregion		V	
European horse mackerel *(Trachurus trachurus)*	Whole subregion		V	
Chub mackerel *(Scomber colias)*	Whole subregion		V	
Anchovy *(Engraulis encrasicolus)*	Zone N & Zone A+B		V	
Bonga *(Ethmalosa fimbriata)*	Maur./Sen./Gam.			V

Fisheries management

The overarching policy framework for fisheries management in Morocco is provided by the Stratégie Halieutis which has been in place for more than 10 years (currently the strategy is in the process of being updated) (Cricket 2022). Under this strategy, the sector has been extensively modernized (e.g., requirement for the preparing and implementing management plans, reporting of landings, enhancements in fisheries science, and vessel monitoring system (VMS) and other measures to eliminate Illegal, unreported, and unregulated (IUU) fishing) (Cricket 2022).

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Fishery under regional management and Regional Fisheries Management Organizations (RFMO).

There is not an RFMO for small pelagics in West Africa, however there are several organizations as the Comission sous regionale des peches (CSRP) and Conférence Ministérielle sur la Coopération Halieutique entre les Etats Africains Riverains de l'Océan Atlantique (COMHAFAT), whose mandate is to support the countries of the region in the management of shared stocks, and in particular small pelagics (Gascoigne et al. 2021). Nevertheless, none of these organizations have legal or regulatory powers, and so far, countries in the region are not working together to put in place coordinated management measures for shared stocks (Gascoigne et al. 2021).

Registries

Vessel register

There is a vessel registry. Licensed fishing vessels are required to submit logbooks and landings declarations (Cricket 2022). Moreover, in 2021, 1,800 fishing licenses were renewed for coastal fishing vessels, including 713 purse seiners, 665 trawlers, 416 longliners and 6 coral reefers. The Laayoune DPM issued the largest number of licenses, 443. Regarding artisanal fishing, the number of fishing licenses renewed in this segment amounts to 17,130, including 3,711 at the level of the DPM of Dakhla, 2,076 in Boujdour and 1,378 in El Jadida (DPM 2021).

Regarding industrial fishing, there are 334 fishing licenses issued for the year 2021 for the national offshore fleet, including 244 cephalopod boats, 58 shrimp boats, 5 tuna boats and 27 pelagic trawlers. The Agadir DPM, which covers a very active area, alone renewed 227 fishing licenses (DPM 2021).

Processors register

FENIP bring together producers and processors (Cricket 2022).

Monitoring

There are clear structures and mechanisms in place for enforcement. Compliance is the responsibility of the Coast Guard (inspections) and ONP (reporting) (Cricket 2022).

Vessel monitoring

To facilitate controls, vessels are required to land at specific ports and are limited to the extent they can move between zones (although they can move between ports within zones). Logbooks must be submitted to ONP and may be cross-checked with landings inspections and VMS, which is required for all vessels in the purse seine fleet (Cricket 2022).

Monitoring of landings

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There are several landings' sites called "Point de Débarquement Aménagé (PDA)" and "Villages de Pêche (VDP)" along the Morocco coastline, these sites are equipped and are specifically designated to the artisanal fishers (Cricket 2022).

Onboard monitoring

INRH has scientific observers on board small pelagic vessels (seiners and pelagic trawlers) to evaluate rates of discards and interactions with ETP species (Cricket 2022).

Electronic monitoring

For control and enforcement, vessels (apart from artisanal vessels) are equipped with VMS and landings (at designated landing points) are being monitored. The artisanal fleet, however, escapes from this control structure to some extent (Cricket 2022).

Regulations

The key management documents are:

i) décret 2-07-230 of November 2008, which sets the management framework for the small pelagics fishery and requires management plans to be prepared for each fishery (Cricket 2022).
ii) arrêté 3279-10 of December 2010, amended by the arrêté 1175-13 of 8 April 2013, which sets the regulations as required by the décret of 2008 (Gascoigne 2019).

The pertinent regional regulations of the fishery.

The key regulations in the fishery are summarized below. Most of them apply only in the south zone (See Gascoigne 2019).

- TAC in the south zone of 1,000,000 tonnes of small pelagics (all five species).
- Large seiners, RSW and pelagic freezer-trawlers only permitted in the south zone.
- Coastal seiners must stay outside 2 miles, RSW seiners (none at present) outside 8 miles, RSW trawlers outside 8 miles and freezer-trawlers outside 15 miles.
- Juvenile sardine protection zone inside 15 miles in the Bay of Dakhla (24-25°N) and monk seal protection zone inside 12 miles between 21°23' and 20°54'40''N – no fishing allowed.
- Gear restrictions in the south zone – pelagic trawl mesh size must be >40mm, maximum size for seine.
- Bycatch restrictions – limited to 2%, for vessels greater than 150 gross tonnage, and 5% for smaller vessels.
- Restricted lists of species may be landed in south zone.
- Closed area to protect monk seals and other marine mammals, for a 10-year period from 2009 (arrêté ministériel n° 2806-09; 10 novembre 2009)
    - Ban on fishing for hammerhead sharks (*Sphyrna* spp.) except for bonnethead (*S. tiburo*), oceanic whitetip shark and bigeye thresher shark from April 2012 for a period of 5 years (arrêté ministériel n° 1654-12; 09 avril 2012).
    - Law to tackle IUU fishing (loi n° 15-12; dahir n° 1-14-95 du 12 mai 2014).

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Management plans

A MP is provided by the décret of 2008, under which regulations can be established via arrêtés (Cricket 2022).

Management plan for the Mediterranean, North Atlantic and Central Atlantic.

This MP of small pelagic fisheries in the Mediterranean, North Atlantic and Central Atlantic, was launched in January 2015, and concerns the following species: Sardine, Sardinella, Horse mackerel, Mackerel and Anchovies. Fishing vessels with a tonnage > 3 GRT and using purse or purse seine are authorized to fish. The units concerned by this MP are the Zone 1: North Atlantic - Mediterranean (from Saïdia to Messouane) Zone 2: Central Atlantic (from Taghnaje to Cap Boujdour).

Management plan for the South Atlantic Fishery.

The small-pelagic fisheries in South Atlantic Fishery (zone C) have a MP, which was implemented since 2010, and established under the Halieutis strategic framework. The MP sets out a list of specific objectives and actions for the management of the fisheries as set out below, which were progressively implemented between 2010 and 2020.

Fisheries agreements

While the key sardine stocks are within Moroccan waters, the stocks of other small pelagic species are shared with other western African countries. There is a regional cooperation for research and stock assessment realized by the FAO/CECAF working group (Gascoigne 2019), and bilateral agreements with other Western African countries as Mauritania and Senegal.

Morocco has fisheries agreements with the European Union (entered into force on July 18, 2019 and will last the next four years), Japan (since September 11, 1985) and Russia (signed initially in 1992, and renewed in 2020 for the following four years) (DPM 2021).

Bycatch

The 2010 arrêté contains a list of authorized bycatch which can be landed alongside small pelagics (up to 2% or 5% of the total depending on vessel category), which only applies to zone C. There are no particularly vulnerable species on this list. The same management measures and the same information collection system apply to the other small pelagic species as to sardines (Gascoigne 2019).

Interaction with ETP species

Interactions of the Moroccan small pelagic fisheries with protected species are poorly documented, and further study is needed. However, Sharks have been reported bycatch species in fisheries off Northwest Africa, as well as sea turtles (including green and loggerhead turtles), manta rays, sun fish, and dolphins (Lopes et al 2016).

Nevertheless, species protected are not formally clear under Moroccan law. However, the protection of species such as marine mammals, turtles and seabirds have some protection either nationally or internationally (e.g., via CITES or other international agreements). Again, no information was available. For purse seiners, this is not likely to be a problem; for trawlers, observer reports are available but have not yet been analyzed (Gascoigne 2019).

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Regarding the anchovy fishery, no ETP species have been identified, but observer coverage is limited, and fishers are not required to report interactions with ETP species (Criquet 2022).

A protection area for monk seals *Monachus monachus* (Endangered in the IUCN Red list) where no fishing is allowed is established within 12 miles between 21º23' 00'' and 20º54'40''N (Gascoigne 2017). In accordance with commitments and recommendations made by the International Commission for the Conservation of Atlantic Tunas (ICCAT) and the General Fisheries Commission for the Mediterranean (GFCM), the 2012-2017 ban on capture of sharks including hammerhead *Sphyrna spp*. (except bonnethead *S. tiburo*), oceanic whitetip *Carcharhinus longimanus* (Vulnerable on IUCN Red list) and bigeye thresher *Alopias superciliosus* (Vulnerable on IUCN Red list) looks to have been renewed through 2022 (FishSource 2023).

Interaction with protected areas

In Morocco, there are several protected areas (Table 29).

Impacts on the marine environment

Morocco has a national plan against global warming, which includes measures on vulnerability and adaptation to climate change carried out by the INRH (Nakamura et al 2021).

Table 29. Marine protected areas in Morocco.

Name	IUCN management category	WDPA ID	Link
Sous-Massa National Park	II	11697	https://www.protectedplanet.net/11697
Archipel et Dunes d'Essawira	Not Reported	902700	https://www.protectedplanet.net/902700
Embochures des Oueds Chbeyka-Al Wa'er	Not Reported	902710	https://www.protectedplanet.net/902710

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Ilot de Skhirat	Not Applicable	555544224	https://www.protectedplanet.net/555544224
Cap Ghir-Imsouane	Not Reported	555698088	https://www.protectedplanet.net/555698088
Jorf Lasfar	Not Applicable	555698109	https://www.protectedplanet.net/555698109
Archipel d'Essaouira	Not Applicable	555698119	https://www.protectedplanet.net/555698119
Massa	VI	555698149	https://www.protectedplanet.net/555698149
Mogador	VI	555698150	https://www.protectedplanet.net/555698150

Fishery Improvement Project (FIPs)

The list of FIPs for Morocco can be consulted in Table 30.

Table 30. FIPs in Morocco. Source: Fisheryprogress.

FIP name	Type	Status	FIP lead entity	FIP identification number
INACTIVE Morocco sardine - pelagic trawl and seine / Maroc sardine - chalut pélagique et senne	Comprehensive	Inactive	Jo Gascoigne/ Ministère de l'Agriculture et de la Pêche Maritime/ Lovering Foods	4196
Morocco anchovy - purse seine	Comprehensive	Active	Federation Nationale des Industries de Tranformation et de Valorisation des Produits de la Peche (FENIP)/ Independent consultant (FIP coordinator) Jo Gascoigne	9872

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Initiatives working with the fishery

List the key ongoing initiatives that are working with the fishery.

Business and Human Rights in Women-Dominated Value Chains in Morocco (2023-2024)

The proposed project's overarching objective is to promote responsible business conduct in Morocco, with a focus on a labour-intensive industry in which Japanese companies and their local suppliers operate that employ a high proportion of women (to be decided in consultation with the Embassy of Japan). These include the fishing industry (notably shellfish gathering1), automotive sector (predominantly in wiring harness manufacturing2), agriculture (argan oil, fruit picking), and the garment sector.

Specifically, the project will strengthen responsible business practices of Japanese and Moroccan companies through improving the ability and understanding of Japanese businesses and local suppliers in Morocco to carry out Human Rights Due Diligence (HRDD) while advocating for the strengthening of responsible business policy and legal framework based on the Business and Human Rights (UNGP) by supporting the adoption of a National Action Plan on Business and Human Rights (NAP) or similar policies. In the current global context, the project will further promote a just and urgent recovery from Covid-19 while mitigating the impact of the Ukraine crisis on pre-existing socioeconomic vulnerabilities in Morocco – notably for women. The estimated number of beneficiaries are the employees of +15 Japanese companies and their local suppliers in Morocco operating in the targeted sector, with a focus on female workers within their supply chains.

Morocco – World Bank loan for "Blue Economy Program for Results" (2017 – 2022).

"Develop Morocco's institutional frameworks, improve integrated management of natural resources, and strengthen selected sectors for a climate-resilient blue economy in Targeted Areas".

Shared sardinella: Supporting the implementation of the ecosystem approach to fisheries for the management of shared sardinella stocks in northwest Africa Morocco, Mauritania, Senegal and Gambia (2017 – 2022).

The long-term objective of the programme is to support sustainable fisheries to improve food and nutrition security for people in partner countries.

The Shared sardinella projects centre around two main components:

- Development of knowledge and the strengthening of capacities in support of fisheries management planning processes in line with the EAF for the shared sardinella stocks.
- Development, implementation and follow-up to management systems aligned with the EAF and harmonised at the regional level.

Sustainable Management of the Canary Current Large Marine Ecosystem (CCLME) – Initial Support to SAP Implementation. Cabo Verde, Guinea, Guinea-Bissau, Mauritania, Morocco, Senegal and The Gambia (2020-2023).

Objective: To create enabling conditions for effective implementation of the Canary Current Large Marine Ecosystem Strategic Action Programme (SAP).

Expected outcomes:

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- Outcome 1.1: Management of the CCLME strengthened with the development of mechanisms for cooperation, partnerships and financing of the SAP.
- Outcome 2.1: Improved knowledge and understanding of the state of the CCLME including fish stocks, vulnerable species and habitats and ecosystem functioning, climate change impacts on the resources and fishing communities.
- Outcome 2.2: Strengthened capacities to enable implementation of an ecosystem approach to fisheries (EAF) in the context of broader multisectoral ecosystem management goals.
- Outcome 3.1: Effective and efficient results-based management and knowledge sharing.

Cooperation agreement on maritime fisheries and aquaculture between Morocco and Mauritania (Established in March 11, 2022, and repeals and replaces the cooperation agreement in the field of maritime fisheries signed between the two parties in Nouakchott on June 13, 2000).

This agreement includes, among others:

- Cooperation in the field of maritime training and activities.
- Cooperation in scientific and technical research.
- Cooperation in the management and development of fisheries.
- Cooperation in the area of processing and marketing of fishery products.
- Cooperation against IUU fishing.

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SWOT analysis

Table 31. List key strengths, weaknesses, opportunities and weaknesses for small pelagics fishery.

Strengths	Weaknesses
• Existence of a strong legal framework to promote sustainable fishing (Fisheries Code, Management plans, etc.). • Roles and responsibilities defined, good consultation with industry. • Existence of a national small pelagic TAC in Morocco, which has never been exceeded. • Existence of a FIP for Sardines and anchovies. • Existence of an excellent scientific research centre (INRH) with good bio-ecological data series stretching back several years. • FAO Working Group and the INRH assess stock status and issue management advice.	• Stock assessment advice is not released in a timely manner; and not explicitly linked to management decisions. • Stock assessment components are not comprehensive among fisheries and throughout the stock's range (commercial sampling, recruitment surveys, and age structure data). • Sardinella species (*S. Aurita and S. maderensis*), are overexploited in the subregion. • The stock structure remains somewhat uncertain.
Opportunities	**Threats**
• Strong framework e.g., Plan Halieutis. • Regional cooperation to develop a strategic plan for small pelagics management. • Implement a recovery strategy for other target species in the multispecies fishery.	• No enthusiasm for sustainability projects unless there is express demand from markets.

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Literature

Arkhipov, A. G. (2009). Seasonal and interannual variation of ichthyoplankton off Mauritania. Journal of Ichthyology, 49(6), 460-468.

Bacha, M., Jemaa, S., Hamitouche, A., Rabhi, K., and Amara, R. (2014). Population structure of the European anchovy, Engraulis encrasicolus, in the SW Mediterranean Sea, and the Atlantic Ocean: evidence from otolith shape analysis. ICES Journal of Marine Science, doi: 10.1093/icesjms/fsu097http://icesjms.oxfordjournals.org/content/early/2014/06/11/icesjms.fsu097.full.pdf+html

Baldé, B. S., Sow, F. N., Ba, K., Ekau, W., Brehmer, P., Kantoussan, J., Fall, M., & Diouf, M. (2019). Variability of key biological parameters of round sardinella Sardinella aurita and the effects of environmental changes. Journal of Fish Biology, 94(3), 391-401. https://doi.org/10.1111/jfb.13903

Bianchi, G., Carpenter, K.E., Roux, J.P., Molloy, F.J., Boyer, D., & Boyer, H.J. (1999). FAO species identification guide for fishery purposes. Field guide to the living marine resources of Namibia. Rome: FAO.

Boëly, T. (1982). Etude du cycle sexuel de la sardinelle ronde (Sardinella aurita Val. 1847) au Sénégal. Océanographie tropicale, 17(1), 3-13.

CAR/ASP. 2012. Identification des parties prenantes et des partenariats potentiels pour la création d'un réseau national d'AMP au Maroc. Par Aghnaj A., Bazairi H., Ribi M. et Limam A. Ed. CAR/ASP- Projet MedMPAnet, Tunis : 29 pp.

CCLME Project (2015). Canary Current Large Marine Ecosystem (CCLME) Transboundary Diagnostic Analysis (TDA). CCLME Project Coordination Unit, Dakar, Senegal. 140 pp. Also available in French.

Cheung, W. W., Pitcher, T. J., & Pauly, D. (2005). A fuzzy logic expert system to estimate intrinsic extinction vulnerabilities of marine fishes to fishing. *Biological conservation*, *124*(1), 97-111.

Conand, F., & Fagetti, E. (1971). Description et distribution saisonnière des larves de sardinelles des côtes du Sénégal et de la Gambie en 1968 et 1969. *Cah. ORSTOM, sér. Océanogr*, *9*(3), 293-318.

Crawford, R. J. M. (1981). Distribution, availability and movements of pilchard Sardinops ocellata off South Africa, 1964-1976. *Fisheries bulletin*, *14*, 1-46.

Criquet G. (2022). Morocco anchovy purse seine. Pre-Assessment Report. Marine Stewardship Council fisheries assessments. Verified by Global Trust Certification.

Decree No. 2.18.722 related to fisheries development and management plans. http://www.mpm.gov.ma/wps/wcm/connect/bb22ddf5-2bf4-49b0-b40b-35bff002f8f0/77_n%C2%B02-18-722.pdf?MOD=AJPERES

DPM (Département de la Pêche Maritime). (2021). La mer en chiffres. Royaume Du Maroc. Ministère de l'Agriculture, de la Pêche Maritime, du Développement Rural et des Eaux et Forêts. Département de la Pêche Maritime.

DPM/INRH (2020). Rapport annuel de l'état des Stocks et des Pêcheries Marocaines 2019. Ressources du large. https://www.inrh.ma/upload/INRH_Etat-des-Stocks-2019-VF.pdf

Estrada C. (2023). Gender Analysis. Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems. Project Preparation Phase (PPG).

FAO (2020). Report of the FAO/CECAF Working Group on the Assessment of Demersal Resources – Subgroup North Nouakchott, Mauritania, 2–10 December 2019 / Rapport du Groupe de travail FAO/COPACE sur l'évaluation des ressources démersales – Sous-groupe Nord Nouakchott, Mauritanie, 2–10 decembre 2019.

FAO (2021). FAO working group on the assessment of small pelagic fish off northwest Africa 2021. Fishery Committee for the eastern Central Atlantic.

FAO. (2018, septembre 11). Species fact sheet T. trecae. http://www.fao.org/fishery/species/3106/en

FishSource (2023). European pilchard NW Africa southern profile. https://www.fishsource.org/stock_page/782

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Fréon, P. (1988). Réponses et adaptations des stocks de Clupéidés d'Afrique de l'Ouest à la variabilité du milieu et de l'exploitation : Analyse et réflexion à partir de l'exemple du Sénégal [Thèse de doctorat]. Université d'Aix Marseille II.

Froese, R., & Pauly, D. (2016). FishBase : World Wide Web Electronic Publication Version [Version 31]. http://www.fishbase.org

Gascoigne J, Inejih CA and Y Jaridi (2021). Rapport de pré-évaluation, Pêcherie de courbine par filet maillant (filet courbine) et pirogue, Mauritanie. Marine Stewardship Council. GB2786. Final Report.

Gascoigne J and Key Traceability. (2020). Morocco anchovy. MSC Pre-Assessment Report. Unimer Group, Gil Comes, Soglama, Fatina Foods.

Gascoigne J. (2019). Moroccan sardine fishery: assessment in relation to the MSC standard. FINAL – 29 October 2014. REVISED 17 January 2019.

Gascoigne, J. (2017). Moroccan sardine fishery: assessment in relation to the MSC standard. REVISED 17 January 2019

Habashi, B. B., Kompowski, A., & Wojciechowski, J. (1987). Food and feeding of chub mackerel, Scomber japonicus Houttuyn, 1782 in the north-west African shelf. Acta Ichthyologica et Piscatoria, 17(1), 77-92.

Hilton-Taylor, C. (2000). *2000 IUCN red list of threatened species: Vol. XVIII*. IUCN, Gland (Suiza). Species Survival Commission.

IWGIA (2023). The Indigenous World 2023: Morocco. Indigenous peoples in Morocco. https://www.iwgia.org/en/morocco/5058-iw-2023-morocco.html

Knijn, R. J., Boon, T. W., Heessen, H. J., & Hislop, J. R. (1993). Atlas of North Sea fishes. *ICES cooperative research report*, *194*, 268.

Knijn, R. J., Boon, T. W., Heessen, H. J., & Hislop, J. R. (1993). Atlas of North Sea fishes. ICES cooperative research report, 194, 268.

Lopes, K., L. Passos, J. Garcia Rodrigues, F. Koenen, V. Stiebens, T. Székely, and A. Dutra. (2016). Sea Turtle, Shark, and Dolphin Bycatch Rates by Artisanal and Semi-Industrial Fishers in Maio Island, Cape Verde. Chelonian Conservation and Biology 15(2):279-288. http://www.bioone.org/doi/10.2744/CB-1213.1

Marchal, E. (1991). Nanisme et sédentarité chez certaines espèces de. *ORSTOM*, 201-208.

Mounir A, Alahyane H, Chouikh N, Hichami N & S Bendam. (2022). Habitats and Characteristics of Sardina pilchardus, off the Moroccan Atlantic coast. Animals of Marine Science. 6(1): 007-020. DOI: https://dx.doi.org/10.17352/ams.000027

Nakamura, J., Chuenpagdee, R., & El Halimi, M. (2021). Unpacking legal and policy frameworks: A step ahead for implementing the Small-Scale Fisheries Guidelines. Marine Policy, 129, 104568.

Shiganova, T. A. (1998). Invasion of the Black Sea by the ctenophore Mnemiopsis leidyi and recent changes in pelagic community structure. *Fisheries Oceanography*, *7*(3-4), 305-310.

Tsangridis, A., & Filippousis, N. (1991). Use of length-frequency data in the estimation of growth parameters of three Mediterranean fish species : Bogue (*Boops boops* L.), picarel (*Spicara smaris* L.) and horse mackerel (*Trachurus trachurus* L.). *Fisheries Research*, *12*(4), 283-297.

Veiga P. (2020). A first analysis of key small pelagics, octopus, and cuttlefish fisheries for three countries in Northwest Africa. SFP, May 2020.

Veiga P. (2023). A first analysis of key small pelagics, octopus, and cuttlefish fisheries for three countries in Northwest Africa. SFP, June 2023.

Whitehead, P. J. P. (1985). Clupeoid fishes of the world (suborder Clupeoidei). Synopsis, 125(7), 1-303.

Zeeberg, J., Corten, A., Tjoe-Awie, P., Coca, J., & Hamady, B. (2008). Climate modulates the effects of Sardinella aurita fisheries off Northwest Africa. Fisheries Research, 89(1), 65-75.

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GMC2 project fishery profile

Fishery: Small pelagics

Country: Mauritania

Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems.

Project Preparation Phase (PPG)

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Submitted by

Rolando Labraña Cornejo
Fisheries Consultant

June 2023

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Overview of the country´s fisheries sector

Mauritania is the world's 31st top fishing country, with average annual catches (2014 - 2018) of 630,000 metric tons (Veiga 2020). Mauritania is the 2nd African top export of fishing products, with an average of exports (2017 - 2020) of almost 960.135 (x 1000 USD) annually, representing Africa's 13% of total African exports (Veiga 2023).

In Mauritania, the Fisheries specific contribution to GDP is between 4 to 10% (Veiga 2020). The total capture production between 2017-21 annual average (% of total annual average) was 804.355 tonnes, being the most important captured species the European pilchard (Sardine), Sardinellas spp., and the Atlantic chub mackerel representing in total 63.33% (Veiga 2023).

According to the FAO FishstaJ trade dataset, which considered data from 2017, Mauritania is the 3rd most important country in Africa in terms of exports of seafood products (Veiga 2020). As for the exports, the three most important groups between 2017 and 2020 exports were Misc marine fish (65%), Fish meal/fish oil (20%) and Small pelagics (9%). Moreover, the most important seafood commodities were Fish (frozen, nei) (61.72%), Fish meals (nei) (14.87%), and Mackerels (nei, frozen) (5.91%) of the total exports (Veiga 2023). In terms of value, Octopus, Misc marine fish and Fish meal/fish oil represent 40%, 32% and 19% respectively of the most important exports. Also, in terms of value, the most exported seafood commodities were i) Octopus (frozen) ii) Fish (frozen, nei) and iii) Fishmeals (nei) representing respectively 39,40%, 28,57% and 14,45% (Veiga 2023).

According to FAO (2006-2020), Mauritania has a small domestic market of seafood. In fact, more than 95% of catches from the Economic Exclusive Zone (EEZ) are exported and sold without added value (often fresh in the local market or exported in frozen form) (Veiga 2020).

Fisheries in Mauritania created 226,000 jobs including 66,461 direct jobs (Kébé et Mayif 2022).

Institutional framework

The main actors involved in fisheries management in Mauritania include (Table 32) among others, the Ministry of Fisheries and Maritime Economy (MPEM), public establishments (l'Institut Mauritanien des Recherches Océanographiques et des Pêches (IMROP), Coast Guards), and professional organizations.

The Institutional environment

The design and implementation of fisheries management strategy is the responsibility of the MPEM based on research by IMROP, and with monitoring provided by the Mauritanian Coast Guard (GCM).

The Ministère des Pêches et de l'Economie Maritime (MPEM)

The MPEM has the general mission of designing, coordinating, promoting, and monitoring the implementation of Government policy in the areas of fisheries, oceanography, and maritime training with a view to strengthening the sector's contribution to the national development. The MPEM has 7 directorates, three of which are directly involved in fisheries management: General Directorate of Exploitation (DARE); Directorate of the Merchant Navy (DMM) and the Directorate for Resources Development and Studies (DGERH).

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- DARE oversees fisheries development and management plans and fisheries regulations. Once the development plans are in place, DARE is responsible for monitoring, evaluating, and implementing the management plans. Its mission is also to implement policies for the conservation, preservation, and enhancement of resources. It is also responsible for studying the feasibility of quota application files and for managing and monitoring quotas by segment and by fishery.
- DGERH is responsible for managing fisheries in application of management plans and the regulations in force. DGERH is responsible, among other things, for monitoring concession contracts and exploitation quotas, royalties and taxes related to their exploitation as well as the centralization of files of authorized fishing vessels.
- DMM plays an important role, particularly in the registration of ships and fishing boats. Thanks to controls at quay or at sea, it is responsible for noting and investigating infringements. DMM is assisted in its mission by decentralized structures at the regional level and mobile coastal units.

L'Institut Mauritanien des Recherches Océanographiques et des Pêches

IMROP is a research establishment which depends on the MPEM. Its mission is to ensure "monitoring of the state of fishery resources and operating systems as well as the evaluation of the results of the management mechanisms in place". The main activities of the institute consist in the collection and analysis of information on a certain number of species that play an important commercial role, on fleets and on fishing communities. IMROP plays a particularly important role in fisheries management plans and contributes to their implementation. These management plans assign it the role of resource assessment and analysis of catch data. This information on the stocks and their exploitation and the scientific evaluations of the data are made available to the administration, which uses it for the management of the fisheries, in particular for setting the Total allowable catches (TACs).

The National Advisory Council for Fisheries Management and Development (CCNADP)

The CCNAP also plays an important role, advising the development of fisheries management plans and in particular on the determination of the TACs.

Table 32. Summary of the main actors involved in the management of small pelagic fisheries in Mauritania (Source: Gascoigne et al. 2021).

Organisation	Description	Role
MPEM	Ministère des Pêches et de l'Economie Maritime	Design and implementation of the maritime sector development strategy and fisheries management
IMROP	L'Institut Mauritanien des Recherches Océanographiques et des Pêches	Scientific research, scientific advice on TACs and other management measures.
GCM	Garde Côte Mauritanienne	Contrôle et surveillance at sea, contrôle et surveillance of quotas
SMCP	Société Mauritanienne de la Commercialisation du Poissons	Contrôle et surveillance at sea, contrôle et surveillance of quotas
FNP	Fédération Nationale de la Pèche	Fishers' organization

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FLPA	Fédération Libre de la Pêche Artisanale	Fishers' organization
CCNADP	Conseil Consultatif National pour l'Aménagement et le Développement des Pêcheries	Advice on management plans and the determination of the TAC
CAAP	Commission d'Appui à l'Aménagement des Pêcheries	Implementation of management plans

Co-management arrangements.

The Commission d'Appui à l'Aménagement des Pêcheries (CAAP) main mission is to program, stimulate and coordinate the process of implementing and evaluating Fisheries Management Plans (PAPs). The CAAP is made up private and public partners, i.e., Ministry, GCM, IMROP, OSP, PNBA, Société Mauritanienne de la Commercialisation de Poisson (SMCP), Office Nationale d'Inspection Sanitaire des Produits de la Pêche et de l'Aquaculture (ONISPA), a representative of civil society, among others. The CAAP can suggest all the measures called for by developments in the fisheries concerned, including changes to legislative or regulatory provisions. In practice, it is responsible for monitoring and coordinating the PAP implementation process, it contributes to the realization and validation of the technical, scientific, and institutional studies provided for in the PAP, it participates in the design, the establishment and maintenance of the information system on the fishery, and finally it submits an annual report on the progress of the PAP implementation process to the MPEM (Gascoigne et al. 2021a).

Regulatory framework

The Maritime Fisheries Code recognizes that "the right to fish belongs to the State, which may concede its use in accordance with the provisions of this law and the regulations adopted for its application" (Law N° 2015-17 on July 29, 2015 and its amendments of 2018, Article 5).

The fisheries legal framework in Mauritania, is well developed. In addition to this general framework, based on Law 2015-17 (Code des Pêches) and the associated décret d'application, there is a range of specific legal circulars on TACs, allocation and renewal of fishing concessions and licences, zoning, among others (Gascoigne et al 2021b).

For cooperation with other parties, there is close cooperation between researchers in the main countries which share these stocks, via CECAF. Other regional organisations as the Comission sous regionale des peches (CSRP) and the Conférence Ministérielle sur la Coopération Halieutique entre les Etats Africains Riverains de l'Océan Atlantique (COMHAFAT) also play a role in relation to voluntary activities and projects, but nothing that can be described as 'effective and organised' regarding to management as opposed to science. Various measures are in place to reduce conflict between fishers. The main measure is the zoning system, where the main objective is to reduce interactions between the artisanal, coastal and industrial fisheries. There have also been limits set up on bycatch in the coastal fleet to reduce conflicts with the artisanal fishery (Gascoigne et al 2021b).

Specific regulations, policies or plans for fisheries sector in protected areas.

The Mauritanian Strategy for the establishment and management of a representative network of protected areas responds to the commitments made by Mauritania at the international level, i.e., the framework of the Convention on Biological Diversity (CBD) and its strategy plan which was updated at the 10th

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Conference of the Parties (COP 10) in Japan in Nagoya for the period 2011 to 2020 (Ministere de Developpement Durable 2013). All CCLME countries have adopted a policy for the creation of MPAs to better preserve vulnerable habitats (CCLME 2015).

Specific regulations, policies or plans for gender issues in the fisheries sector.

Mauritania have made important progress in terms of adherence to international and regional commitments on gender equality, signing the United Nations Convention on the Elimination of All Forms of Discrimination Against Women "CEDAW", the International Labor Organization (ILO) Convention No. 100 on equal remuneration for men and women and The International Labor Organization (ILO) Convention No. 111 on Discrimination in terms of employment and occupation, the Beijing Declaration and Platform for Action and The Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa (Maputo Protocol) (Estrada 2023). Moreover, since 2015, Ministry of Social Affairs, Children and the Family of Mauritania has a national gender mainstreaming strategy which seeks over a period of ten years to ensure the success of the process of mainstreaming gender issues in all development sectors with a view to promoting gender equality and equity and to guarantee the advancement of women (Ministry of Social Affairs, Children and the Family, 2015). However, the small pelagic management plan published in 2022 has just a reference of a breakdown by sex of the indicators related to employment in factories and fish processing. Yet, there are not any concrete actions to mainstream gender in the small pelagics value chain (Estrada 2023).

Mauritania has signed and ratified the following international agreements:

- United Nations Convention on the Law of the Sea of 1982 (signed 1982 and ratified in 1996).
- Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing and
- International Labour Organisation instruments: Work in Fishing Convention of 2007 (C188) (Member since 20.06.1961), and
- Work in Fishing Recommendation of 2007 (R199).

Mauritania is member of the following RFMOs and Regional Commissions.

- International Commission for the Conservation of Atlantic Tunas (ICCAT).
- Committee for the Eastern Central Atlantic Fisheries (CECAF).
- Ministerial Conference on Fisheries Cooperation Among African States Bordering the Atlantic Ocean (ATLAFCO) (COMHAFAT in French) (participating party).
- Sub-Regional Fisheries Commission (SRFC) (CSRP in French).

Indigenous peoples, ethnic groups or communities in fisheries.

In Mauritania, minority groups include sub-Saharan ethnic groups (Peulh and Toucouleur, Soninké, and Wolof, 25 percent) and Haratine (45 per cent). It is difficult to provide transparent data on the ethnic composition of the population because the government refuses to disaggregate the data in terms of ethnicity (Pazmiño 2023).

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At the international level, there are no specific regulations for indigenous peoples, since Mauritania has not ratified Convention 169 of the International Labour Organization (ILO) on Indigenous and Tribal Peoples in Independent Countries. However, Mauritania signed the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) adopted by the General Assembly on September 13, 2007 (Pazmiño 2023).

The Fisheries Transparency Initiative (FITI)

Mauritania has the status of FiTI Candidate country since December 2018, making Mauritania the first country to reach this status. The FiTI International Board has not validated Mauritania against the FiTI Standard yet. However, the FiTI International Board has tasked the FiTI International Secretariat to launch the validation process in accordance with the FiTI Standard (section D.1) for Mauritania; time frame: December 2018 until March 2022.

Overview of the fishery

Fishing operations

In Mauritania, catches from industrial trawlers increased until 2012, reaching over one million tonnes. However, in 2010, artisanal fishing vessels had more important catches, reaching about 300,000 tonnes in 2016 (Figure 20) (Touron-Gardic et al. 2022).

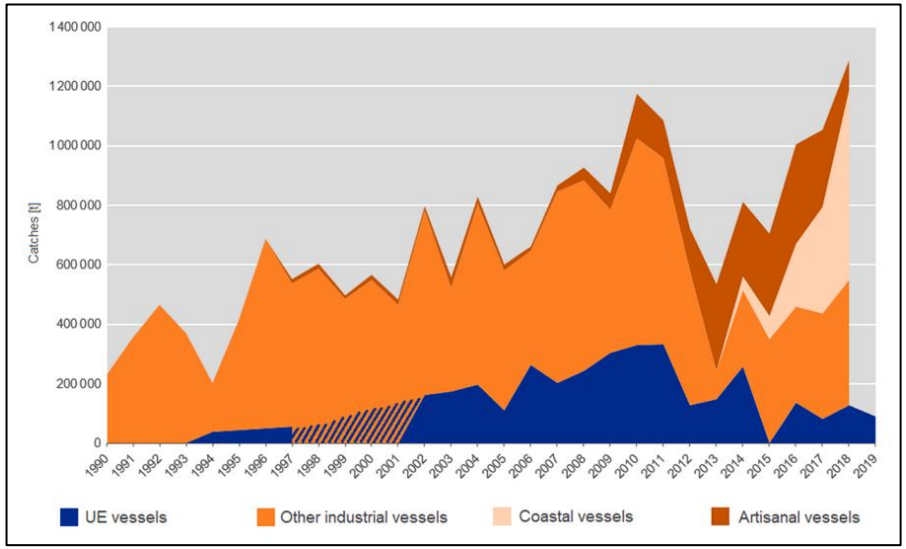


Figure 20. Evolution of catches of small pelagics in Mauritania. The coastal category refers to Senegalese canoes and semi-industrial purse seiners. Source: Touron-Gardic et al. 2022).

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The three fleets targeting small pelagic fish in Mauritanian waters are the artisanal fleet (canoes or pirogues) (Figure 21), the coastal fleet (mainly small and medium RSW purse seiners) (Figure 22) and the industrial fleet (pelagic freezer trawlers) (Figure 23). There is a wide range of crafts targeting small pelagic fish in the category "coastal pelagic fishing" in Mauritania - i.e., canoes using Senegalese type seines, canoes using felé-felé nets, purse seiners in a wide range of sizes in addition to pelagic trawlers (Gascoigne, 2021a).

The gear within the fishery used are boat seines, encircling nets, encircling gillnets, purse seine and midwater trawls.

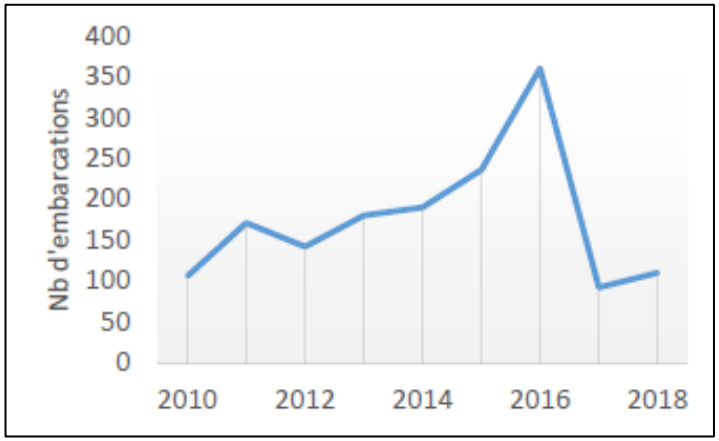


Figure 21. Evolution of pirogues from 2010 to 2018. Source: Khallahi et al 2020.

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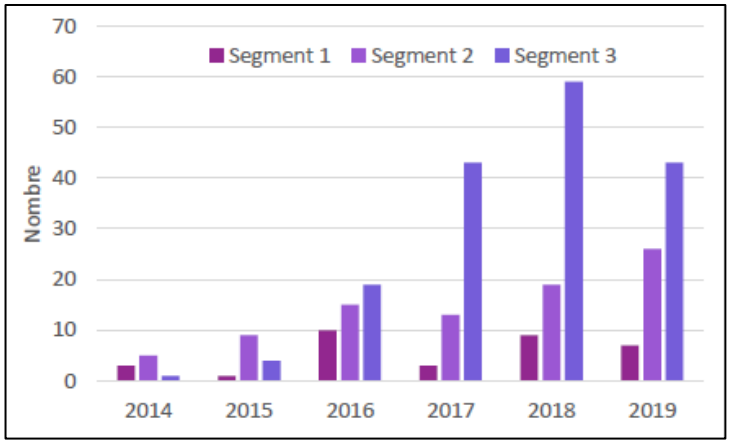


Figure 22. Number of vessels in the “coastal fishing” segments (Dr Braham Cheikh-Baye, reproduced in Inejih 2020) (canoes excluded). Source: Gascoigne, 2021a.

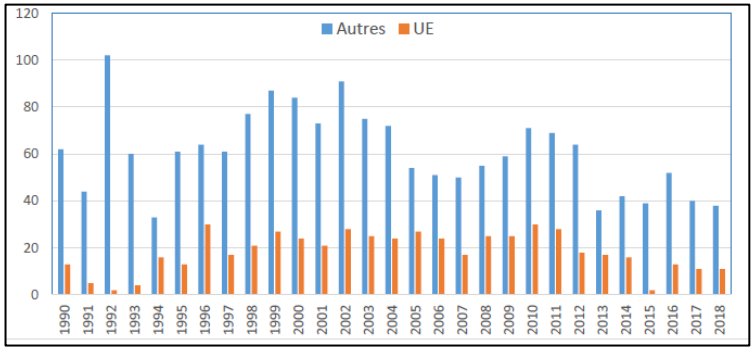


Figure 23. Number of EU vessels and other from 1190 to 2018. Source: Khallahi et al 2020.

Main commodities and products and destinations

In Mauritania, all fishmeal and fish oil produced is exported. According to ITC data, over the past decade this country has very quickly become one of the biggest fish meal exporters in Africa, and in the world. The Russian Federation was the major importer from fish meal from Mauritania in the early 2010s with up to 61% of market share in 2011. China and Turkey are the major importers in recent years with, respectively, 46% and 21% of market share in 2019 (Thiao and Bunting

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2022). Regarding fish oil, Mauritania has various fish oil importers, but France was the major destination in 2019 with 15 101 tonnes (44% of total export). The other major clients were Denmark (17%), Norway (11%) and Turkey (11%) (Thiao and Bunting 2022). Mauritanian also exports frozen fish, mainly to African countries, the exports increased since 2013 (Figure 25) (Touron-Gardic et al. 2022).

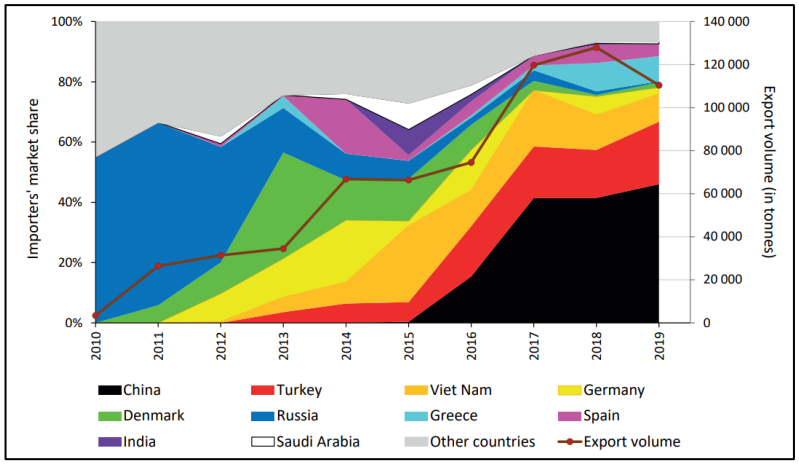


Figure 24. Volume of fish meal export of Mauritania and importers' market shares (Thiao and Bunting 2022).

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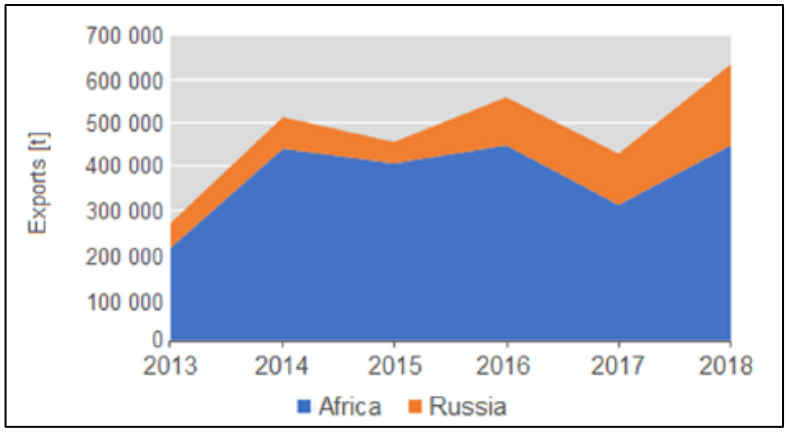


Figure 25. Export quantity and destination for frozen fish from Mauritania to other African countries and Russia. Source: Touron-Gardic et al 2022.

Target species

The main small pelagics especies are detailed in Table 33.

Round Sardinella

Round Sardinella (*Sardinella aurita*) reproduction features several spawning maxima (Baldé, Sow, et al., 2019) separated by more or less pronounced rest periods, and strong inter-annual variability linked to climatic conditions (Fréon, 1988).

The species *S. aurita* (Valenciennes, 1847) lives in tropical and subtropical regions of the eastern Atlantic and is found in large concentrations along the west coast of Africa in three main areas (Roy et al. 1989): between southern Morocco (Western Sahara) and Guinea (26 ° -10 °N), Côte d'Ivoire and Ghana (7 ° - 5 °N) and further south between Gabon and southern Angola (0 ° -18 °S) (Figure 3) (Froese & Pauly, 2016).

Sardinella aurita is a gregarious species, whose individuals move in schools, making seasonal migrations (Boëly et al., 1982). Figure 18 illustrates the migratory movements of the West African stock, linked to water temperature and plankton richness (Whitehead, 1985). *S. aurita* populations in north-west Africa move parallel to the coast in search of convergence zones near upwellings (Boëly et al. 1982). These upwellings of cold water bring mineral salts that enable the development of phytoplankton and then zooplankton, which S. *aurita* feeds on.

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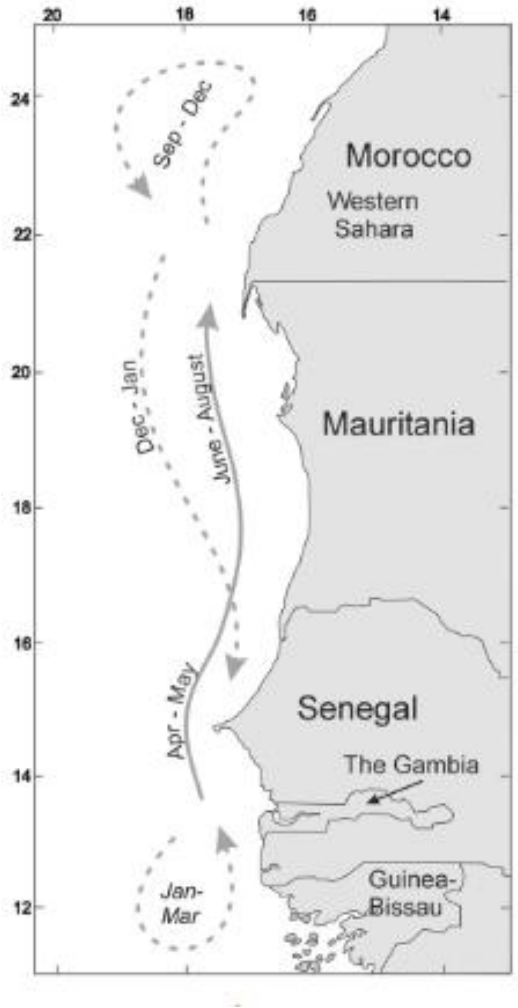


Figure 26. Migratory pattern of Sardinella aurita in West Africa, reflecting regional hydrographic characteristics and seasonality, i.e. upwelling seasonality with an annual alternation of warm (wintering season) and cold (upwelling season) water (Boëly, 1982; Zeeberg et al., 2008).

Flat sardinella

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Sardinella maderensis has a very coastal distribution, most often occupying depths of less than 50m. It is abundant in the warm season. The main nursery is north of Cap Timiris. *S. maderensis*, less migratory than *S. aurita*, is a species with tropical affinities, tolerating temperature ranges from 20 to 23°C (Conand & Fagetti, 1971; Marchal, 1991). However, according to Ben-Tuvia (1960), depending on the region, it can tolerate water temperatures ranging from 15°C (in Algeria) to 25°C and salinities ranging from 20 ‰ in the estuary of major rivers (Niger, Congo, Nile) to 40 ‰ in the eastern Mediterranean. Large individuals (> 24 cm) are poorly represented in Senegal, while in Mauritania the maximum size is 32 cm (fork length) (Fréon, 1988) (Fréon 1988. *S. maderensis* feeds on plankton such as diatoms, dinoflagellates and crustacean larvae (Hilton-Taylor, 2000).

Sardinella maderensis is a pelagic fish of the Clupeidae family. It is found from the southern Mediterranean to Angola. This species is found from north to south of the Mauritanian EEZ.

Horse mackerel

Trachurus trecae has distinct breeding, feeding and wintering areas. Migration is probably determined by water temperature and the availability of prey organisms (Cheung et al., 2005). Its range extends from Morocco to Angola (Bianchi et al. 1999). *Trachurus trecae* is a bentopelagic species, generally found near the bottom (15 - 22°C) between 20 and 100 m depth; sometimes also pelagic and near the surface at times (Bowker 2013). It breeds in warm-water regions off the coast of Mauritania and the Moroccan Sahara (Arkhipov, 2009). Juveniles are found in subtropical and tropical waters (Bowker 2013). The species' diet consists of fish, squid and crustaceans (FAO, 2018).

Black horse mackerel in general (*Trachurus sp,* Carangidae, L., 1758) are semi-pelagic fish, widely distributed in the sea and supporting large fisheries. They are generally found on the continental shelf: from the West African islands of Cape Verde (Crawford, 1981), to the northern Norwegian and North Seas (Knijn et al., 1993), as well as in the Mediterranean (Tsangridis & Filippousis, 1991) and Black Seas (Shiganova, 1998).

Anchovy

The stock structure of the European anchovy in Northwest Africa is not truly known, however an assessment unit in the subregion is considered by FAO to conduct stock assessments (FAO 2020). However, Bacha et al. (2014) recently identified 3 populations in: Algero-Provençal Basin, southern Alborán Sea and Northwest Atlantic (Morocco and Gulf of Cadiz); although the study does not cover the whole assessment unit area.

The species is captured in a small pelagic fishery that also targets European pilchard *Sardina pilchardus* (central and southern stocks), sardinella *Sardinella* spp., horse mackerel *Trachurus* spp. and chub mackerel *Scomber japonicus* (FishSource 2023).

Mackerel

The chub mackerel (*Scomber japonicus*) is a pelagic species occurring over the continental shelf and living tropical, subtropical, and partly moderate latitudes of all the three oceans (Habashi et al 1987).

Sardine

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Sardine (European pilchard) is by far the most important of these species for the fishery, being some of its main characteristics that these species are all fast-growing and short-lived, maturing young and reproducing in large quantities; they are highly mobile, and dependent on food resources; and that the distribution of their eggs, larvae and food are determined by environmental conditions which fluctuate each year (Gascoigne 2019). Regarding its morphology, *Sardina pilchardus* is an elongated, fusiform-shaped fish of oval section and laterally compressed. The sardine has a pointed snout and terminal mouth, reaching a length of 27 cm (90% of its total length can be reached during the first year). In the Northwest Africa region, the size of the Sardine increases from North to South, probably due to the trophic richness of the environment and the temperature of the upwelling phenomenon (Mounir et al. 2022).

The stock structure of the European pilchard (or commonly called sardine) population is distributed in the Northeast and Eastern Central Atlantic, the Mediterranean and Black Sea (FishSource 2023). Two assessment units are delineated by the FAO/CECAF Working Group on Small Pelagic Fish in Northwest Africa. The first stock is in zones "A + B" (Central) and the second stock is situated in zone "C" (Southern). The Central stock unit is distributed in waters from Cap Boujdour at 26ºN and north to the Moroccan port of Safi at 32ºN. The Southern stock unit is located in waters from Cap Boujdour and south through the southern limit of the species extent (FishSource 2023).

Table 33. Main target species of small pelagics for Mauritania.

English common name	Local common name	Scientific name	CITES listing	IUCN Red List status
Round sardinella	Sardinelle ronde	*Sardinella aurita*	Not Evaluated	Least Concern
Cunene horse mackerel	Chinchard	*Trachurus trecae*	Not Evaluated	Least Concern
Flat sardinella	Sardinelle plate	*Sardinella maderensis*	Not Evaluated	Vulnerable under criteria A2d.
Chub mackerel	Maquereau	*Scomber japonicus*	Not Evaluated	Least Concern
European Pilchard	Sardine	*Sardina pilchardus*	Not Evaluated	Least Concern
Atlantic Horse Mackerel	Maquereau	*Trachurus trachurus*	Not Evaluated	Vulnerable under criteria A2bd
Bonga Shad	Bonga	*Ethmalosa frimbiata*	Not Evaluated	Least Concern
False Scad		*Caranx rhonchus*	Not Evaluated	Least Concern

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European Anchovy	Anchois	*Engraulis encrasicolus*	Not Evaluated	Least Concern

Fishing areas

Mauritania has more than 700 kilometers of coastline, which is divided into the following zones: North (Nouadhibou), PNBA (National Park of Banc Arguin), Center, Nouakchott and South Nouakchott (Figure 18) (Bocoum et al 2023).

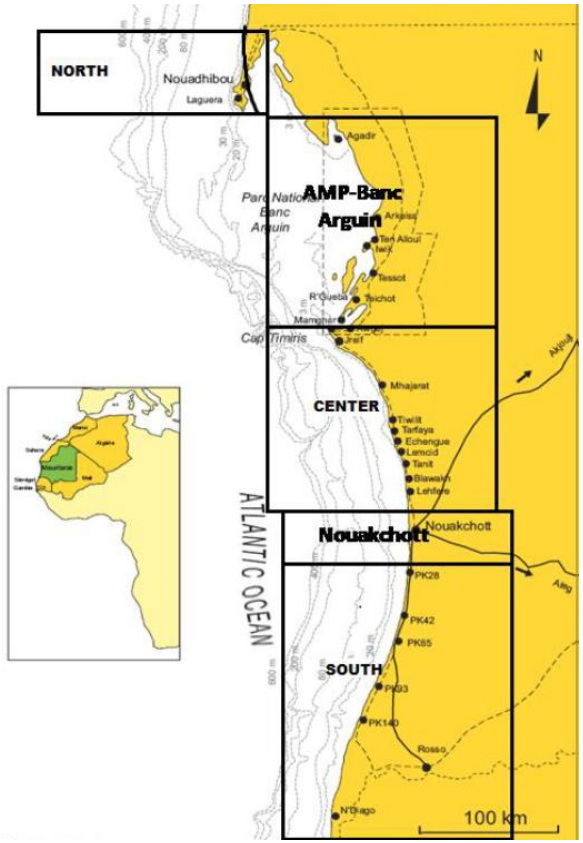


Figure 27. Geographical areas of Small pelagics fishing and landings. Source: Bocoum et al 2023.

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Stock assessment

The FAO Fisheries Committee for the Eastern Central Atlantic (CECAF) is a regional structure for scientific cooperation on stock assessment and providing management recommendations. CECAF has a working group for small pelagics, composed of national scientists from Morocco, Mauritania, Senegal, Gambia and Spain. The Small Pelagic Working Group meets annually to review and analyse data and conduct stock assessments for each small pelagic stock. CECAF has a range of stock assessment techniques, but generally the choice of approach is severely limited by the data available. IMROP also conducts its own stock assessments (Gascoigne et al. 2021a).

Stock status

According to the stock assessments of the FAO working group of 2021, the assessment and historical series on sardinella indicate that the sardinella and bonga stock is overexploited. In the case of Sardina, the two stocks are considered sustainably exploited; however, a precautionary approach is required due to the high sensitivity of its abundance in relation to hydroclimatic factors (Thiao and Bunting 2022) (
Table 35). Regarding management, the Working Group recommends, as was also mentioned in the previous years, a substantial reduction in fishing effort as soon as possible, and this reduction should be at least in the order of 50 percent with the perspective of achieving a substantial level of exploitation. In order to improve the state of the shared stocks of sardinella, the FAO working group also recommended to prohibit the use of flat sardinella for fishmeal. The working group also strongly recommends that national governments initiate mutual consultations on the joint management of sardinellas (FAO 2021).

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Table 34. Management status of main small pelagics species*. Source: Evans 2018.

Common name	Latin name	Stock	% of landings (2014-2016) *	Management	Category
Round Sardinella	*S. aurita*	FAO Area 34 - NW Africa	816,000t 36.2%	Management measures are not species specific.	Type 1 Category B
Cunene horse mackerel	*T.trecae*	FAO Area 34 - NW Africa	500,000t 22.2%	Management measures are not species specific.	Type 1 Category B
Flat Sardinella	*S. maderensis*	FAO Area 34 - NW Africa	251,100t 11.1%	Management measures are neither species nor stock specific.	Type 1 Category B
Chub mackerel	*S. japonicus*	FAO Area 34 - NE Atlantic	210,000t 9.3%	Management measures are neither species nor stock specific.	Type 1 Category B
European Pilchard	*S. pilchardus*	FAO Area 34 - NW African Southern Stock	192,000t 8.5%	Management measures are not species specific.	Type 1 Category B
Atlantic Horse Mackerel	*T. trachurus*	FAO Area 34 - NW Africa	157,900t 7.0%	Management measures are not species specific.	Type 1 Category B
Bonga Shad	*E. fimbriata*	FAO Area 34 - NW Africa	118,300t 5.2%	Management measures are not stock specific.	Type 1 Category B
False Scad	*C. rhonchus*	FAO Area 34 - NW Africa	6,800t 0.3%	Management measures are not stock specific.	Type 2 Category D
European Anchovy	*E. encrasicolus*	FAO Area 34 - NW Africa	4,400t 0.2%	Management measures are not stock specific.	Type 2 Category D
IFFO RS RESPONSIBLE SUPPLY		Total	2,256,500t 100%		

*Notes: TYPE 1 SPECIES (Representing 95% of the catch or more) Category A: Species-specific management regime in place. Category B: No species-specific management regime in place. TYPE 2 SPECIES (Representing 5% OF THE CATCH OR LESS). Category C: Species-specific management regime in place. Category D: No species-specific management regime in place.

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Table 35. Small pelagics stocks in CECAF- North in 2019. Source: Thiao and Bunting 2022.

Stock	State	Recommendations
Sardinellas (*Sardinella aurita, S. maderensis*)	Overexploited	Immediately and substantially reduce the fishing effort and catch in all the countries within the region (50 percent reduction is required).
Bonga (*Ethmalosa fimbriata*)	Overexploited	Effort and catch have to be reduced to below their 2017 levels to allow a level of biomass that can ensure sustainability.
Sardine (*Sardina pilchardus*)	Not fully exploited	The instability of this species vis-à-vis hydroclimatic changes requires a precautionary approach and a catch limit with close monitoring.

Fisheries management

In Mauritania, the national institutional framework is represented by the Ministry of Fisheries and Maritime Economy and the Secretariat on the State of the Environment. The MPEM is responsible of the design and implementation of the maritime sector development strategy and fisheries management. In addition, the IMROP is in charge of the scientific research, and of providing scientific advice on TACs and other management measures. The control and enforcement are provided by the GCM, who constitutes the institution in charge of the national fisheries monitoring, control and surveillance (MCS) system.

Fishery under regional management and Regional Fisheries Management Organizations (RFMO).

There is not an RFMO for small pelagics in West Africa, however there are several organizations as the CSRP and COMHAFAT, whose mandate is to support the countries of the region in the management of shared stocks, and in particular small pelagics (Gascoigne et al. 2021b). Nevertheless, none of these organizations have legal or regulatory powers, and so far, countries in the region are not working together to put in place coordinated management measures for shared stocks (Gascoigne et al. 2021b).

Registries

Licensing: All fishing vessels in Mauritania must be licensed, including artisanal, coastal and industrial vessels (Order 28 of 13 Jan. 2016). However, part of the artisanal fleet does not have a license (Inejih 2020 *in* Gascoigne et al. 2021b).

Vessel monitoring

The Coast Guard has an important role in the data collection system for the small pelagic fishery, as its officers are responsible for collecting landing declarations and logbooks for control purposes (areas, quotas, etc.) as well as VMS monitoring. The IMROP obtains copies of the logbooks from the Coast Guard (Gascoigne et al. 2021b).

Monitoring of landings

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The collection of scientific data is the responsibility of IMROP which has a network of observers along the coast and a data storage / analysis system, which is however more focused on the artisanal fishing and the PNBA than on coastal fishing (Gascoigne et al. 2021b). IMROP has struggled to find the personnel and equipment needed to implement a robust sampling program at landing sites (especially new ports) and fish meal factories, and to monitor the rate of capture and analysis of vessel logbooks, in order to obtain good data on catches, species composition, length frequency of catches and other biological data essential for stock assessments (Gascoigne et al 2021b).

Onboard monitoring

The Mauritanian Coast Guard (GCM) is the main institution of the national fisheries monitoring, control and surveillance (MCS) system. The GCM is a security force responsible for civil action in Mauritanian waters. It is responsible for the MCS of fishing activities, the search for people and the rescue at sea. Due to a lack of human, logistical and financial resources, however, the GCM cannot fully play the role that is vested in it (control, in the harbor, at the quay, in warehouses and fishing factories).

Electronic monitoring

Control measures for fishing activities have been reinforced by the obligation to equip industrial and coastal fishing vessels with VMS beacons and the modernization of control vessels at sea. However, the effectiveness of this system still stumbles on the absence of tracking devices at the level of the artisanal segment (VMS, radar reflectors, AIS). Controls of artisanal fishing activities, especially outside the prohibited zone of the PNBA, are always difficult due to the absence of a reliable register of boats and the non-respect of landing points. Research and findings of offenses related to the capture of juveniles remain difficult (Gascoigne et al 2017).

Regulations

There are a variety of generic fishery management measures in Mauritania, but there is no species-specific or small pelagic multispecies management plan or harvest strategy in place. There is a partial, multispecies TAC applicable to the EU fleet fishing under FPA agreement in Mauritania.

The main regulations in Mauritania are briefly summarized below (Gascoigne, 2021a):

• All fishing vessels must be licensed, including artisanal, coastal and industrial vessels (Order 28 of 13 Jan. 2016).

• TAC and quotas per fleet and per “concession” (vessel / factory owner company), based on a TAC set at 1.353 million tonnes for all small pelagic species combined (Circular 13 of 1 March 2016).

• Zoning aims to separate the three main fleets (artisanal, coastal and industrial) according to their distance from the coast (decree 2015-159, revised in order 992 of 2019 and message 41 of April 24, 2020).

• A minimum mesh size for seines and pelagic trawls of 40 mm.

• Since 2020, it is not allowed to land *S. aurita*, horse mackerel, croaker or yellow mullet for fish meal, while 20% of the remaining catches must be landed for human consumption (letter from the Ministry and the Coast Guard, Feb. 4, 2020).

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• Vessels (with the exception of canoes) must land in an approved port.

• Vessels (with the exception of canoes) must have a VMS. They must complete logbooks and declare their catches at the end of each trip. Canoes must fill out "fishing sheets" for each trip (order 264 of 9 av. 2018).

• The Banc d'Arguin National Park represents 30% of the Mauritanian coastal area, where motorized fishing is prohibited. Only a 114 sailfish vessels are allowed to fish in this area.

Management plans

List the pertinent management plans of the fishery and current status:

- Small pelagics management plan published in 2022.

Fisheries agreements

Fishing agreements between EU and Mauritania have been in force since August 1990. The EU-Mauritania Sustainable Fisheries Partnership Agreement (SFPA) is worth €61.625 million per year and is currently the EU's largest fisheries agreement with a third country, both in terms of volumes and fees (Touron-Gardic et al 2022). A new agreement for the period 2021–2026 has been recently concluded, which retains similar fishing possibilities to the previous agreement (232,500 t/year and an optional 15,000 t/year in reserve). However, the price of catches now varies according to the species, whilst there is provision for reducing the closed area for pelagic trawlers from 20 to 15 nautical miles in some parts of the EEZ following the implementation of a strategy dedicated to the conservation of sardinella (Touron-Gardic et al 2022).

Bycatch

In Mauritania, measures are in place to protect Endangered, Threatened and Protected (ETP) species; the fishing code prohibits the targeting of marine mammals, seabirds and turtles. The Parc National de Banc d'Arguin (PNBA) is in place to protect populations of seabirds, cetaceans and turtles in particular (Gascoigne et al 2021b).

Interaction with ETP species

Purse seiners interactions with ETP species are limited encountering few demersal species (Evans 2018). Yet, rumours of catches of jewfish by coastal seine boats must be verified. Risks of accidental catches of monk seal (a species that has been classified as threatened), dolphins and turtles by purse seines are not negligible (Evans 2018).

Interaction with protected areas

Measures are in place in Mauritania to protect these species: the Code des Pêches forbids targeting of marine mammals, seabirds and turtles. The PNBA protects seabird populations, cetaceans and turtles, as well as their habitat (Gascoigne et al 2021b). Marine protected areas in Mauritania are listed in Table 36.

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Table 36. Marine protected areas in Mauritania.

Name	IUCN management category	WDPA ID	Link
Banc d'Arguin	II	797	https://www.protectedplanet.net/797
Banc d'Arguin	Not Reported	17726	https://www.protectedplanet.net/17726
Parc national du banc d'Arguin	Not Applicable	20388	https://www.protectedplanet.net/20388

Impacts on the marine environment

Mauritanian marine ecosystems are destabilized by anthropic impacts, and fishing is considered to have a big impact (IMROP 2013).

Fishery Improvement Project (FIPs)

FIPs reported in Mauritania are detailed in Table 37.

Initiatives working with the fishery

GREPPAO: Fisheries Management and Resilience small pelagics in West Africa Mauritania

The objective of the GREPPAO action (2017-2024) is to contribute to the achievement of the overall objective of the PESCAO Programme which is to improve the contribution of fisheries resources to sustainable development, food security and poverty reduction in West Africa.

The specific objectives of the GREPPAO action are:

- Improve the contribution of small pelagic transboundary (Ppt) fisheries to the food security of West African populations.
- Increase the added value created throughout the fisheries sector specific to the Pt.
- Contribute to the management of migratory fisheries related to Ppt.

Table 37. FIPs in Mauritania. Source: Fisheryprogress.

FIP name	Type	Status	FIP lead entity	FIP identification number
Atlantic Ocean blue shark and swordfish - surface longline (FIP-BLUES)	Comprehensive	Active	ANECTEAM (Asociación Nacional de Empresas Comercializadoras y Transformadores de	11890

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			Especies Altamente Migratorias)	
Atlantic Ocean tuna - purse seine (Capsen & Grand Bleu S.A.)	Comprehensive	Active	Key Traceability	13544
Atlantic Ocean tuna - purse seine (GSK Marine S.A.)	Comprehensive	Active	Key Traceability	16837
COMPLETED Atlantic Ocean tropical tuna - purse seine (OPAGAC)	Comprehensive	Completed	OPAGAC	1521
Eastern Atlantic Ocean tuna - pole & line	Comprehensive	Active	Thai Union	11420
Mauritania small pelagics - purse seine	Comprehensive	Active	IMROP	9490
PROSPECTIVE Mauritania octopus - bottom trawl, jig & pot/trap	Prospective	Active	AMPEP/SMCP	20987

“Our Fish” – Tackling industrial fishmeal and fish oil production in West Africa

The main objectives of the project (2022 – 2025) are:

- Improve transparency of finance driving the exploitation of the small Pelagic fishery and FMFO industry in West Africa.
- Build a robust body of evidence spotlighting the realities underpinning FMFO production in West Africa, to be used in targeted corporate
- and policy campaigns.
- Build grassroots capacity to act on information and advocate on the need to address the impacts of FMFO.
- Support effective policy decisions at regional and national levels and reinforce protection of shared pelagic fish stocks.
- Ensure an effective, engaged community of actors continue to work in partnership to guarantee the health of small pelagic fish stocks in West Africa during and beyond the project.

PROMOPECHE/ Spanish Agency for International Development (2017-2024)

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Promotion of employment and improvement of the living conditions of artisanal coastal fishermen, young people and women around the protected natural areas of the northern sector of Mauritania,

Specific objectives:

- OS.1 - Integrate the disadvantaged sectors of the city of Nouadhibou into the labor market through the processing of fish products and the realization of diversified economic activities in favor of fishing families.
- SO.2 - Maintain the employment-generating capacity of the artisanal fishing sector, through an approach of sustainable exploitation of resources and reduction of post-harvest losses.
- SO.3 - Improve training conditions for Mauritanian institutions on the conservation and responsible exploitation of the fishing zone.
- OS.4 - Raise public awareness about more responsible and sustainable fishing.

Shared sardinella: Supporting the implementation of the ecosystem approach to fisheries for the management of shared sardinella stocks in northwest Africa (2017 – 2022) Morocco, Mauritania, Senegal and Gambia

The long-term objective of the programme is to support sustainable fisheries to improve food and nutrition security for people in partner countries.
The Shared sardinella projects centre around two main components:

- Development of knowledge and the strengthening of capacities in
- support of fisheries management planning processes in line with the EAF for the shared sardinella stocks.
- Development, implementation and follow-up to management systems aligned with the EAF and harmonised at the regional level.

Towards Sustainable Management of the Canary Current Large Marine Ecosystem (CCLME) – Initial Support to SAP Implementation (2020-2023)
Cabo Verde, Guinea, Guinea-Bissau, Mauritania, Morocco, Senegal and The Gambia

Objective: To create enabling conditions for effective implementation of the Canary Current Large Marine Ecosystem Strategic Action Programme (SAP).
Expected outcomes:

- Outcome 1.1: Management of the CCLME strengthened with the development of mechanisms for cooperation, partnerships and financing of the SAP.
- Outcome 2.1: Improved knowledge and understanding of the state of the CCLME including fish stocks, vulnerable species and habitats and ecosystem functioning, climate change impacts on the resources and fishing communities.
- Outcome 2.2: Strengthened capacities to enable implementation of an ecosystem approach to fisheries (EAF) in the context of broader multisectoral ecosystem management goals.
- Outcome 3.1: Effective and efficient results-based management and knowledge sharing.

WA8-Improving the management of small pelagics Mauritania, Senegal, the Gambia, Guinea, Guinea Bissau and Cabo Verde (2020 – 2022)

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We aim to reduce the over-exploitation of small pelagics through a more sustainable management of the stocks and a more effective protection of the main critical coastal sites, by:

- improving data collection and scientific knowledge of stocks and critical sites of small pelagics
- building capacity for effective management of critical sites and sustainable exploitation of small pelagics supporting civil society advocacy for transparency and implementation of small pelagic fishery regulations strengthening and making the partnership sustainable

Cooperation agreement on maritime fisheries and aquaculture between Morocco and Mauritania (Established in March 11, 2022, and repeals and replaces the cooperation agreement in the field of maritime fisheries signed between the two parties in Nouakchott on June 13, 2000).

This agreement includes, among others:

- Cooperation in the field of maritime training and activities.
- Cooperation in scientific and technical research.
- Cooperation in the management and development of fisheries.
- Cooperation in the area of processing and marketing of fishery products.
- Cooperation against IUU fishing.

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SWOT analysis

List key strengths, weaknesses, opportunities and weaknesses are detailed in Table 38.

Table 38. SWOT analysis for the small pelagics fishery of Mauritania.

Strengths	Weaknesses
• An updated Small pelagics Management plan was published in 2022. • Since 2018, Mauritanian is part of the FITI initiative. • A small pelagic FIP is in place and has an "A score" in the progress of rating.	• Stock status of sardinellas is uncertain (flat sardinella) or depleted (round sardinella), the harvesting strategy is totally inadequate, and the data collection system is mediocre in the region (Gascoigne et al 2021a). • No detailed information on the impact on ETP species.
Opportunities	**Threats**
• Regional management of stocks must be encouraged.	• FMFO industry is affecting the status of small pelagics stocks (Thiao & Bunting, 2022). • No market regulation policy has been initiated by States and the regional commissions (Bara Deme et al 2023).

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Literature

Arkhipov, A. G. (2009). Seasonal and interannual variation of ichthyoplankton off Mauritania. Journal of Ichthyology, 49(6), 460-468.

Bacha, M., Jemaa, S., Hamitouche, A., Rabhi, K., and Amara, R. (2014). Population structure of the European anchovy, Engraulis encrasicolus, in the SW Mediterranean Sea, and the Atlantic Ocean: evidence from otolith shape analysis. ICES Journal of Marine Science, doi: 10.1093/icesjms/fsu097http://icesjms.oxfordjournals.org/content/early/2014/06/11/icesjms.fsu097.full.pdf+html

Baldé, B. S., Sow, F. N., Ba, K., Ekau, W., Brehmer, P., Kantoussan, J., Fall, M., & Diouf, M. (2019). Variability of key biological parameters of round sardinella Sardinella aurita and the effects of environmental changes. Journal of Fish Biology, 94(3), 391-401. https://doi.org/10.1111/jfb.13903

Bianchi, G., Carpenter, K.E., Roux, J.P., Molloy, F.J., Boyer, D., & Boyer, H.J. (1999). FAO species identification guide for fishery purposes. Field guide to the living marine resources of Namibia. Rome: FAO.

Bocoum, W., Sidi, M. T., Bouzouma, M., & Daim, A. (2023). Fisheries at the heart of a development issue in Mauritania: Small coastal pelagics between market logic and nutritional rationality. International Journal of Fisheries and Aquatic Studies 11(1): 41-48.

Boëly, T. (1982). Etude du cycle sexuel de la sardinelle ronde (Sardinella aurita Val. 1847) au Sénégal. Océanographie tropicale, 17(1), 3-13.

CCLME Project (2015). Canary Current Large Marine Ecosystem (CCLME) Transboundary Diagnostic Analysis (TDA). CCLME Project Coordination Unit, Dakar, Senegal. 140 pp. Also available in French.

Cheung, W. W., Pitcher, T. J., & Pauly, D. (2005). A fuzzy logic expert system to estimate intrinsic extinction vulnerabilities of marine fishes to fishing. *Biological conservation*, *124*(1), 97-111.

Conand, F., & Fagetti, E. (1971). Description et distribution saisonnière des larves de sardinelles des côtes du Sénégal et de la Gambie en 1968 et 1969. *Cah. ORSTOM, sér. Océanogr*, *9*(3), 293-318.

Crawford, R. J. M. (1981). Distribution, availability and movements of pilchard Sardinops ocellata off South Africa, 1964-1976. *Fisheries bulletin*, *14*, 1-46.

Dème El B, Failler P, Fall AD, Dème M, Diedhiou I, Touron-Gardic G, Bocoum W and Asiedu B (2023) Contribution of smallscale migrant fishing to the emergence of the fishmeal industry in West Africa: Cases of Mauritania, Senegal and the Gambia. Front. Mar. Sci. 10:871911. doi: 10.3389/fmars.2023.871911

Estrada C. (2023). Gender Analysis. Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems. Project Preparation Phase (PPG).

Evans T. 2018. Mauritanian Small Pelagics - Purse seine. Global Standard for Responsible Supply of Marine Ingredients Fishery Assessment Methodology and Template Report.

FAO (2021). FAO working group on the assessment of small pelagic fish off northwest Africa 2021. Fishery Committee for the eastern Central Atlantic.

FAO. (2018, septembre 11). Species fact sheet T. trecae. http://www.fao.org/fishery/species/3106/en

FishSource (2023). European pilchard NW Africa southern profile. https://www.fishsource.org/stock_page/782

FITI (2022). Fisheries Transparency Initiative. TAKING STOCK Online Transparency of Fisheries Management Information Republic of Mauritius 2022 Detailed Assessment Report.

Fréon, P. (1988). Réponses et adaptations des stocks de Clupéidés d'Afrique de l'Ouest à la variabilité du milieu et de l'exploitation : Analyse et réflexion à partir de l'exemple du Sénégal [Thèse de doctorat]. Université d'Aix Marseille II.

Froese, R., & Pauly, D. (2016). FishBase : World Wide Web Electronic Publication Version [Version 31]. http://www.fishbase.org

Gascoigne J, Inejih CA and Y Jaridi (2021a). Mauritania small pelagics fishery by the coastal fleet summary report. Summary. Marine Stewardship Council. GB2786. Summary Report.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Gascoigne J, Inejih CA and Y Jaridi (2021b). Rapport de pré-évaluation, Pêcherie de courbine par filet maillant (filet courbine) et pirogue, Mauritanie. Marine Stewardship Council. GB2786. Final Report.

Gascoigne J. (2019). Moroccan sardine fishery: assessment in relation to the MSC standard. FINAL – 29 October 2014. REVISED 17 January 2019.

Habashi, B. B., Kompowski, A., & Wojciechowski, J. (1987). Food and feeding of chub mackerel, Scomber japonicus Houttuyn, 1782 in the north-west African shelf. Acta Ichthyologica et Piscatoria, 17(1), 77-92.

Hilton-Taylor, C. (2000). *2000 IUCN red list of threatened species: Vol. XVIII*. IUCN, Gland (Suiza). Species Survival Commission.

Kébé M & M Mayif. (2022). Rapport de la Mauritanie à l'Initiative pour la Transparence des Pêches (FiTI) Années : 2019 et 2020. Préparé par Le Groupe Multipartite National (GMN) FiTI de la Mauritanie.

Khallahi B., H. Taleb, C. B. Barham, B. M. Habibe, E. A. Kane et M. E. Bouzouma (Eds). 2020 -Aménagement des ressources halieutiques et gestion de la biodiversité au service du développement durable.

Knijn, R. J., Boon, T. W., Heessen, H. J., & Hislop, J. R. (1993). Atlas of North Sea fishes. ICES cooperative research report, 194, 268.

Marchal, E. (1991). Nanisme et sédentarité chez certaines espèces de. *ORSTOM*, 201-208.

Ministère de l'Environnement et du Développement Durable. (2013). Projet de stratégie nationale pour l'établissement et la gestion d'un réseau national représentatif des zones d'intérêt pour la biodiversité marine et côtière (2014 – 2020). Republique Islamique de Mauritanie.

Pazmiño A. (2023). Baseline report on indigenous peoples´ relationship with target fisheries and seafood value chains. Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems (GMC2).

Thiao, D. and Bunting, S.W. (2022). Socio-economic and biological impacts of the fish-based feed industry for sub-Saharan Africa. FAO Fisheries and Aquaculture Circular No. 1236. Rome, FAO, WorldFish and University of Greenwich, Natural Resources Institute. https://doi.org/10.4060/cb7990en

Touron-Gardic, G., Hermansen, Ø., Failler, P., Dia, A. D., Tarbia, M. O. L., Brahim, K., ... & Arias-Hansen, J. (2022). The small pelagics value chain in Mauritania–Recent changes and food security impacts. Marine Policy, 143, 105190.

Veiga P. (2020). A first analysis of key small pelagics, octopus, and cuttlefish fisheries for three countries in Northwest Africa. SFP, May 2020.

Veiga P. (2023). A first analysis of key small pelagics, octopus, and cuttlefish fisheries for three countries in Northwest Africa. SFP, June 2023.

Whitehead, P. J. P. (1985). Clupeoid fishes of the world (suborder Clupeoidei). Synopsis, 125(7), 1-303.

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GMC2 project fishery profile

Fishery: Small pelagics

Country: Senegal

**Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current
and the Pacific Central American Coastal
Large Marine Ecosystems.**

Project Preparation Phase (PPG)

Submitted by

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Rolando Labraña Cornejo
Fisheries Consultant

Bocar Sabaly BALDE
ISRA/CRODT

June 2023

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Overview of the country´s fisheries sector

Senegal is the world's 39th top fishing country, with an average wild production (2014 - 2018) of almost 500,000 metric tons annually (Veiga 2020). Senegal is the fifth African top export of fishing products, with an average of exports (2017 - 2020) of almost 491.919 (x 1000 USD) annually, representing Africa's 6.7% of total African exports (Veiga 2023). Senegal's fishing fleet is by far the largest in the West African sub-region (including Nigeria and Ghana). In 2005, the number of fishing units stood at 13,903, while the latest census in 2015 reported 18,284 fishing units, over 90% of which were motorised (CRODT, 2016).

In Senegal, agriculture, forestry, and fishing represented 16.6% of GDP (2018) (Veiga 2020). The total capture production between 2017-21 annual average (% of total annual average) was 501.611 tonnes, being the most important captured species the madeiran sardinella, the round sardinella and the skipjack tuna representing in total more than 40% (Veiga 2023). As for the exports, the three most important groups between 2017 and 2020 exports were Small pelagics (37%), Misc marine fish (31%) and Tuna (14%). In addition, the most important seafood commodities were i) fish (frozen, nei) ii) jack and horse mackerel (frozen) and iii) sardines, sardinellas, brisling or sprats (frozen) with 28,76%, 15,58% and 13,02% of the total exports (Veiga 2023). In terms of value, Misc marine fish (31%), Small pelagics (18%), Tuna (17%) and Octopus (11%) were the most important exports. Also, in terms of value, the most exported seafood commodities were i) Fish (frozen, nei) ii) Octopus (frozen) iii) Fish (fresh or chilled, nei) iv) Jack and horse mackerel (frozen) representing 20,49%, 10,52%, 9,55% and 8,46% respectively (Veiga 2023).

In recent years, exports of fishery products have experienced significant growth, mainly on the continents of Africa and Asia. During 2019, Africa absorbed a quantity of 205,424.35 tons against 183,637.04 tons in 2018, an increase of 21,787.31 tons in absolute value and 11.86% in relative value. The main importing country remains Ivory Coast, which has become a major export market. Exports to other countries such as Burkina Faso, Mali and Ghana, increased in 2019, which placed African exports in 1st place in terms of Senegal's exports of all kinds, i.e., more by 70%. Exports to Europe decreased, from 50,512.77 tonnes in 2018 to 38,119.14 tonnes in 2019, i.e., a drop of -24% in relative value. For the Asian continent, the volume exported represents 29,201.40 tonnes, an increase of 12.22% in relative value compared to 2018 (26,028.78 tonnes). As for exports to America, they increased with a weight of 12,492.10 tons in 2019 against 11,998.98 tons in 2018, i.e., a significant increase of 493.12 tons (DPM 2019).

In addition, the artisanal fishing sector provides around 60,000 direct jobs and contributes, directly and indirectly, to providing an income for around 600,000 people, i.e. one Senegalese active in fishing out of six (Greenpeace, 2012).

Institutional framework

The fisheries sector was successively part of the Ministry of Rural Economy (from 1959 to 1969), the Ministry of Rural Development (from 1969 to the 80s). Since then, the fisheries sector has been managed by the Secrétariat d'Etat de la Pêche maritime. It was only in 1993 that the fisheries sector entrusted to a full Ministry: The Ministry of Fisheries and Maritime Transport. This Ministry became the Ministry of Maritime Economy in 2004.

Under Decree 2004-572 of April 30, 2004, the Ministry of the maritime economy is responsible, among other things, for the implementation of government policy in the field of fisheries, aquaculture, merchant marine management and exploitation of the seabed.

The Local Artisanal Fisheries Councils (CLPA)

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The Local Artisanal Fisheries Councils (CLPA) were set up by the Maritime Fishing Code (Law 98-32 of 14 April 1998), with the aim of promoting the participation of professionals and their involvement in discussions and initiatives concerning the planning and development of fishing.

These local councils must bring together local representatives of the administration, local authorities, artisanal fishers (from different groups), processors, fishmongers and fish farmers.

It is responsible for:

- Organising the fisheries sector,
- Setting up and revitalising fishing councils,
- Defining local fishing standards,
- Organising fishing seasons and defining fish farming and aquaculture development programmes.

Professional organisations

Both small-scale and industrial fishers have set up associations, either on their own initiative or at the instigation of the State.

Industrial fishing professionals are brought together in various associations, the best known of which are the Groupement des Armateurs et Industriels de la Pêche Maritime au Sénégal (GAIPES) and the Union des Pêcheurs et Mareyeurs Exportateurs du Sénégal (UPAMES).

Artisanal sea fishing professionals are brought together in groups, the most prominent of which are the Fédération Nationale des Groupements d'Intérêt Economique de Pêcheurs (FENAGIE-PECHE) and the Fédération Nationale des Groupements d'Intérêt Economique de Mareyeurs du Sénégal (FENAMS), the Collectif National des Pêcheurs artisanaux du Sénégal (CNPS), the Union Nationale des GIE de Mareyeurs du Sénégal (UNAGIEMS), the Fédération Nationale des Femmes Transformatrices de Produits halieutiques et Micro-mareyeuses (FENATRAMS). These organisations are represented in the regions, departments and maritime localities.

Their main aim is to defend the interests of their members.

In 2003, these umbrella organisations came together to form a consultation body known as the Conseil National Interprofessionnel de la Pêche au Sénégal (CONIPAS). However, there are significant number of fishers outside the associative movement.

Fishing professionals are also members of the Dakar Chamber of Commerce, Industry and Agriculture (CCIAD). This is a public establishment of a professional nature. It is responsible for defending the general interests of the various economic sectors and is in close relationship with the public authorities. The CCIAD is therefore an advisory body for all matters within its remit that are referred to it by the State authorities. It is also a promotional body, as it can and must initiate

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suggestions and proposals in all economic, social, tax, legal and customs fields, and on all issues concerning the economic life of its consular area, helping to improve the prosperity of its member companies. Each region of the country has a regional chamber of commerce, industry and agriculture.

The institutional framework

Directorate of Maritime Fisheries

The Directorate of Maritime Fisheries (DPM) is responsible for designing and implementing policies for the development of maritime fisheries. It is also responsible for enforcing regulations relating to the organisation and control of sea fishing activities. The main departments making up the DPM are, at central level, the Industrial Fisheries Division, the Small-scale Fisheries Division, the Maritime Fisheries Development Division, and the Improvement, Experimentation and Extension Division. The DPM has regional departments in each of Senegal's maritime regions.

Directorate of Fisheries Protection and Surveillance

Decree no. 2000-833 of 16 October 2000, which organises the Ministry of Fisheries, establishes the DPSP, which replaces the former Senegal Fisheries Protection and Surveillance Project. This project was set up in 1981, as part of cooperation between Senegal and Canada, to deal with threats to fisheries resources in the Exclusive Economic Zone (EEZ). Canadian funding came to an end in 1991 and the government, convinced of the urgent need for a fisheries surveillance system, sought ways and means of ensuring the structure's operation. The DPSP's mission is to protect and monitor the EEZ to ensure compliance with fisheries regulations. The DPSP has three divisions (administrative, operational and scientific) and coastal stations.

Directorate of Inland Fisheries (DPC)

Prior to March 2000, inland fisheries were the responsibility of the Ministry of the Environment. The Inland Water and Wildlife Management Division was responsible for implementing national policy in this area, initiating programmes to develop fishing and fish farming, and monitoring all activities in this sub-sector. This division was represented in certain regional Water and Forestry Inspectorates (Ziguinchor, Kolda, Saint-Louis).

Today, inland fishing is placed under the supervision of the Ministry of Fisheries by Decree no. 2000-833 of 16 October 2000.

Decree no. 010270 of 31 December 2003 governs the organisation and operation of the DPCA, which comprises the Inland Fisheries Division, the Aquaculture Division and the Resource Management and Development Division.

Fisheries Processing Industries Division

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Formerly a division of the DPM, the Fisheries Processing Industries Division was created in 2004. Its mission is to implement the policy defined for the processing, conservation and marketing of fishery and aquaculture products at industry level.

The Merchant Navy Directorate

Its mission is to implement the rules laid down by international conventions in the fields of maritime safety and marine environmental pollution. It is also responsible, among other things, for the design, preparation and application of legislation and regulations in the fields of fishing, commercial and pleasure vessel safety and marine environmental pollution. It comprises the Maritime Safety and Pollution Prevention Division, the Maritime Transport Division and the Seafarers, Maritime Labour and Training Division.

The Centre de Recherches Océanographiques de Dakar-Thiaroye (CRODT)

The Centre de Recherches Océanographiques de Dakar-Thiaroye (CRODT) is the department of the Institut Sénégalais de Recherches Agricoles (ISRA; www.isra.sn) specialized in fisheries and aquaculture sciences. Its mission is to contribute to the development of the marine and continental fisheries and aquaculture sector by (i) improving knowledge and creating new technologies, (ii) supporting professionals, administrations and development partners and (iii) monitoring scientific developments.

Co-management arrangements

The State, NGOs and development partners, as well as communities, to introduce measures aimed at reducing these negative impacts. The approach advocated by most of the stakeholders who have been working in this field for some years now has been to delegate power to grassroots stakeholders and to promote local co-management initiatives for resource management (Dieng et al, 1998, Mbaye, 2005).

Although local organisations such as the CLPAs are often cited as the co-management body, the Fisheries Administration is still the structure most recognised as being responsible for implementing and monitoring regulatory measures (Figure 28). This situation can be explained by the fact that not only does the Fisheries Administration ratify the measures taken by decree and penalise offenders, but also and above all by the fact that some stakeholders equate the CLPA with the Fisheries Administration, which provides the chair and secretariat. Nevertheless, this could mean a lack of visibility of the role of the CLPAs, not to say the local organisations of professionals before the Fisheries Administration.

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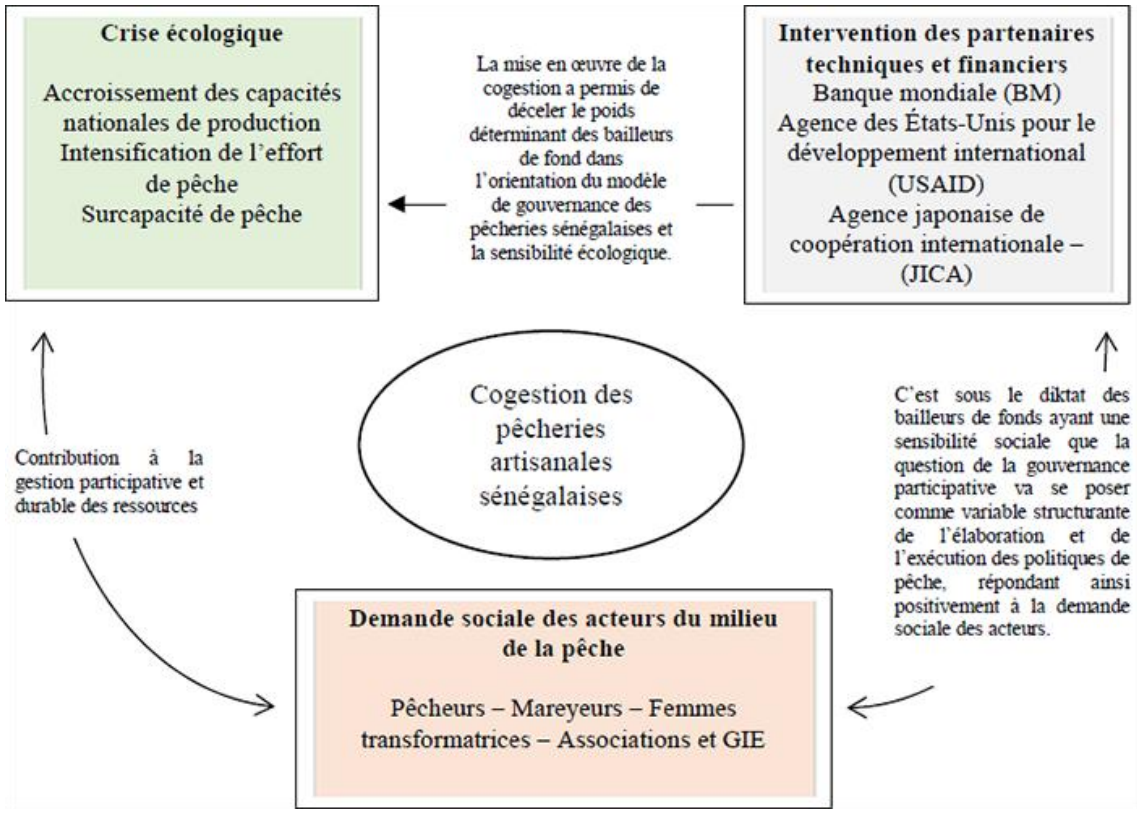


Figure 28. Socio-historical contours of the implementation of co-management in Senegal, against a backdrop of ecological crisis and intervention by technical and financial development partners in a strong context of social demand from stakeholders (Dème et al., 2022).

Regulatory framework

Specific regulations, policies or plans for fisheries sector in protected areas.

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Senegal has created marine protected areas in the framework of international environmental treaties, mainly the Convention on Biological Diversity (CBD). All CCLME countries have adopted a policy for the creation of MPAs to better preserve vulnerable habitats. Mauritania has a UNESCO World Heritage Sites called the Banc D'Arguin National Park (CCLME 2015).

Specific regulations, policies or plans for gender issues in the fisheries sector.

Senegal have made important progress in terms of adherence to international and regional commitments on gender equality, signing the United Nations Convention on the Elimination of All Forms of Discrimination Against Women "CEDAW", the International Labor Organization (ILO) Convention No. 100 on equal remuneration for men and women and The International Labor Organization (ILO) Convention No. 111 on Discrimination in terms of employment and occupation, the Beijing Declaration and Platform for Action and The Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa (Maputo Protocol) (Estrada 2023).

Moreover, the Emerging Senegal Plan (ESP), which is Senegal's only policy and strategy reference framework, includes in its programming the promotion of gender equity and equality as one of the principles that should accompany the development process. Indeed, as part of the economic and sustainable development of the biodiversity sector in Senegal, good governance requires the participation of all stakeholders in management so that the interests of artisanal fishers are legitimately represented in all processes. Accordingly, the Senegalese government has set up a National Strategy for Gender Equality and Equity, the aim of which is to: "To make Senegal an emerging country, without discrimination, where men and women will have the same opportunities to participate in its development and enjoy the benefits of its growth".

Senegal has signed and ratified the following international agreements:

- United Nations Convention on the Law of the Sea of 1982 (signed 1982 and ratified in 1984).
- Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing and
- The International Labour Organisation instruments: Work in Fishing Convention of 2007 (C188) (Member since 04.11.1960), and
- the Work in Fishing Recommendation of 2007 (R199).

Senegal is member of the following RFMOs and Regional Commissions.

- International Commission for the Conservation of Atlantic Tunas (ICCAT).
- Committee for the Eastern Central Atlantic Fisheries (CECAF).
- Ministerial Conference on Fisheries Cooperation Among African States Bordering the Atlantic Ocean (ATLAFCO) (COMHAFAT in French) (participating party).
- Sub-Regional Fisheries Commission (SRFC) (Commission Sous Régionale des pêches - CSRP in French).

Indigenous peoples, ethnic groups or communities in fisheries.

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In Senegal, the Wolofs are a typical ethnic group, representing almost half of the population. In addition, the Lébous are part of the Wolof community in Senegal. Traditionally fishers and farmers concentrated in the Cape Verde peninsula (Dakar) which they occupied when the first settlers arrived in the region. The other groups in Senegal, are the Diolas which are located mostly in Casamance (Deme et al 2023).

The Fisheries Transparency Initiative (FITI)

The Fisheries Transparency Initiative (FiTI) is a global multi-stakeholder partnership that aims to increase transparency and participation for greater sustainability in marine fisheries. Senegal has been slow since 2016 to complete the steps required to join this important FITI standard. However, professionals in Senegal's small-scale fishing sector have repeatedly expressed their desire to see the public commitment of His Excellency, the President of the Republic of Senegal, to have Senegal join the FITI initiative become a reality. The FiTI is an opportunity for Senegal to publicise the efforts made by the State to develop the fisheries sector.

Overview of the fishery

Fishing operations

In Senegal, small pelagics account for about 72% of landings. Over the period 2009-2018, an average of 315,000 tons of pelagics landed each year (Deme & Deme 2021). Today, sardinella catches represent 70% of the total catch of the Senegalese artisanal fishery in volume (Thiaw et al., 2017; Ba et al., 2019).

During the period 2010 to 2021, landings of small pelagics in Senegal were largely dominated by round sardinella (*Sardinella aurita*), flat sardinella (*Sardinella maderensis) and* bonga shad *(Ethmalosa fimbriata*), which account for an average of 36.3%, 36% and 6% of total landings of small pelagics respectively (CRODT and DPM 2022). *Scomber japonicus, Trachurus trecae, Trachurus trachurus* and *Mugil spp*. represent 5.2%, 4%, 2.3% and 1.3% of the landings respectively. Other pelagic species account for the remaining 8.4% of total small pelagic landings. The category 'other pelagics' includes all species with very low landings in Senegal (Baldé, 2019) (Figure 29).

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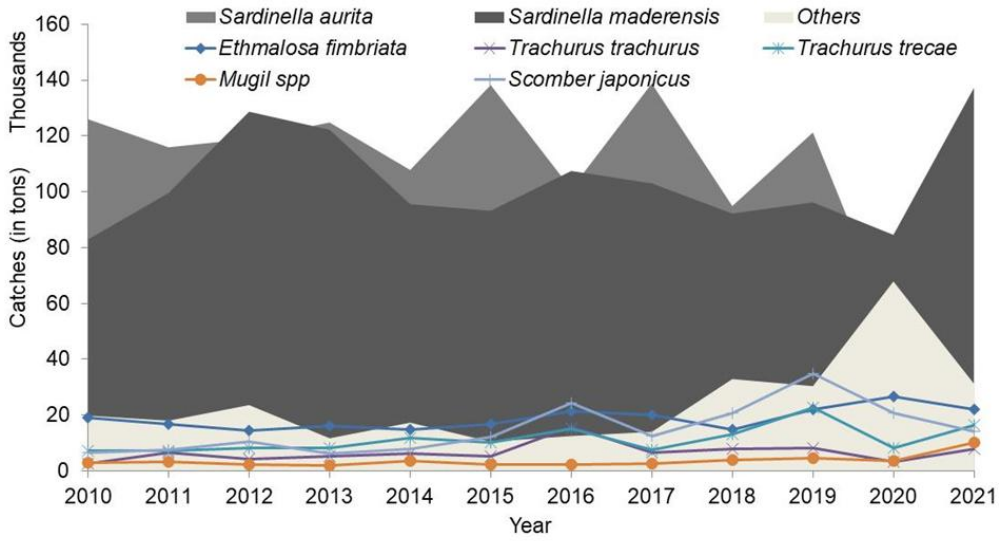


Figure 29. Annual landings of small pelagics from 2010 to2021. Source: CRODT and DPM 2022.

Small coastal pelagics are mainly operated in Senegal by an artisanal fleet and semi-industrial units (Déme et al., 2019). Artisanal fishing in Senegal accounted for 76% of landings in 2018. The artisanal fisheries catch data is very underfunded compared to the enormous scale of the task (20,000 canoes although only 11,000 possesses fishing licenses, and with landings of around 400,000 t/year (Baldé, 2019). The artisanal fleet consists of motorized pirogues, employing a range of different gears including purse seines, surrounding gill nets and beach seines (CCLME Project, 2015). Indeed, in Senegal, the pelagic fishery is by far the most important artisanal fishing activity, contributing about 70% of the total tonnage of catches landed by pirogues in Senegal (about 350,000 tons in 2010) (Ndiaye & Kébé, 2017). They are also the main resource for traditional processing activities (drying, smoking, fermentation, salting, etc.) and play an essential role in the diet of the Senegalese population (Ba et al., 2017). In addition, the artisanal fisheries sector provides around 60,000 direct jobs and contributes, directly and indirectly, to providing an income for around 600,000 people, or one in six Senegalese active in fishing (Greenpeace, 2012). It is seen as an alternative to industrial fishing, especially when one considers its food, social and economic, and even cultural, importance in developing countries. Indeed, comprising more than two-thirds of total landings, artisanal fishing in Senegal represents the largest marine fisheries sector over the past four decades (Thiao, 2012). It is practiced by several fishing communities using more than twenty fishing techniques following strategies that vary seasonally according to biological and socio-economic factors. The Senegalese fishing fleet is by far the largest in the West African sub-region (including Nigeria and Ghana). In 2005, the number of fishing units stood at 13,903, while the last census in 2015 reported 18,284 fishing units, more than 90% of which were motorised (Anonyme, 2016). The dynamism of artisanal fishing lies in its ability to adapt permanently to changes in the context of the activity (qualitative and quantitative availability of the resource, economic conditions of the moment with reference to the possibilities of selling the products and the levels of remuneration of the markets) (Binet et al., 2012). This strong reactivity of artisanal fishers is linked, among other things, to their good knowledge of the behaviour of fishery resources but also to their great organisational capacities in the face of a changing institutional environment and the appropriation of new techniques to exploit new resources (Binet et al., 2012). These dynamics have resulted in the adoption of

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fishing strategies and tactics involving several elements: migration, deferral of fishing effort, economic risk management, decapitalisation, vertical integration of the fisheries sector, and the development of other income-generating non-fisheries activities (Binet et al., 2010).

In 2019, Senegal reported 1249 purse seine units and 875 encircling gillnets distributed in the different fishing centres in the country (census of the canoe fleet conducted by the CRODT) (Deme & Deme 2021), although these species can also be caught with other gear (e.g., the drifting gillnet ("félé-félé")) which is also used to target mullets and other species (Gascoigne, 2021b). From the 1249 purse seines, 700 units operate exclusively in the Senegalese EEZ, 349 units in the countries neighbouring coastal areas (Mauritania, Guinea Bissau, The Gambia) under fisheries agreements and about 200 active canoes in Mauritania under charter contract concluded with Mauritanian operators for the supply of flour factories fish from Nouakchott and Nouadhibou. Since 2012, Senegal has not granted fishing possibilities for foreign fleets (Déme et al., 2019).

In Senegal, the landings of the industrial fishery of small pelagic species are negligeable compared with the artisanal fishery (DPM, 2018). The industrial pelagic fleet has almost disappeared; the large seiners disappeared in 1994 and the pelagic trawlers left in 1999. In recent years, the industrial fleet was composed of Russian trawlers and small local seiners called "sardiniers Dakarois" (FAO, 2013), targeting sardinellas (96 percent of landed species). The average catch in the last decade is around 3100 tonnes, of which 51 percent were round sardinella (CCLME Project, 2015).

Target species

Sardinella aurita

Biology

S. aurita reproduction (Figure 3) features several spawning maxima (Baldé, Sow, et al., 2019) separated by more or less pronounced rest periods, and strong inter-annual variability linked to climatic conditions in Senegalese coastal waters (Fréon, 1988). The first breeding period extends from May to July in waters with temperatures between 22 and 25°C and salinities between 35.5 and 36.5 ‰, while the second takes place in October-November, in waters with temperatures between 28 and 29°C and relatively low salinities (34.5 to 35.0 ‰) (Boëly, 1982; C. Conand, 1977). Young breeders only join older, sexually mature individuals at the end of the first breeding period between May and July. They are, however, the only ones to ensure the second egg-laying period, which takes place from October to November, as the adults are absent from Senegal. First spawning takes place between 12 and 20 cm fork length (FL), depending on locality (Ben-Tuvia, 1960). Oviposition is fractional for the same individual, and relative fecundity is very high (466 eggs/g), (Fréon, 1988). Female size at first sexual maturity (L50) is between 18.5 cm and 20 cm LF, and the sex ratio is close to 1 (Baldé, Sow, et al., 2019; F. Conand, 1977). *S. aurita* eggs are pelagic and between 1 and 2 mm in diameter (Ben-Tuvia, 1960). They hatch after around 24 hours (Conand, 1977), producing larvae that grow very rapidly, reaching 3 cm in a month before being brought ashore. According to Fréon (1988), three categories can be distinguished according to fish size: (a) individuals under 18 cm, juveniles; (b) individuals from 18 to 25 cm, young spawners; and (c) individuals over 25 cm, adults. *Sardinella aurita* is planktonophagous and has a mixed diet. When young, it feeds on phytoplankton and then switches to a zooplanktonophagous diet based on copepods and euphausiids. However, the proportion of the different components of the diet depends more on the planktonic composition of the environment than on the species or age of the predators concerned (opportunistic trophic behavior) (Medina-Gaertner, 1985).

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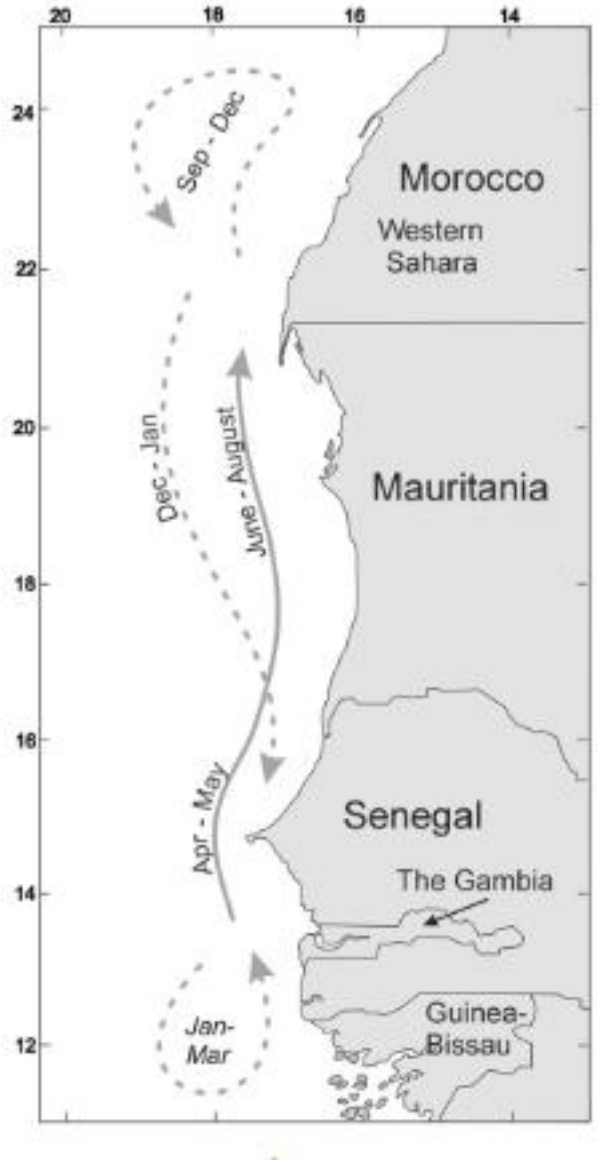
Figure 30. Sardinella aurita or round sardinella vernacular name Yabóy mërëg in Wolof, from the family Clupeidae, widely consumed by the Senegalese population (Photo credit B. S. Baldé 2018).

Geographical distribution

The species *S. aurita* (Valenciennes, 1847) lives in tropical and subtropical regions of the eastern Atlantic and is found in large concentrations along the west coast of Africa in three main areas (Roy et al. 1989): between southern Morocco (Western Sahara) and Guinea (26 ° -10 °N), Côte d'Ivoire and Ghana (7 ° - 5 °N) and further south between Gabon and southern Angola (0 ° -18 °S) (Figure 3) (Froese & Pauly, 2016). *Sardinella aurita* is also found in the western Atlantic Ocean, from Cape Cod (USA) to Argentina, including the West Indies and the Gulf of Mexico (Felder, 2009; Smith, 1997). It also inhabits the Mediterranean Sea (Boltachev & Karpova, 2014). In all regions, the species evolves preferentially in continental shelves where it prefers salty water (> 35 ‰) and warm temperatures (<24 °C) (Fréon, 1988). It is encountered near the surface of nearshore waters to a depth of 350 m beyond the continental shelf.

Sardinella aurita is a gregarious species, whose individuals move in schools, making seasonal migrations (Boëly et al., 1982). Figure 31 illustrates the migratory movements of the West African stock, linked to water temperature and plankton richness (Whitehead, 1985). *S. aurita* populations in north-west Africa move parallel to the coast in search of convergence zones near upwellings (Boëly et al. 1982). These upwellings of cold water bring mineral salts that enable the development of phytoplankton and then zooplankton, which S*. aurita* feeds on.

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Figure 31. Migratory pattern of Sardinella aurita in West Africa, reflecting regional hydrographic characteristics and seasonality, i.e. upwelling seasonality with an annual alternation of warm (wintering season) and cold (upwelling season) water (Boëly, 1982; Zeeberg et al., 2008).

Fisheries exploitation

The Senegalese artisanal fishery provides the bulk of total *S. aurita* landings. Two main fishing gears are used to target sardinella: the purse seine (ST) and the encircling gillnet (FME). The purse seine is used in both the northern and southern Senegalese fishing zones. The fishing unit is made up of two pirogues: a small pirogue (12 -15 m) carrying the net and a large pirogue (20 m) on board which the fish is loaded (Thiao, 2012). The length of the purse seine has increased from 200 to 400 m over the last twenty years (Deme et al., 2012). The encircling gillnet is used by 533 fishing units all along the Senegalese coast, of which 66% (353 units) operated in the Saloum area. Mbour and Joal were the most important landing sites for *S. aurita* until 2003 (Figure 5). These two localities had already seen a spectacular increase in landings in the 1980s. Landings at each site rose from less than 10,000 t / year to around 40,000 t / year. However, after 2004, the highest landings of *S. aurita* were recorded in Saint-Louis (Figure 32), while landings in Kayar (north of Dakar) also increased concomitantly. Large inter-annual variations in the number of fishing units are noted in the ST fishery. The number of units fluctuated between 40 and 500 between 1997 and 2010 (Thiao, 2012).

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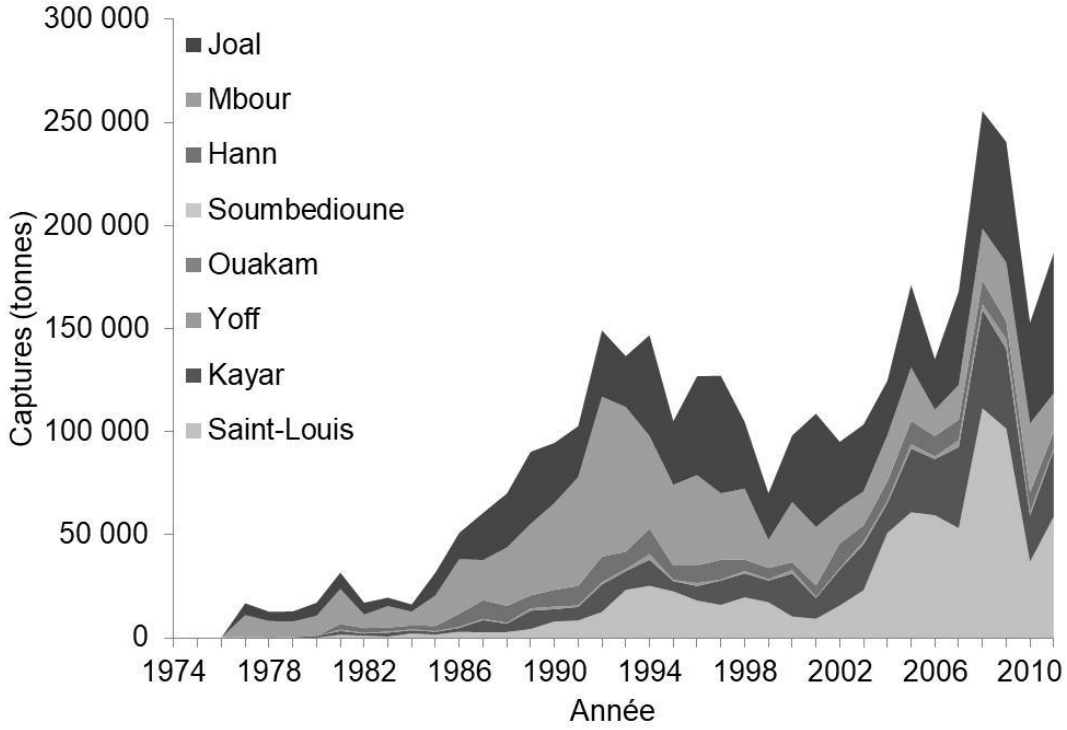


Figure 32. Annual catches (in tonnes) of Sardinella aurita by artisanal fisheries broken down by main landing sites (see Figure 1) in Senegal from 1975 to 2011 (Source CRODT adapted by Thiaw et al. 2017).

Fishing effort has varied significantly over the past 30 years. During the period from 1981 to 1993, the number of annual trips increased significantly, from 27,000 to 64,000. From 1993 to 2008, fishing effort remained fairly stable, hovering around 60,000 trips/year. The same trend was observed in the case of FME, but the ST fishing effort was greater (Figure 33). During 2008 and 2010, the number of fishing trips fell, certainly due to an increase in fishing effort in Mauritania (Thiao 2012).

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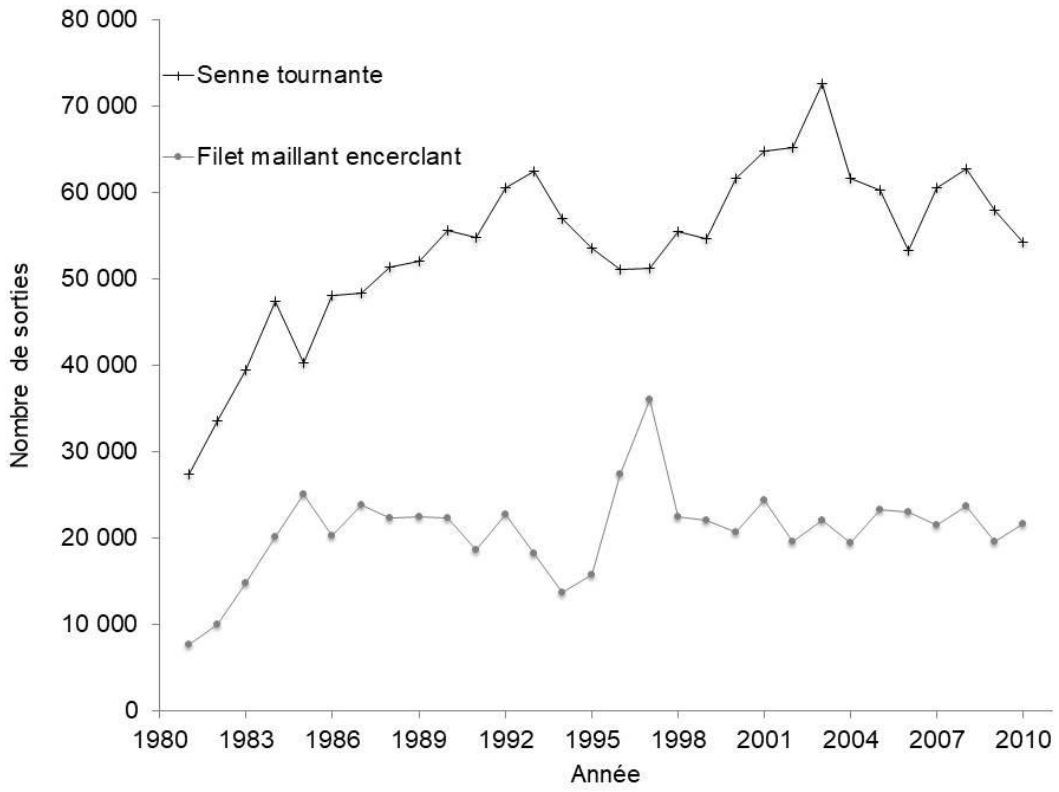


Figure 33. Variation in the number of fishing trips using purse seines (curve with crosses) and encircling gillnets (curve with dots) between 1981 and 2010 in Senegal at the main landing sites (Source CRODT adapted by Thiaw et al. 2017).

Catch per unit effort (CPUE) of *S. aurita* increased significantly between 1984 and 1992; this is certainly due to the introduction of more efficient fishing gear and more powerful pirogues. From 1997 to 2003, CPUE declined, reflecting the shortage of fish during this period (Thiaw et al. 2017). From 2004 onwards, CPUE also increased. This was certainly due to the opening of the Mauritanian zone to Senegalese pirogues operating out of Saint-Louis (Corten et al., 2012).

Most of the catches landed by the artisanal fleet are used for human consumption. Some fish are bought fresh for direct consumption or are transported in refrigerated trucks to the interior of the country. However, much of the catch is processed artisanally, mostly smoked or dried (Deme et al. 2012). Catches landed

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by industrial vessels are used for canning (Corten et al. 2012) and by the milling industry (fish meal), which is steadily increasing in Morocco, Senegal and Mauritania (Corten et al., 2017).

Ethmalosa fimbriata

Biology

Morphologically, the sexes are separate in Bonga shad *E.* fimbriata (Figure 34) and there is no apparent outward sexual dimorphism (Albaret, 1999). First sexual maturity and reproduction always occur during the intermediate ecophase in environments with higher variability. There is probably differential growth between the sexes in *E. fimbriata*. Mean sizes within homogeneous samples are generally 0.5 to 1 cm smaller in males than in females (Charles-Dominique & Albaret, 2003). According to Wague and Mbodj (2002), for the same species inhabiting different environments, growth and size at first sexual maturity can be very different. Size at first sexual maturity is highly variable for the species, ranging from 8.3 to 18.5 cm depending on the area. In fact, *E. fimbriata* reacts to pollution (Albaret & Charles-Dominique, 1982; Baldé, Döring, et al., 2019; Guyonnet et al., 2003) and overfishing (Laë, 1997) with a reduction in its size at first sexual maturity.

The location of the spawning area and the duration of reproduction in *E. fimbriata* are often difficult to determine, as is often the case with clupeids, and most authors do not rule out more or less continuous reproduction (Panfili et al. 2004, 2006). *Ethmalosa fimbriata* breeds mainly in lagoons and estuaries, but may also reproduce at sea (Charles-Dominique & Albaret, 2003). In the Sine Saloum, sexual activity generally extends from January to September with spawning peaks from March to August, with two flushes in May and June, in waters of salinity 3.5-35 ‰ and temperature 22-31 °C (Döring et al., 2017; Panfili et al., 2004). Larvae are most abundant in river waters with salinities between 5 and 10 ‰. The range of salinity tolerance is wider for maturation than for spawning and larval development. The latter two occur within a narrower environmental window, excluding freshwater and very high salinities. In summary, *E. fimbriata* breeds in waters of highly variable salinity, ranging from 3.5 to 38 ‰. Temperature seems to play a limiting role, only below a value of 22°C (Charles-Dominique & Albaret, 2003). Such euryhalinity (and to a lesser extent eurythermia) of reproduction is an exception in fish, for which hydrological conditions are, as a rule, very strict at the time of reproduction, even for euryhaline or eurythermic species. Such adaptation to extreme environmental conditions is perhaps an important resilience factor for *E. fimbriata*. The maximum size of the species was recorded by Postel (1950) in the Sine-Saloum estuary (total length = 47 cm, FL = 38.5 cm, weight = 1.150 kg).

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Figure 34. Photograph of Ethmalosa fimbriata (Bowdich, 1825), vernacular name Cobo in Wolof, from the family Clupeidae, widely consumed in southern Senegal (Petite côte and Casamance) (Photo credit B. S. Baldé 2018).

Geographical distribution

The Bonga shad, *E. fimbriata*, is a tropical estuary-dependent species, distributed from Mauritania to Angola (Charles-Dominique & Albaret, 2003), and is the most widespread clupeid in the brackish waters of West African coastal estuaries (Charles-Dominique & Albaret, 2003). *Ethmalosa fimbriata* is a euryhaline species that frequents littoral zones, generally near the mouths of large rivers, and may spend part or all of its life in inland mixohaline waters (rivers, estuaries, deltas, lagoons). It seasonally penetrates far inland, notably up the Senegal and Gambia rivers to within 140 km and 380 km of their mouths respectively (Scheffers et al., 1971). Adults may spend varying periods of their lives in mixohaline zones (Charles-Dominique 1982). The diet of *E. fimbriata* changes from a zooplanktonic diet in young fish to a more microphagic diet (with more phytoplankton) in adults (Fagade & Olaniyan, 1972). This change in diet between juveniles and adults is due to the fact that gill filtration changes as *E. fimbriata* grows. This leads to a reduction in the mesh size of the gill filter and thus a change in diet (Fagade and Olaniyan 1972). These results have been confirmed by work carried out in the Sine Saloum estuary (Diouf, 1996), in the Lagos lagoon in Nigeria (Fagade and Olaniyan 1972) and the Ebrié lagoon in Côte d'Ivoire (Nieland 1980). However, Fagade and Olaniyan (1972) in Nigeria and Gningue et al. (2008) in Sine Saloum (Senegal) have also reported the presence of ostracods, bivalve larvae and gastropods in the stomach contents of *E. fimbriata*.

Fisheries exploitation

Ethmalosa fimbriata is mainly exploited by artisanal fisheries in The Gambia, Senegal and more recently Mauritania (for fishmeal) (Corten et al., 2017). According to the latest assessment of the *E. fimbriata* stock carried out by Food Agriculture and Organization (FAO) (FAO, 2016) over the period 2008-2014, the species,

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considered as a single fishing stock, is considered overexploited in northwest Africa (Gambia, Mauritania and Senegal). It is the third most exploited marine fish species in Senegal (Figure 35), after *S. aurita* and *S. maderensis*, comprising 19,500 tonnes of landings in 2015 (Thiao et al., 2016). In 1950, catches of *E. fimbriata* in Senegal were estimated at 2,500 tonnes, most of which were caught using "sparrowhawk" fishing gear (Postel, 1950). According to Bousso (1994), this fishing gear is used by a single person wading in shallow waters (i.e., without a boat). However, since 1950, an artisanal fleet has developed in Senegal, which has rapidly developed its fishing capacity and technology (Diankha et al., 2017). From 2004 to 2013 (Figure 36), artisanal fishermen in southern Senegal mainly used seines (45% of landings) and encircling gillnets (52% of landings). The purse seine is a non-selective fishing gear that catches small fish, while the encircling gillnet catches mainly *E. fimbriata* (Bousso 1994).

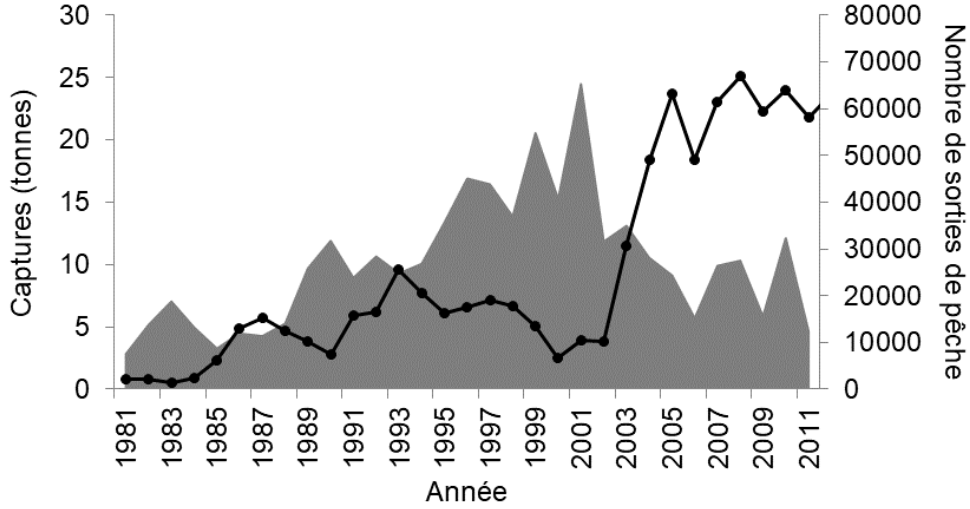


Figure 35. Total catches (in tonnes) of Ethmalosa fimbriata (in black) and number of fishing trips (line with circle) between 1981 and 2011 (Source CRODT adapted by Baldé et al., 2018).

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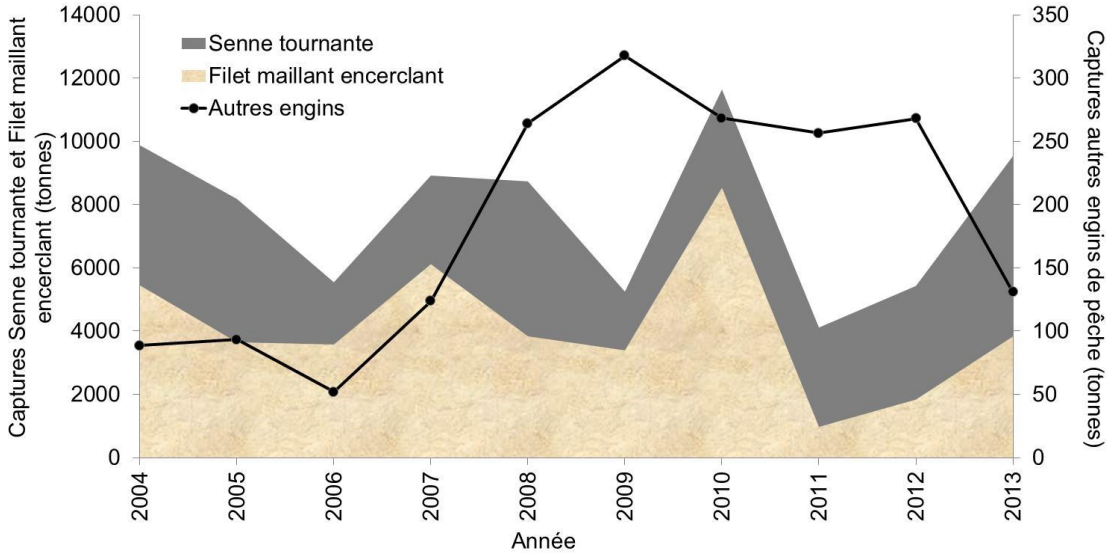


Figure 36. Annual landings of Ethmalosa fimbriata along the south coast of Senegal (2004 to 2013). Purse seine (gray), encircling gillnets (beige), other gear (black line), including surface gillnets, ice longline, bottom set gillnets, single non-motorized line, drifting gillnets, beach seines and trammel nets (Source CRODT adapted by Baldé et al. 2018).

For the coastal economy sector, the *E. fimbriata* fishery generates 24,200 direct and indirect jobs (8,100 fishermen, 6,631 processors and 9,500 fish sellers) in Senegal (Kébé et al., 2015). In Senegal, *E. fimbriata* makes a major contribution to the diet of the Senegalese people, who consume between 7 and 25 kg of fish per capita. Indeed, the local population consumes 90% of landings, worth 11 billion CFA (http://www.spcsrp.org/fr, accessed on: 16/11/2017). Despite the importance of the species' contribution to Senegal's food security, the scale and dynamics of its exploitation are still largely unknown.

Sardinella maderensis

Biology

This species has a very coastal distribution, most often occupying depths of less than 50m. It is abundant in the warm season. The main nursery is north of Cap Timiris. *Sardinella maderensis* (Figure 37), less migratory than *S. aurita*, is a species with tropical affinities, tolerating temperature ranges from 20 to 23°C (Conand & Fagetti, 1971; Marchal, 1991). However, according to Ben-Tuvia (1960), depending on the region, it can tolerate water temperatures ranging from 15°C (in Algeria) to 25°C and salinities ranging from 20 ‰ in the estuary of major rivers (Niger, Congo, Nile) to 40 ‰ in the eastern Mediterranean. Large individuals (> 24 cm) are poorly represented in Senegal, while in Mauritania the maximum size is 32 cm (fork length) (Fréon, 1988) (Fréon 1988). *S. maderensis* reproduces throughout the year in Senegal. The first breeding period is from April to October. A second breeding period, with continuous breeding (more intense than during

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the first period), takes place from January to the end of February (Ba et al. 2016). *S. maderensis* feeds on plankton such as diatoms, dinoflagellates and crustacean larvae (Hilton-Taylor, 2000).



Figure 37. Photograph of Sardinella maderensis, vernacular name Yaboy tass in Wolof, from the family Clupeidae, widely consumed by the Senegalese population (Photo credit B. S. Baldé 2018).

Geographical distribution

Sardinella maderensis is a pelagic fish of the Clupeidae family. It is found from the southern Mediterranean to Angola. This species is found from north to south of the Mauritanian EEZ (Figure 38).

Fisheries exploitation

Unlike the purse seine (Bousso, 1994), which is mainly used to catch *S. aurita*, the encircling gillnet (Bousso 1994) is mainly used for *S. maderensis* (Deme et al. 2012). In Senegal, Joal has always been the main landing site. In this region of Senegal, catches increased significantly during the period from 1981 to 2003, reaching a peak of over 100,000 t/year, but subsequently declined to less than 60,000 t/year in 2010 (Thiao 2012). Landings at Mbour are much lower (~ 20,000 t)/year), but follow the same temporal pattern as at Joal (Thiaw et al. 2017). CPUE increased steadily until 2004, but thereafter showed a downward trend (Thiaw et al. 2017). The latest work by the FAO (2016) shows that the species is in a state of overexploitation and recommends a reduction in fishing effort in all segments of the fishery.

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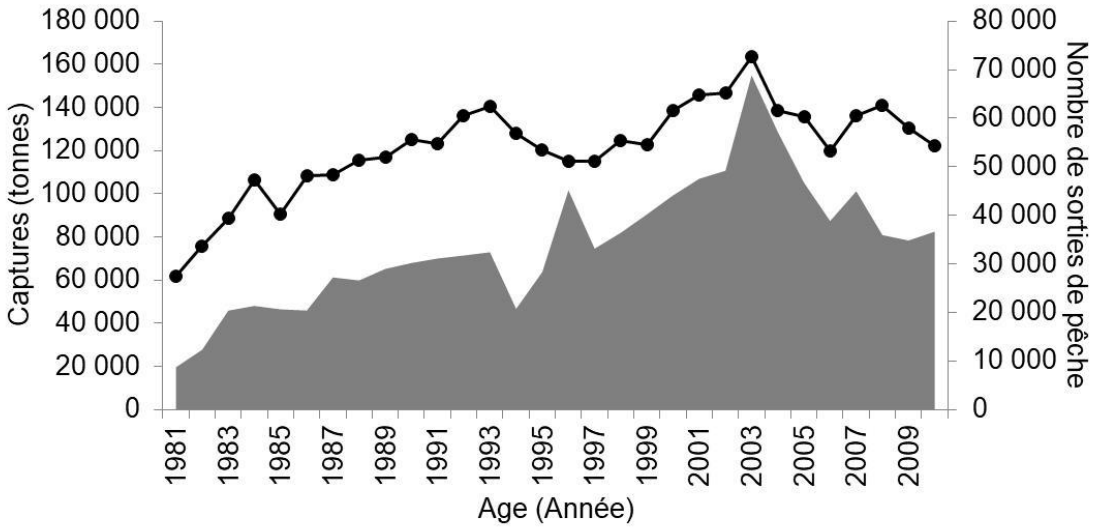


Figure 38. Total catches (in tonnes) of Sardinella maderensis (in black) and number of fishing trips (line with point) between 1981 and 2011 (Source CRODT adapted by Thiaw et al. 2017).

Most of the catches landed by the artisanal fleet are used for human consumption. Some fish are bought fresh for direct consumption or transported in refrigerated trucks to the interior of the country. However, much of the catch is smoked or dried (Deme et al. 2012).

Trachurus trecae

Biology

Trachurus trecae (Figure 39) has distinct breeding, feeding and wintering areas. Migration is probably determined by water temperature and the availability of prey organisms (Cheung et al., 2005). Its range extends from Morocco to Angola (Bianchi et al. 1999). *Trachurus trecae* is a bentopelagic species, generally found near the bottom (15 - 22°C) between 20 and 100 m depth; sometimes also pelagic and near the surface at times (Bowker 2013). It breeds in warm-water regions off the coast of Mauritania and the Moroccan Sahara (Arkhipov, 2009). Juveniles are found in subtropical and tropical waters (Bowker 2013). The species' diet consists of fish, squid and crustaceans (FAO, 2018).

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Figure 39. Trachurus trecae vernacular name Dyay in Wolof (Photo credit B. S. Baldé 2018)

Geographical distribution

Black horse mackerel in general (*Trachurus sp,* Carangidae, L., 1758) are semi-pelagic fish, widely distributed in the sea and supporting large fisheries. They are generally found on the continental shelf: from the West African islands of Cape Verde (Crawford, 1981), to the northern Norwegian and North Seas (Knijn et al., 1993), as well as in the Mediterranean (Tsangridis & Filippousis, 1991) and Black Seas (Shiganova, 1998). In the eastern central Atlantic, four species of Trachurus are found with slightly different but overlapping ranges: *T. trachurus, T. mediterraneus* (Steindachner, 1868), *T. picturatus* (Bowdich, 1825) and *T. trecae* (Suda et al. 1995). The most important of these species in terms of catches in Senegal is *T. trecae* (Thiao et al. 2016). Off the northwest coast of Africa, two stocks of *T. trachurus* (Figure 14) have been distinguished on the basis of morphometric characters, otolith weight and population characteristics (Galaktionova et al., 1989): the Senegalese-Mauritanian stock (south of 23°N) and the Moroccan-Saharan stock (23°N at the Strait of Gibraltar) (Murta, 2000).

Fisheries exploitation

In Senegal, horse mackerel are caught by both an industrial fishery, which came to a virtual halt in April 2012, and an artisanal fishery, which catches them as by-catch. No study on the dynamics of exploitation of this species has been carried out in Senegal. However, the latest results from the FAO (2016) in the sub-region highlight that the stock is fully exploited.

Scomber colias

Biology

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Scomber colias (Figure 40) is also a medium-sized cosmopolitan pelagic species (Collette, 1986) with a highly migratory character on the continental shelf. It lives mainly as a coastal pelagic and, to a lesser extent, epipelagic or mesopelagic fish on the continental slope (Collette 1986). The species is mainly distributed at depths of up to 250-300 m (Collette 1986). Most of the information on the species' biology comes from studies carried out in continental Portuguese coastal waters (Martins 1996), the Canary Islands (Lorenzo-Nespereira, 1993), the Bay of Cadiz (Rodriguez-Roda, 1982), the Bay of Biscay (Lucio, 1993), the Hellenic Seas (Kiparissis et al., 2000) and the Azores archipelago (Carvalho et al., 2002). It breeds during the warmest periods of the year (Keč & Zorica, 2013). The reproductive strategy of *S. colias* is differentiated by being iteroparous, gonochoric, oviparous and showing no sexual dimorphism (Gordo et al., 2008). Previous studies off northwest Africa suggest that copepods, euphausiids and, to a lesser extent, fish are the main components of the diet of juvenile and adult *S. colias* (Weiss, 1974).



Figure 40. Scomber colias, vernacular name Ouo in Wolof (Photo credit B. S. Baldé 2018).

Geographical distribution

The Scombridae family comprises 15 genera and around 51 species of epipelagic and generally migratory marine fish, characterized by an elongated, fusiform body, although moderately compressed in some genera (Collette et al., 2001). Within this family, mackerel and tuna form the basis of important commercial, recreational and artisanal fisheries, with more than half the world's catch in the north-west and south-east Pacific and the north-east Atlantic (Collette, 2003). In Senegal, mackerel of the genus Scomber are the most represented in catches (Thiao et al., 2016). From a taxonomic point of view, three different species have been classically recognized within this genus based on multiple morphological characters: *Scomber scombrus* (Linnaeus, 1758), *Scomber australasicus* (Cuvier, 1832) and *Scomber japonicus* (Houttuyn, 1782). Mackerel *S. japonicus* is traditionally considered the most geographically widespread species in the genus, being found in the Atlantic, Mediterranean and Black Seas. However, morphological and genetic data (Espiñeira et al., 2009) corroborate the existence of two different species, *S. colias* (Figure 16) in the Atlantic and *S. japonicus* (Figure 17) in the Indopacific (Infante et al., 2007), a classification now accepted (Collette, 1997). In Senegal, it seems that *Scomber colias* has often been confused with the japonicus genus.

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Fisheries exploitation

Scomber colias is exploited from southern Africa to the south of the Iberian Peninsula. In North-West Africa, mackerel is fished by Moroccan coastal seiners, pelagic trawlers operating under the Morocco-Russian Federation fishing agreement and other vessels chartered by Moroccan operators and by several pelagic trawlers from different countries (Russian Federation, Ukraine, European Union and others) (Velasco et al., 2011). However, in Senegal, it is also considered a by-catch by the Senegalese artisanal fleet (FAO, 2008). In addition to its economic value for fisheries in several countries, it is important as a fishery resource and component of the diet of large pelagic fish (e.g. tunas, swordfish and sharks), sharks, as well as marine mammals (dolphins) (Zardoya et al., 2004).

Mugil spp.

Biology

The species found in Mauritania belong to the order Perciformes and the family Mugilidae, of which three species are represented (*M. cephalus, M. bananensis* and *Liza falcipinnis*) (Bernardon & Vall, 2005). The Mugilidae (Figure 41, Figure 42, Figure 43) are one of the best-represented fish families in Mauritanian coastal waters. These three species are also taken into account in Senegal by CRODT, as part of its mullet diagnosis carried out in December 2009. Yellow mullet migration is directly linked to the reproductive cycle (Ndour et al., 2014). In Mauritania, the Banc d'Arguin, under the direct influence of upwelling, is the nursery area, while reproduction takes place further south between Nouakchott and the mouth of the Senegal River. The larvae would enter the Senegal River estuary, where they would find the conditions necessary for growth and protection (Ndour et al. 2014). The distribution and transboundary migrations of the mullet induce human and material flows. Although only a small proportion of mullet are caught in northern Senegal at the end of their north-south migration, most are caught in Mauritania (Bernardon et Vall 2005). Yellow mullet can reach 120 cm (Stiassny et al., 2007). Nowadays in Mauritania, it is very rare to observe individuals reaching a size of 70 cm (Bernardon et Vall 2005). This situation may be considered the result of heavy exploitation of juveniles.

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Figure 41. *Mugil cephalus*, vernacular name Guiss in Wolof (http://www.fishbase.org, accessed 01/06/2018)



Figure 42. Mugil capurrii, vernacular name Deem in Wolof (Photo credit B. S. Baldé 2018)

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Figure 43. *Mugil bananensis*, vernacular name baniakh in Wolof (https://www.fishbase.org, accessed 01/06/2018)

Geographical distribution

Mugil cephalus (yellow mullet) is distributed in warm and temperate waters of the Atlantic, Pacific and Indian oceans. It lives in abundance in coastal marine waters, estuaries and lagoons. The black mullet (*Mugil capurrii*) is bentho-pelagic and adapted to brackish waters. Its range extends along the Moroccan coast to the north of the Senegalese coast (Thomson, 1997), on the continental shelf in water depths of 0 to 120 m (Bernardon et Vall 2005).

Fisheries exploitation

In Mauritania, it is traditionally fished by the Imraguens, famous local specialist fishermen, who use it to make bottarga (dried ovaries, which can serve as a substitute for the rare and exorbitantly priced caviar), "tichtar" (dried flesh) and oil (boiled heads and intestines) (Baldé, 2014). In Senegal, it is consumed fresh and is only exceptionally processed by craftsmen when there are shortages. By-products include tambadiang, métorah and sali (Baldé 2014). Catches of *M. cephalus* in Senegal were estimated at 8,900 tonnes in 2015 (Thiao et al. 2016).

Pomatomus saltator

Biology

Pomatomus saltator (Figure 44) can measure up to 130 cm and weigh 14.4 kg, corresponding to a maximum age of 9 years (Wilk, 1977). The species breeds in both shoulder seasons (cold-warm and warm-cold) (Champagnat, 1983).

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Figure 44. Pomatomus saltator, vernacular name Ngott in Wolof (https://www.fishbase.org, accessed 01/06/2018)

Geographical distribution

Known by the vernacular name tassergal in French and "Ngot" in Wolof, the species belongs to the family Pomatomideae, order Perciformes, class Actinopterygians. It is found in brackish water and at sea at depths ranging from 0 to 200 m (FAO-FIGIS 2005). *Pomatomus saltator* is a coastal and pelagic fish (Le Gall, 1934). It is widely but irregularly distributed throughout tropical and subtropical waters, with the exception of the Pacific Ocean (Fricke, 1999). From January to February, *Pomatomus saltator* migrates to the south of the Mauritanian coast and the north coast of Senegal. It stabilizes on the Grande in March and April (Champagnat, 1983). Work carried out by Champagnat (1983) on the migration of *P. saltator* shows that these movements are strongly linked to their size and/or age.

Fisheries exploitation

There are several fisheries north of 10°N latitude, the most important being on the Grande Côte du Sénégal (north of Dakar), where tassergal is exploited during the cold season, from December to June, by the artisanal pirogue fisheries of Kayar and Saint Louis (Champagnat 1983). More abundant catches are sometimes taken in November in the Cap Blanc region and off the Banc d'Arguin, where concentrations of this species form at the start of the cold season. In 2015, its exploitation level was estimated at 1,400 tons in Senegal (Thiao et al. 2016). This is an emblematic fish of the Senegalese coast, which saw phenomenal levels of landings in the 1970s, especially between Kayar and Saint-Louis. The main target species, together with the CITES listing and the IUCN Red List status are presented in Table 39.

The main target species for small pelagics in Senegal are detailed in Table 39.

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Table 39. Main target species of small pelagics for Senegal.

English common name	Local common name	Scientific name	CITES listing	IUCN Red List status
Round sardinella	Yabóy mërëg	*Sardinella aurita*	Not Evaluated	Least Concern (LC)
Bonga shad	Cobo	*Ethmalosa fimbriata*	Not Evaluated	Least Concern (LC)
Flat sardinella	Yaboy tass	*Sardinella maderensis*	Not Evaluated	Vulnerable (VU)
Cunene horse mackerel	Dyay	*Trachurus trecae*	Not Evaluated	Least Concern (LC)
Atlantic Chub Mackerel	Ouo	*Scomber colias*	Not Evaluated	Least Concern (LC)
Common grey mullet	Guiss	*Mugil cephalus*	Not Evaluated	Least Concern (LC)
Leaping African mullet	Deem	*Mugil capurrii*	Not Evaluated	Least Concern (LC)
Banana mullet	Baniakh	*Mugil bananensis*	Not Evaluated	Least Concern (LC)
Bluefish	Ngott	*Pomatomus saltator*	Not Evaluated	Vulnerable (VU)

Main commodities and products and destinations

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Artisanal fish processing is particularly important in Senegal. The products derived from small coastal pelagics are kethiakh (braised, salted and dried fish), metorah (smoked and dried fish), tambadiang (whole salted and dried fish) and yoss (dried fish juveniles). The activity processes about 36% of artisanal fisheries landings and kethiakh accounts for more than 75% of artisanally processed products. The latter product makes particular use of flat sardinella, which is much less fatty than round sardinella. In Senegal, the format of cannery of sardinella (in the form of spreads, called pinton) is mainly available for the local market (Deme et al. 2019).

Several actors are involved in the distribution of coastal pelagics in Senegal. Fishers capture the resources. The wholesalers (Mareyeurs) ensure the wholesale and supply the country's local markets. The micro-fishmongers (micro-mareyeurs) and retailers take over to make the fish available to households. Then, coastal pelagics are transported to consumption centers by various means including refrigerated trucks, pick-ups, bicycles and public transport (Deme & Deme 2021).

Beyond supplying the local market, wholesalers (mareyeurs) and/or micro fishmongers (micro-mareyeurs) also supply the small-scale processing segment and exports of frozen pelagics. The artisanal processing sector is largely dominated by women processors. The artisanal processing of coastal pelagics is usually done with smoking ovens. All these actors use of a large unskilled labor force to support them (Deme & Deme 2021). A detailed scheme is presented in Figure 45.

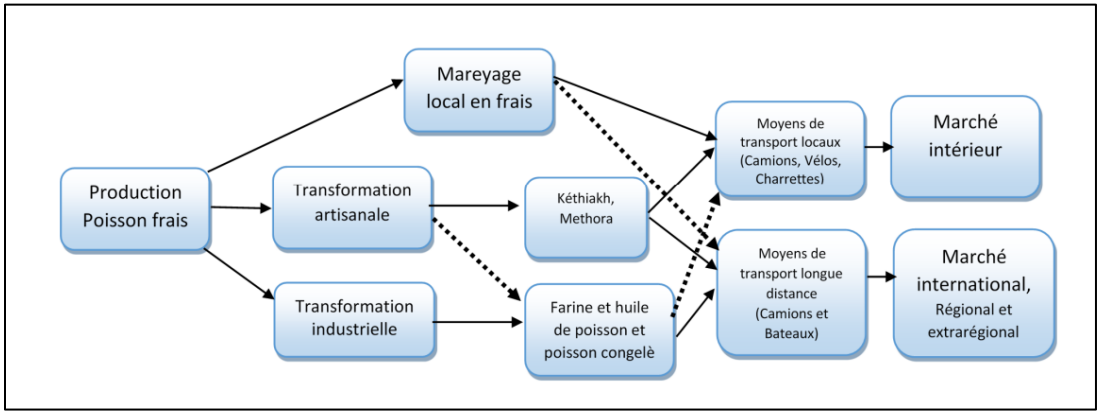


Figure 45. Distribution of small pelagics products. Source: Ba 2017.

In Senegal, fishmeal factories have increased during the last decades. This expansion in fishmeal production could become a potential competitor for direct national and sub-regional consumption (Ba 2017). The fishmeal industry in Senegal has 9 operational fishmeal and fish oil factories, half of these processing plants are located far from the coast (Deme et al. 2019). The maximum daily processing capacity varying from 150 to 300 tonnes per factory (Thiao & Bunting 2022). There are al well, five artisanal fishmeal production units and some small workshops, as well as some feed mills of different sizes (Thiao & Bunting 2022).

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Regarding fishmeal production, in recent years around 12 000 tonnes/year are being processed. On the other hand, fish oil reached a peak of 3 468 tonnes in 2019 with strong fluctuations in recent years. The raw material are mainly catches of round and flat sardinellas and bonga but also including a few byproducts from local canneries (Thiao & Bunting 2022). The value chain maping is detailed in Figure 46.

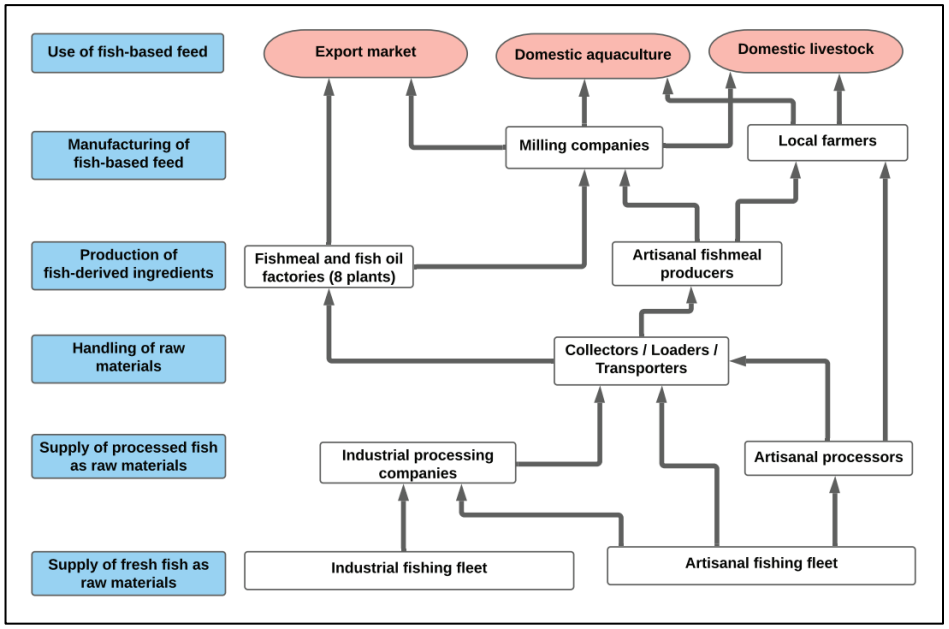


Figure 46. Value chain mapping of the fish-based feed industry in Senegal (Thiao & Bunting 2022).

Sardinellas have an important role in national food security, due to the fact that sardinella is the most accessible source of animal protein regarding price and quantity. The majority of Sardinellas are consumed at a local level with only 16% exported, meanwhile the majority of horse mackerel and mackerel are exported. Biggest destinations for Senegalese exports are other African countries (Ivory Coast, Mali, Burkina Faso) with 93% of total fish exports exported as frozen products (MPEM, 2019).

Most of Senegal's production of fishmeal is exported (Figure 47). Of the 4654 tons of flour exported in 2017, 54% of volumes (2495 tons) were circulated on the EU market. The most important destinations were Denmark and Italy. The Asian market (Vietnam) imported 25% (1153 tons) and Africa (Cameroon, Ivory Coast) imported 21% (1005 tons) of the tonnage of this fishmeal. The price per kg of fishmeal, ranging from 400 to 550 CFAF attests to the inferior quality of Senegalese

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fishmeal. As mentioned before, regarding issues of local consumption, the development of this industry is facing strong popular pressure to use only small coastal pelagics for human consumption (Deme et al. 2019).

Regarding the destination of fish oil, in 2019, Denmark imported 528 tonnes from Senegal (60 percent of total fish oil export), followed by Spain with 216 tonnes (25 percent of total fish oil export) (Thiao & Bunting 2022).

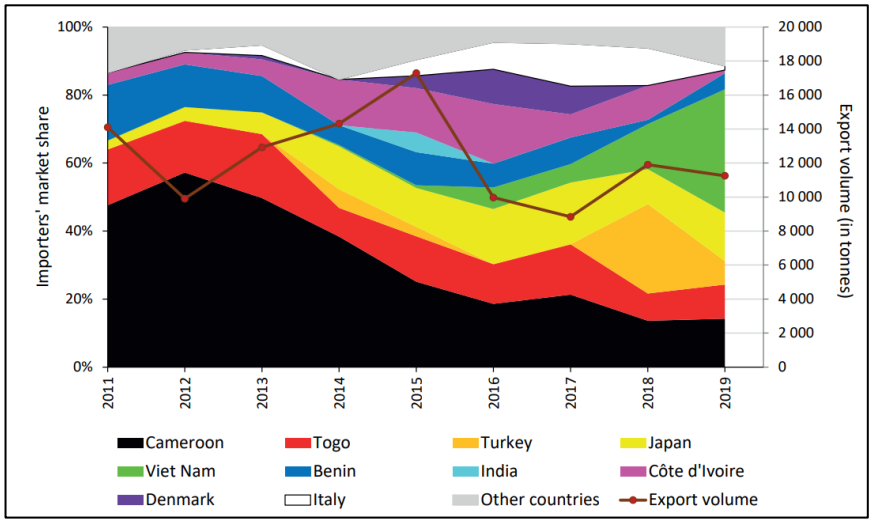


Figure 47. Volume of fishmeal export of Senegal and importers' market shares. Source: Thiao & Bunting 2022.

Fishing areas

Senegal extends over 196,722 km² between 12° and 17° north latitude, and between 11° and 18° west longitude. Its continental shelf, between the shore and the 200 m isobath, is not very uneven and covers an area of 600 km², unevenly distributed according to depth: 15% between 0 - 10 m, 49% between 10 - 50 m and 36% between 50 -200 m (Domain, 1977). At the level of Cape Verde (Dakar), the plateau narrows considerably and the 200 m isobath is only 5 nautical miles from the coast in the south of the country, while a few dozen kilometres further north, the Kayar trench cuts deeply into it. These two obstacles, although passable by pelagic species, are responsible for certain hydroclimatic and ecological particularities in the region. The exclusive economic zone (EEZ) of 180,895 km² is marked by an estuarine zone made up of the three deltaic zones of the Senegal, Sine Saloum and Casamance rivers. The Senegalese coastline is characterised by large urban areas (Saint-Louis, Dakar, Mbour, Joal, etc.) and a multitude of villages (Kayar, in particular), most of which are home to fishing communities. The Senegalese coast, which is 718 km long, can be divided into three geographical entities: the Grande Côte, the Petite Côte and the Casamance (Figure 48).

Grande côte, the northern part of the coastline

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The grande côte (Figure 20) stretches from Saint-Louis (16°04 N) in the north to the pointe des Almadies (14°36 N). It is characterized by high swells, a series of dunes and barrier beaches, the most important of which is the Langue de Barbarie. A large mudflat, located on either side of the mouth of the Senegal River (15°15 N - 16°30 N), is between 20 and 80 m deep. This area is home to cold, salty waters from October onwards, which cover the entire continental shelf by January. In fact, the inflow from the Senegal River acts as a boundary for a short period, forming a thin, desalinated surface layer that does not reach the bottom. This is due to the action of lower rainfall on the extended, shallow continental shelf in the northern zone, compared with Casamance in the southern zone. There is a large canyon at Kayar (15°00 N). Soft bottoms (sand, mud, mix of the two) dominate, with rocky bottoms located within the 6-mile limit. The Grande Côte concentrates very important fishing centers such as Saint-Louis, Fass Boye, Mboro, Lompoul, Yoff and above all Kayar in relation to the ecological conditions present and a strong presence of traditional fishing communities such as the guet-ndariens (Thiaw et al. 2017).

Petite côte, nursery area for small pelagic fish

The Petite côte (14° 36 N to 13° 36 N; Figure 20) is rich in geomorphology and biodiversity: sandy strips and spits, cliffs, bays, lagoons and mangrove estuaries (Saloum estuary, Somone lagoon-estuarine system). Sedimentary features include sandy seabeds (Somone) mixed with mud and flat relief. Warm, salty tropical waters circulate here from May to July, under the influence of monsoon flows. Winds from the north and south-east (speed 7 m.s-1) predominate during the cold dry season from November to May on the Petite Côte, while during the rainy season from June to October, winds come mainly from the west and south-west, with a reduction in wind speed (by 5 m.s-1) (Diara, 1999). These winds generate various phenomena (e.g. tides, swells, currents, upwelling) which are responsible for variations in sea level (Niang-Diop, 1995). Seasonal variability in wind forcing is the main driver of seasonal variability in surface chlorophyll. The small coast is home to a seasonal upwelling cell that governs ambient temperature fluctuations in the region (Faye et al. 2015). Due to the platform's topography, the northerly trade winds induce a strong tongue-shaped upwelling core formation in winter/spring Combined with sunlight, the nutrient-rich and nutrient-rich groundwater favors phytoplankton production (Auger et al. 2016). Phytoplankton is at the base of the food chain in all ocean ecosystems, and serves as a food source for the higher trophic levels that house small pelagic fish.

The Sine Saloum estuary (13 ° 55 ' - 14 ° 10' North and 16 ° 00 - 16 ° 80 West; Figure 20) located in the Petite côte was referred to the category of reverse-functioning estuaries in 1967 (Pagès & Citeau, 1990). It concentrates an important avifauna, particularly waterfowl, especially during winter. It has a surface area of around 800 km² of open water and comprises three main branches from north to south: the Saloum, the Diomboss and the Bandiala. In the south-western part of the Sine Saloum system, there is a dense network of small mangrove-covered inlets of seawater known locally as "bolongs" (Simier et al., 2004; Vidy, 2000). In the Sine Saloum estuary, water temperature varies, with maximum values of around 32°C between June and October and lower values of between 21 and 22°C from December to February (Gueye et al., 2012). This variation has an effect on the salinity of the environment. Indeed, during the cold season (November-June), which corresponds to the dry season on the continent, water salinity at the ocean surface reaches 36-36.5 ‰. In contrast, during the warm season (July-October), water salinity drops to 35-35.5 ‰ under the impact of river water (Gac & Kane, 1986). The dry season, which lasts eight to ten months, is characterized by maximum air temperatures and evaporation values in March and April, and by seawater entering the Saloum delta and causing intense salinization. This intrusion leads to an increase in salinity of up to 80-100 ‰ (Pagès & Citeau, 1990). The Sine Saloum estuary is also characterized by the presence of numerous small fish due to its role as a nursery and protection against predators (Sloterdijk et al., 2017).

Casamance or southern part

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The Casamance (13° 04 N and 12° 20 N) or southern zone is located between the Gambia and Guinea-Bissau borders. Here, the continental shelf reaches its maximum width, almost 54 miles, and the rocky seabed lies offshore, mainly on the shelf break. Its estuary is in fact a ria that flows 250 km into the interior of the continent (Sakho, 2011). It receives freshwater inflows only during the rainy season, which lasts only 5 months, from June to October. The climate is essentially characterized by the alternation of a wet season from July to October and a dry season during which the highest temperatures are recorded between April and June, with average monthly values between 24 and 29°C (Thiam & Singh, 2002). During the dry season, from October to May, the many small streams that make up the Casamance River are often dry. Reduced rainfall in the Casamance river basin and rising temperatures have led to a flow deficit and saline intrusion (Savenije & Pagès, 1992; Thiam & Singh, 2002).

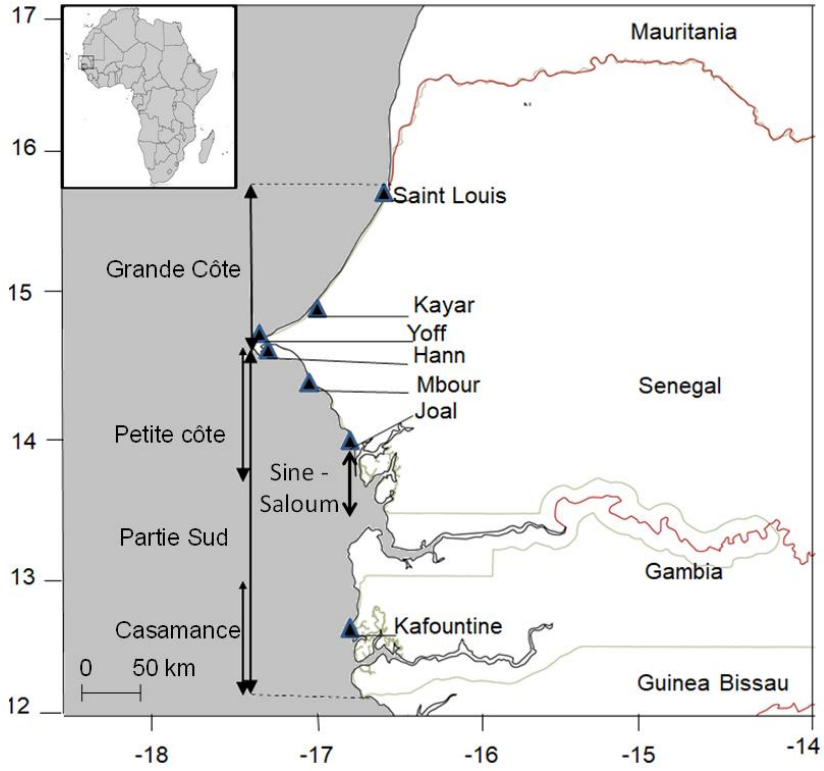


Figure 48. Map of the study area with the location of the main landing ports along the Senegalese coast. The Grande côte includes Saint-Louis, Kayar and Yoff; the Petite côte includes Hann, Mbour and Joal and the Casamance (Kafountine). Source Balde et al (2018).

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Stock assessment

The FAO Fisheries Committee for the Eastern Central Atlantic (CECAF) is a regional structure for scientific cooperation on stock assessment and providing management recommendations. CECAF has a working group for small pelagics, composed of national scientists from Morocco, Mauritania, Senegal, Gambia and Spain. The Small Pelagic Working Group meets annually to review and analyse data and conduct stock assessments for each small pelagic stock. CECAF has a range of stock assessment techniques, but generally the choice of approach is severely limited by the data available. In Senegal, stock assessments are also conducted by the CRODT.

Stock status

According to the stock assessments of the FAO working group of 2021, the assessment and historical series on sardinella indicate that the sardinella stock is overexploited. Regarding management, the Working Group recommends, as was also mentioned in the previous years, a substantial reduction in fishing effort, and this reduction should be at least in the order of 50 percent with the perspective of achieving a substantial level of exploitation. In order to improve the state of the shared stocks of sardinella, the FAO working group also recommended to prohibit the use of flat sardinella for fish meal. The working group also strongly recommends that national governments initiate mutual consultations on the joint management of sardinellas (FAO 2021). A resume with the assessment results of small pelagics is presented in Table 40.

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Table 40. Assessments results of the FAO working group 2021 (Source: FAO 2021).

Species	Area	Not fully exploited	Fully exploited	Overexploited
Sardine ***(Sardina pilchardus)***	Zone A+B	V (2019)		
	Zone C	V (2019)		
Sardinella ***(Sardinella aurita*** **and** ***S. maderensis)***	Whole subregion			V
Cunene horse mackerel ***(Trachurus trecae)***	Whole subregion		V	
European horse mackerel ***(Trachurus trachurus)***	Whole subregion		V	
Chub mackerel ***(Scomber colias)***	Whole subregion		V	
Anchovy ***(Engraulis encrasicolus)***	Zone N & Zone A+B		V	
Bonga ***(Ethmalosa fimbriata)***	Maur./Sen./Gam.			V

Fisheries management

The management of Senegal's marine fisheries resources is entrusted to the State. They are under the administrative authority of the Ministry of Fisheries and Maritime Economy (MPEM). The Fisheries Code has undergone several revisions since its creation in 1976. Indeed, the Fishing Code created in 1976 was revised for the first time in 1987 by Law 87-27, which in turn was revised in 1998 by Law 98-32. Law 98-32 is accompanied by Decree 98-498 which identifies the areas of coverage of the law and the provisions of management plans and technical management measures. However, the 1998 Fisheries Code has been repealed by the 2015 Fisheries Code.

The result is an evolution of the regulation of small pelagic fisheries from 1976 to 2015 summarised in Table 41.

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Table 41. Evolution of mesh size regulations (in mm) for fishing gear from 1976 to 2015 (Ndao & Bonnin, 2016).

Gear types	Mesh size 1976	Mesh size 1987	Mesh size 1998	Stretch mesh 2015	Side mesh 2015
Bottom-set gillnet	130	100	100	100	50
Surface drift gillnet	50	50	50	50	25
Beach seine	20	40	50	50	25
Encircling gillnet	-	60	60	60	30
Cast net	20	40	40	40	20
Purse seine	-	-	28	28	14
Pelagic trawl	70	50	50	50	-

Fishery under regional management and Regional Fisheries Management Organizations (RFMO).

There is not an RFMO for small pelagics in West Africa, however there are several organizations as the Comission sous regionale des peches and Conférence Ministérielle sur la Coopération Halieutique entre les Etats Africains Riverains de l'Océan Atlantique, whose mandate is to support the countries of the region in the management of shared stocks, and in particular small pelagics (Gascoigne et al 2021). Nevertheless, none of these organizations have legal or regulatory powers, and so far, countries in the region are not working together to put in place coordinated management measures for shared stocks (Gascoigne et al 2021).

Registries

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Until 2005, artisanal fishing was subject to a free access regime. However, since 2005, the exercise of this activity in maritime waters under Senegalese jurisdiction has been subject to obtaining a fishing permit for all nationals wishing to engage in artisanal maritime fishing. The artisanal fishing permit varies according to the fishing gear and the length of the boat. Thus, a distinction is made between an A permit for fishing on foot, a B permit for pirogues of 0 to 13 metres and a C permit for pirogues of more than 13 metres (see Fall 2009). For foreign artisanal fishers authorised to fish under a reciprocity agreement, the conditions for their activities are defined in the agreement or protocol linking their country to Senegal. Industrial fishing vessels must obtain fishing licences.

Given the economic and social importance of artisanal pelagic fishing, Senegalese law provides it with a certain form of protection, partially protecting it from competition from industrial fishing. Article 47 of the Decree implementing the Maritime Fishing Code restricts the areas authorised for industrial activities: coastal pelagic trawlers are prohibited from fishing in the entire "central zone" of the EEZ, corresponding to the Cape Verde peninsula (Dakar), the "Petite Côte", the main traditional artisanal fishing areas (6-7 nautical mile strip) and the spawning grounds of the Sine Saloum (estuarine mangrove area).

Vessel monitoring

Inspection of vessels after landing
Inspection of Senegalese vessels and foreign nationality vessels that land at a fishing port, in accordance with the legal and regulatory provisions in force. There is a maritime patrol operation which aims to control vessels, of any nationality, present in waters under Senegalese jurisdiction. They are carried out in collaboration with the French Navy, which uses its naval resources and the launches of the DPSP. In addition, air patrol operations are carried out in collaboration with the Air Force and the French Elements in Senegal (EFS).

Participatory monitoring of artisanal fisheries
Since 2005, the State of Senegal has adopted a new approach to monitoring and controlling artisanal fisheries, called participatory surveillance. It is a system in which fishers have the mission of controlling activities together with local administrative agents.

Monitoring of landings

The collection of scientific data is in charge of the CRODT and the MPEM. CRODT has a coverage in all national landing sites, and uses data for scientific research, scientific advice on management measures. The MPEM collects data for production and export matters.

Regulations

Management measures have been introduced by both the government and the local co-management committees. They include a ban on certain non-selective gear such as nylon or monofilament nets. These types of nets are non-biodegradable and are often lost on fishing grounds near wrecks and rocky bottoms (protection, reproduction), where the concentration of fish is high. These lost nets continue to fish unnecessarily for decades (ghost fishing) (Thiao et al., 2017). Management measures also include mesh sizes (Table 41) and minimum catch sizes. The control of minimum catch sizes in fishing areas is also an indispensable tool for regulating fishing effort. Article 39 of the draft decree implementing the Maritime Fisheries Code prohibits the capture, transport and sale of fish below the size and weight limits. There are yet no government restrictions on the number of pirogues or on the quantity of fish landed. Also noteworthy are the creation of Marine Protected Areas (MPAs), no-fishing zones and the dumping of artificial reefs. All these measures and management tools contribute to the preservation

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of biodiversity, the maintenance of essential ecological processes (e.g. enrichment of the coastal marine environment by mangroves), the protection of a natural wonder, the conservation of important environments for living beings in the sea, the preservation of threatened species, the safeguarding of cultural and historical values, etc.

Management plans

A proposal for a sardinella management plan has been formulated by the Ministry of Fisheries and Maritime Economies (MPEM) through the DPM. The objective of the plan is to maximise the production of sardinella in order to contribute to the satisfaction of the national demand for fish products, while ensuring that the structure and function of the ecosystem on which these resources depend is maintained.

Given the shared nature of sardinella, concerted management between the countries concerned is therefore more effective. The desired concertation should focus on the fishing possibilities of each country and the harmonisation of technical management measures. However, the strategy to be developed to achieve effective application of these measures may differ from one country to another depending on the specific characteristics of the fishery.

In Senegal, the plan will be to create an incentive framework that will lead the actors at the grassroots level to respect the management rules that they themselves have proposed. CLPAs representing all stakeholders, in coordination with the Fisheries Administration (technical and financial support), co-management initiatives for sardinella resources should focus on:

- the maximum potential to be fished so as not to exceed the maximum sustainable yield;
- the conditions of access to the fishery, including the authorisation required, the characteristics of the fishing gear to be used, the fishing areas and periods.

In terms of fisheries development, the management plan proposes to reduce post-capture losses and to improve the artisanal processing of fish, particularly in periods of high production. Indeed, the products resulting from this processing are, for the most part, destined for local consumption, especially by people in remote areas who have difficulty accessing fresh products. Also, the use of the residues of processed products, particularly as organic fertiliser or as a supplement to livestock or poultry feed, should be encouraged as it is an additional source of employment and income.

Within the framework of research, the management plan proposes accompanying research to support the implementation of the management plan for sardinella fisheries. This research will focus on the annual assessment of the halieutic potential of sardinella, the consolidation of a robust information system on coastal pelagic fisheries and on sardinella in particular, and a periodic analysis of the value chain of these species.

National technical groups set up by the SRFC for ethmalose (GoWamer project, funded by the European Union) and the sub-regional scientific exchange forum ICAWA (AWA project, funded by IRD-BMBF, 2013-2017) are moving in the right direction, as is the AGD-pélagique project (SRFC, funded by MAVA, 2018-2020),

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which aims to harmonize survey sheets for artisanal fisheries targeting pelagics at sub-regional level. One of the objectives of the Regional Fisheries Project for West Africa (PRAO) is to sustainably increase the overall wealth generated by the exploitation of marine resources from fisheries in West Africa, and to increase the proportion of this wealth accruing to West African countries by strengthening countries' capacities to sustainably govern and manage their fisheries, moreover.

Fisheries agreements

The EU concluded its first bilateral fisheries agreement with Senegal in 1979. This mixed agreement was applied until 2006, through a series of protocols offering EU vessels access to a wide variety of fisheries resources. In 2011, the Senegalese government granted licences to 20 Russian trawlers to fish for small pelagics. These vessels caught a total of 7,000 tonnes of round and flat sardinella. These licences were not renewed in 2012. In 2014, it was transformed into a tuna agreement, with a demersal fish component (black hake), concluded for five years and tacitly renewable. This agreement, which is currently in force, was accompanied by a protocol that expired on 19 November 2019. The fisheries agreement with Senegal is a central element in the network of agreements concluded by the EU in West Africa, which extends to the neighbouring states of Mauritania, Cabo Verde, Gambia and Guinea-Bissau.

Bycatch

No information on bycatch for the target fishery.

Interaction with ETP species

No interaction with ETP species documented for the target fishery.

Interaction with protected areas

Following the recommendation of the national parks congress held in September 2003 to protect at least 5% of the coastal and marine areas of each coastal country, Senegal created five MPAs in 2004 by decree 2004-1408 of November 4, 2004. These MPAs are Saint-Louis, Kayar, Joal-Fadiouth, Abéné and Bamboung, covering a total area of 1,030 km² (Table 42).

The Bamboung Marine Protected Area covers almost 70 km2. It is located in the southern part of the Saloum Delta. Bamboung is bounded to the north by the Diombos inlet, to the south by the Kabaye and Kolé forests, to the east by the Bandiala bolong and to the west by the Diogaye forest. The MPA is located in the rural community of Toubacouta, in the department of Foundiougne, part of the Fatick region. The Joal-Fadiouth Marine Protected Area covers an area of 174 Km2 and includes the commune's maritime outbuildings, an arm of the sea and a large network of mangroves. It is administratively located in the Thiès region, Mbour department, and geographically situated in the commune of Joal-Fadiouth. The Saint-Louis Marine Protected Area lies within the maritime domain of the Saint-Louis region, straddling the commune of Saint-Louis and the rural community of Ndiébène Gandiol. With a surface area of 496 km2, it is the largest marine protected area in the country. The Kayar Marine Protected Area covers 171 km2 and is made up entirely of the maritime dependencies of the Commune of Kayar and the Kayar marine trench. The Abéné Marine Protected Area straddles the rural communities of Kafountine and Diouloulou in the Ziguinchor region. It covers an area

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of 119 km2 and extends from the Gambian border to the Kafountine fishing wharf. The Abéné Marine Protected Area straddles the rural communities of Kafountine and Diouloulou in the Ziguinchor region. It covers a surface area of 119 km2 and extends from the the Gambian border to the Kafountine fishing port.

Table 42. Marine protected areas in Senegal.

Name	IUCN management category	WDPA ID	Link
MPA Saint-Louis	VI	352704	https://www.protectedplanet.net/352704
MPA Kayar	VI	352705	https://www.protectedplanet.net/352705
MPA Joal-Fadiouth	VI	352706	https://www.protectedplanet.net/352706
MPA Bamboung	II	555651496	https://www.protectedplanet.net/555651496
MPA Abéné	V	352707	https://www.protectedplanet.net/352707

Impacts on the marine environment

There are ecological risks of the fish-based feed industry related to the pollution of the coastal waters, mainly due to the produced liquid waste of the factories which are degrading water quality (Thiao & Bunting 2022).

Fishery Improvement Project (FIPs)

FIPs reported in Senegal are detailed in Table 43.

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Table 43. Existing FIPs in Senegal. Source: FisheryProgress.org.

FIP Name	FIP Type	Progress Rating	Status
Atlantic Ocean blue shark and swordfish - surface longline (FIP-BLUES)	Comprehensive	A - Advanced Progress	Active
Atlantic Ocean tuna - longline (StarKist)	Comprehensive	C - Some Recent Progress	Active
Atlantic Ocean tuna - purse seine (Capsen & Grand Bleu S.A.)	Comprehensive	A - Advanced Progress	Active
Atlantic Ocean tuna - purse seine (GSK Marine S.A.)	Comprehensive	A - Advanced Progress	Active
COMPLETED Atlantic Ocean tropical tuna - purse seine (OPAGAC)	Comprehensive		Completed
Eastern Atlantic Ocean tuna - pole & line	Comprehensive	A - Advanced Progress	Active

Initiatives working with the fishery

List the key ongoing initiatives that are working with the fishery.

GREPPAO: Fisheries Management and Resilience small pelagics in West Africa

The project was funded by the European Union as part of the PESCAO program. The objective of the GREPPAO (2017-2024) action is to contribute to the achievement of the overall objective of the PESCAO Programme which is to improve the contribution of fisheries resources to sustainable development, food security and poverty reduction in West Africa.

The specific objectives of the GREPPAO action are:

- Improve the contribution of small pelagic transboundary (Ppt) fisheries to the food security of West African populations.
- Increase the added value created throughout the fisheries sector specific to the Pt.
- Contribute to the management of migratory fisheries related to Ppt.

“Our Fish” – Tackling industrial fishmeal and fish oil production in West Africa

The project (2022-2025) was funded by Oceans 5. The main objectives of the project are:

- Improve transparency of finance driving the exploitation of the small Pelagic fishery and FMFO industry in West Africa.
- Build a robust body of evidence spotlighting the realities underpinning FMFO production in West Africa, to be used in targeted corporate and policy campaigns.
- Build grassroots capacity to act on information and advocate on the need to address the impacts of FMFO.
- Support effective policy decisions at regional and national levels and reinforce protection of shared pelagic fish stocks.
- Ensure an effective, engaged community of actors continue to work in partnership to guarantee the health of small pelagic fish stocks in West Africa during and beyond the project

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Senegal Dekkal Geej (Restoring the Sea)

The project was funded by USAID (2019-2024). The main objectives of the project are to improve management of Senegal's fisheries for ecological resilience. Over 5 years, The DG program will build on previous USAID interventions in the fisheries sector which have contributed to substantial progress towards sustainable fishery management that is accountable, equitable and inclusive. Vision: A sustainable, equitable and inclusive fisheries management system is established in Senegal by 2024, resulting in the conservation of biological diversity; the regeneration of priority stocks; the strengthening of community resilience and food security; and an increased contribution to GDP and peoples' living standards.

Shared sardinella: Supporting the implementation of the ecosystem approach to fisheries for the management of shared sardinella stocks in northwest Africa (Morocco, Mauritania, Senegal and Gambia)

The project (2017-2022) was funded by Norwegian Agency for Development Cooperation (Norad). The long-term objective of the programme is to support sustainable fisheries to improve food and nutrition security for people in partner countries.

The Shared sardinella projects centre around two main components:

- Development of knowledge and the strengthening of capacities in support of fisheries management planning processes in line with the EAF for the shared sardinella stocks.
- Development, implementation and follow-up to management systems aligned with the EAF and harmonised at the regional level.

Towards Sustainable Management of the Canary Current Large Marine Ecosystem (CCLME) – Initial Support to SAP Implementation Cabo Verde, Guinea, Guinea-Bissau, Mauritania, Morocco, Senegal and The Gambia

The project (2020-2023) was funded by GEF (GEF ID 9940). The main objective of the project is to create enabling conditions for effective implementation of the Canary Current Large Marine Ecosystem Strategic Action Programme (SAP).

Expected outcomes:

- Outcome 1.1: Management of the CCLME strengthened with the development of mechanisms for cooperation, partnerships and financing of the SAP.
- Outcome 2.1: Improved knowledge and understanding of the state of the CCLME including fish stocks, vulnerable species and habitats and ecosystem functioning, climate change impacts on the resources and fishing communities.
- Outcome 2.2: Strengthened capacities to enable implementation of an ecosystem approach to fisheries (EAF) in the context of broader multisectoral ecosystem management goals.
- Outcome 3.1: Effective and efficient results-based management and knowledge sharing.

AGD Pelagic project

The project (2020-2022) was funded by MAVA Fondation pour la nature. The project aims:

- to reduce overexploitation of small pelagics through more sustainable management of stocks and more effective protection of key critical coastal sites;

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- improving data collection and scientific knowledge on small pelagic stocks and critical sites;
- building capacity for effective management of critical sites and sustainable exploitation of small pelagics;
- supporting civil society advocacy for transparency and enforcement of small pelagic fisheries regulations
- strengthen and sustain the partnership.

SWOT analysis

The key strengths, weaknesses, opportunities, and weaknesses are listed in Table 44.

Table 44. SWOT analysis for Senegal small pelagics fisheries.

Strengths	**Weaknesses**
• Fishers and main stakeholders of the fishery participate in local management bodies called CLPAs. • Existence of local small pelagics. management measures. • Data available in the CRODT and the Ministry of fisheries.	• No information of bycatch related to this fishery. • No information of interactions with ETP species.
Opportunities	**Threats**
• Improve the artisanal processing of small pelagics fish. • A sardinellas management plan will be published in December 2023. • Increase transparency by publishing minutes of CLPAs. • Improve transformation sites of small pelagics.	• Sardinella stock is overexploited (FAO 2021). • Considerable negative impact on national food security and nutrition because the country is greatly dependent on fish consumption and may have a projected gap of fish demand of about 150,000 tonnes every year during the 2020s (Thiao & Bunting 2022). • The increase in fish-derived ingredient production that may depend on edible fish will worsen the critical situation of fish availability and affordability (Thiao & Bunting 2022).

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	• The establishment of fishmeal and fish oil factories is increasing the risk of overexploitation of sardinellas and bonga (Thiao & Bunting 2022).

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Literature

Albaret, J.-J. (1999). *Les peuplements des estuaires et des lagunes* (Ed. LEVEQUE, C., PAUGY, D). Editions IRD.

Albaret, J.-J., & Charles-Dominique, E. (1982). Observation d'une taille à la premiére maturation sexuelle exceptionnellement faible chez *Ethmalosa fimbriata* Bowdich dans une baie polluée de la lagune Ebrié (Côte d'Ivoire). In *Biologie de l'Ethmalose, Ethmalosa fimbriata (Bowdich), en Côte d'Ivoire: Vol. XIII* (p. 23-31). Centre de Recherche Océanographique Abidjan. http://horizon.documentation.ird.fr/exl-doc/pleins_textes/divers11-12/16115.pdf

Arkhipov, A. G. (2009). Seasonal and interannual variation of ichthyoplankton off Mauritania. *Journal of Ichthyology*, *49*(6), 460-468.

Auger, P.-A., Gorgues, T., Machu, E., Aumont, O., & Brehmer, P. (2016). What drives the spatial variability of primary productivity and matter fluxes in the North-West African upwelling system? A modelling approach and box analysis. *Biogeosciences*, *13*(23), 6419-6440. https://doi.org/10.5194/bg-13-6419-2016

Ba, A., Chaboud, C., Schmidt, J., Diouf, M., Fall, M., Dème, M., & Brehmer, P. (2019). The potential impact of marine protected areas on the Senegalese sardinella fishery. *Ocean & Coastal Management*, *169*, 239-246.

Ba, A., Schmidt, J., Dème, M., Lancker, K., Chaboud, C., Cury, P., Thiao, D., Diouf, M., & Brehmer, P. (2017). Profitability and economic drivers of small pelagic fisheries in West Africa : A twenty year perspective. *Marine Policy*, *76*, 152-158.

Bakun, A. (1990). Global climate change and intensification of coastal ocean upwelling. *Science*, *247*(4939), 198-201.

Baldé, B. S. (2014). *Contribution à la capitalisation des processus d'élaboration des plans d'Aménagement des pêcheries transfrontalières d'espèces ciblées par le Projet d'Appui à la Gestion des Pêches Artisanales Transfrontalières (PARTAGE) : Mulets (Mugil cephalus, Mugil capurii), courbine (Argyrosomus regius) et tassergal (Pomatomus saltatrix).* [Mémoire Master]. Université Cheikh Anata Diop.

Baldé, B. S. (2019). *Dynamique des petits poissons pélagiques (Sardinella aurita et Ethmalosa fimbriata) au Sénégal dans un contexte de changement climatique : Diagnostic et synthèse bioécologiques* [Thése de doctorat, Université Cheikh Anta Diop]. https://horizon.documentation.ird.fr/exl-doc/pleins_textes/divers19-08/010076741.pdf

Baldé, B. S., Brehmer, P., Sow, F. N., Ekau, W., Kantoussan, J., Fall, M., & Diouf, M. (2018). Population dynamics and stock assessment of *Ethmalosa fimbriata* in Senegal call for fishing regulation measures. *Regional Studies in Marine Science*, *24*, 165-173. https://doi.org/10.1016/j.rsma.2018.08.003

Baldé, B. S., Döring, J., Ekau, W., Diouf, M., & Brehmer, P. (2019). Bonga shad (*Ethmalosa fimbriata*) spawning tactics in an upwelling environment. *Fisheries Oceanography*, *28*(6), 686-697. https://doi.org/10.1111/jfb.13903

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Baldé, B. S., Sow, F. N., Ba, K., Ekau, W., Brehmer, P., Kantoussan, J., Fall, M., & Diouf, M. (2019). Variability of key biological parameters of round sardinella *Sardinella aurita* and the effects of environmental changes. *Journal of Fish Biology*, *94*(3), 391-401. https://doi.org/10.1111/jfb.13903

Barton, E. D., Field, D. B., & Roy, C. (2013). Canary current upwelling : More or less? *Progress in Oceanography*, *116*, 167-178. https://doi.org/10.1016/j.pocean.2013.07.007

Ben-Tuvia, A. (1960). Synopsis of biological data on *Sardinella aurita* of the Mediterranean Sea and other waters. *Proceedings of the World. Scientific Meeting on the Biology*, *14*, 287-312.

Bernardon, M., & Vall, M. O. M. (2005). *Le mulet en Mauritanie : Biologie, écologie, pêche et aménagement*. FIBA, Fondation internationale du Banc d'Arguin.

Binet, T., Failler, P., & Agossah, M. (2010). Migrations contemporaines des pêcheurs artisans en Afrique de l'Ouest : Synthèse et axes de recherche. *CSRP et UICN, Dakar, Sénégal, Rapport technique*, *3*, 29.

Binet, T., Failler, P., & Thorpe, A. (2012). Migration of Senegalese fishers : A case for regional approach to management. *Maritime Studies*, *11*(1), 1.

Boëly, T. (1982). Etude du cycle sexuel de la sardinelle ronde (*Sardinella aurita* Val. 1847) au Sénégal. *Océanographie tropicale*, *17*(1), 3-13.

Boëly, T., Fréon, P., & Stéquert, B. (1982). La croissance de *Sardinella aurita* (Val. 1847) au Sénégal. *Oceanographie Tropicale*, *17*(2), 103-119.

Boltachev, A. R., & Karpova, E. P. (2014). Faunistic revision of alien fish species in the Black Sea. *Russian journal of biological invasions*, *5*(4), 225-241.

Bousso, T. (1994). *Typologie des engins et techniques de pêche artisanale utilisés au Sine-Saloum (Sénégal)* (N° 19; p. 111). Centre de Recherches Océanographiques de Dakar-Thiaroye.

Carvalho, N., Perrotta, R. G., & Isidro, E. (2002). Age, growth and maturity in the chub mackerel (*Scomber japonicus* Houttuyn, 1782) from the Azores. *Arquipelago*, *19*, 93-99.

Champagnat, C. (1983). *Pêche, biologie et dynamique du tassergal (Pomatomus saltator, Linnaeus, 1766) sur les côtes sénégalo-mauritaniennes* (Rapport technique N° 168; p. 279). ORSTOM. https://books.google.fr/books?hl=fr&lr=&id=4QP8sM6hkwoC&oi=fnd&pg=PA1&dq=Fr%C3%A9on+sardinelle+ronde&ots=ggKQo7Eaqc&sig=Vkf0sE3x5G2RB6AUu0-dJTNQFkU

Charles-Dominique, E., & Albaret, J.-J. (2003). African shads, with emphasis on the West African shad *Ethmalosa fimbriata*. *American Fisheries Society Symposium*, *35*, 27-48.

Cheung, W. W., Pitcher, T. J., & Pauly, D. (2005). A fuzzy logic expert system to estimate intrinsic extinction vulnerabilities of marine fishes to fishing. *Biological conservation*, *124*(1), 97-111.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Collette, B. B. (1986). Scombridae. In *Fishes of the North-eastern Atlantic and the Mediterranean* (Whitehead PJP, ML Bauchot, JC Hureau, J Nielsen&E Tortonese, p. 981-997). UNESCO.

Collette, B. B. (1997). Mackerels, molecules, and morphology. *Proceedings of the 5th Indo-Pacific Fish Conference, Nouméa*, 149-164.

Collette, B. B. (2003). *Family Scombridae Rafinesque 1815-mackerels, tunas, and bonitos*. Annotated Checklist of Fishes California Academy Sciences.

Collette, B. B., Reeb, C., & Block, B. A. (2001). Systematics of the tunas and mackerels (Scombridae). *Fish physiology*, *19*, 1-33.

Conand, C. (1977). Contribution à l'étude du cycle sexuel et de la fécondité de la sardinelle ronde, *Sardinella aurita* : Pêche sardinière dakaroise en 1975 et premier semestre 1976. *Cahiers ORSTOM. Série Océanographie*, *15*(4), 301-312.

Conand, F. (1977). Oeufs et larves de la sardinelle ronde (*Sardinella aurita*) au Sénégal : Distribution, croissance, mortalité, variations d'abondance de 1971 à 1976. *Cahiers ORSTOM. Série Océanographie*, *15*(3), 201-214.

Conand, F., & Fagetti, E. (1971). Description et distribution saisonnière des larves de sardinelles des côtes du Sénégal et de la Gambie en 1968 et 1969. *Cah. ORSTOM, sér. Océanogr*, *9*(3), 293-318.

Corten, A., Asberr, N. M., & Diop, H. (2012). *The sardinella of northwest Africa : Fisheries, stock assessment and management* [Document technique]. Commission Sous Régionale des Pêches.

Corten, A., Braham, C.-B., & Sadegh, A. S. (2017). The development of a fishmeal industry in Mauritania and its impact on the regional stocks of sardinella and other small pelagics in Northwest Africa. *Fisheries Research*, *186*, 328-336.

Crawford, R. J. M. (1981). Distribution, availability and movements of pilchard Sardinops ocellata off South Africa, 1964-1976. *Fisheries bulletin*, *14*, 1-46.

CRODT (2016). *Statistiques de la pêche maritime sénégalaise en 2016 : Pêche artisanale, Pêche thonière et Pêche chalutière* (p. 65). Centre de Recherche Océanographique Dakar Thiaroye.

Dème El B, Failler P, Fall AD, Dème M, Diedhiou I, Touron-Gardic G, Bocoum W and Asiedu B (2023). Contribution of smallscale migrant fishing to the emergence of the fishmeal industry in West Africa: Cases of Mauritania, Senegal and the Gambia. Front. Mar. Sci. 10:871911. doi: 10.3389/fmars.2023.871911

Dème 1, E. hadj B., Brehmer 2, P., & Failler 3, P. (2022). La pêche artisanale sénégalaise à l'épreuve de la cogestion : Le local désormais utilisé comme échelle de planification des politiques de pêche. Revue Gouvernance, 19(2), 25-50.

Déme, M., Inejih, C. A., & Baldé, B. M. (2019). *Etude sur l'importance économique, sociale et écologique des petits pélagiques au Sénégal, en Mauritanie et en Guinée Bissau* (p. 76). PRCM.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Deme, M., Thiao, D., Sow, F. N., Sarre, A., & Diadhiou, H. D. (2012). *Dynamique des Populations de Sardinelles en Afrique du Nord-Ouest : Contraintes Environnementales, Biologiques et Socio-économiques* (Rapport; p. 125). USAID/COMFISH. http://www.crc.uri.edu/download/Sardinella-Rapport_FR_508.pdf

Diankha, O., Demarcq, H., Fall, M., Thiao, D., Thiaw, M., Sow, B. A., Gaye, A. T., & Brehmer, P. (2017). Studying the contribution of different fishing gears to the Sardinella small-scale fishery in Senegalese waters. *Aquatic Living Resources*, *30*, 27. https://doi.org/10.1051/alr/2017027

Diara, M. (1999). *Formation et évolution fini-holocènes et dynamique actuelle du Delta Saloum-Gambie (Sénégal-Afrique de l'Ouest) : Géomorphologie, stratigraphie, sédimentologie et dynamique sédimentaire* [Thése Sciences Naturelles]. Université de Perpignan.

Diedhiou, I., Yang, Z., Ndour, M., Dème, M., Fall, M., Thiaw, M., ... & Li, S. (2019). Socioeconomic dimension of the octopus "Octopus vulgaris" in the context of fisheries management of both small-scale and industrial fisheries in Senegal. Marine Policy, 106, 103517.

Diouf, P. S. (1996). *Les peuplements de poissons des milieux estuariens de l'Afrique de l'Ouest : L'exemple de l'estuaire hyperhalin du Sine-Saloum* [Thèse de doctorat, Université Montpellier II]. http://www.bondy.ird.fr/pleins_textes/pleins_textes_7/TDM_7/010008130. pdf

Direction des Pêches maritimes (DPM), 2022. Résultats généraux des pêches maritimes. Ministère des pêches et de l'économie maritime. Direction des Pêches Maritimes.

Domain, F. (1977). *Carte sedimentologique du plateau continental senegambien. Extension a une partie du plateau continental de la Mauritanie et de la Guinee Bissau.* (Note explicative N° 68; p. 17). ORSTOM. http://agris.fao.org/agris-search/search.do?recordID=FR19780287958

Döring, J., Tiedemann, M., Stäbler, M., Sloterdijk, H., & Ekau, W. (2017). *Ethmalosa fimbriata* (Bowdich 1825), a Clupeid Fish That Exhibits Elevated Batch Fecundity in Hypersaline Waters. *Fishes*, *2*(3), 13.

Espiñeira, M., Gonzalez-Lavín, N., Vieites, J. M., & Santaclara, F. J. (2009). Development of a method for the identification of scombroid and common substitute species in seafood products by FINS. *Food Chemistry*, *117*(4), 698-704.

Estrada C. (2023). Gender Analysis. Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems. Project Preparation Phase (PPG).

Fagade, S., & Olaniyan, C. I. O. (1972). The biology of the West African shad *Ethmalosa fimbriata* (Bowditch) in the Lagos lagoon, Nigeria. *Journal of Fish Biology*, *4*, 519-533.

Fall, M. (2009). *Pêcherie démersale côtière au Sénégal – Essai de modélisation de la dynamique de l'exploitation des stocks* [Université de Montpellier 2]. http://horizon.documentation.ird.fr/exl-doc/pleins_textes/divers13-04/010050294.pdf

FAO. (2008). *Report of the FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa : Saly, Senegal, 6-15 May 2008* (Fisheries Report N° 882; p. 269). FAO.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

FAO. (2016). *La situation mondiale des pêches et de l'aquaculture*. FAO. http://www.itavi.asso.fr/sites/default/files/files/FAO%202016%20%20Situation%20Peche%20et%20Aqua-1.pdf

FAO. (2018, septembre 11). *Species fact sheet T. trecae*. http://www.fao.org/fishery/species/3106/en

Faye, S., Lazar, A., Sow, B. A., & Gaye, A. T. (2015). A model study of the seasonality of sea surface temperature and circulation in the Atlantic North-eastern Tropical Upwelling System. *Frontiers in Physics*, *3*, 76. https://doi.org/10.3389/fphy.2015.00076

Felder, D. L. (2009). *Gulf of Mexico origin, waters, and biota : Biodiversity* (College Station, Vol. 1). Texas A&M University Press.

Fréon, P. (1988). *Réponses et adaptations des stocks de Clupéidés d'Afrique de l'Ouest à la variabilité du milieu et de l'exploitation : Analyse et réflexion à partir de l'exemple du Sénégal* [Thése de doctorat]. Université d'Aix Marseille II.

Fréon, P., Stéquert, B., & Boëly, T. (1979). *Les pêches sénégalaises : Description et analyse des captures et des rendements des principales espèces pélagiques côtières*. http://www.documentation.ird.fr/hor/fdi:31701

Fricke, R. (1999). *Fishes of the Mascarene Islands (Réunion, Mauritius, Rodriguez)* (Vol. 31). Koeltz Scientific Books.

Froese, R., & Pauly, D. (2016). *FishBase : World Wide Web Electronic Publication Version* [Version 31]. http://www.fishbase.org

Gac, J. Y., & Kane, A. (1986). Le fleuve Sénégal : II. Flux continentaux de matières dissoutes à l'embouchure. *Sci. Geol. Bull*, *39*(2), 151-172.

Galaktionova, A. I., Domanevskiy, L. N., & Oceanography—AtlantNIRO, K. (1989). A morphoecological description of the horse mackerel of the central and eastern Atlantic. *Journal of Ichthyology*, *29*, 120-128.

Gning, N., Vidy, G., & Thiaw, O. T. (2008). Feeding ecology and ontogenic diet shifts of juvenile fish species in an inverse estuary : The Sine-Saloum, Senegal. *Estuarine, Coastal and Shelf Science*, *76*(2), 395-403.

Gordo, L. S., Costa, A., Abaunza, P., Lucio, P., Eltink, A., & Figueiredo, I. (2008). Determinate versus indeterminate fecundity in horse mackerel. *Fisheries Research*, *89*(2), 181-185.

Greenpeace. (2012). *Main basse sur la Sardinelle* (Le scandale des autorisations de pêche au Sénégal: un drame en cinq actes, p. 24). Greenpeace.

Gueye, M., Tine, M., Kantoussan, J., Ndiaye, P., Thiaw, O. T., & Albaret, J.-J. (2012). Comparative analysis of reproductive traits in black-chinned tilapia females from various coastal marine, estuarine and freshwater ecosystems. *PloS one*, *7*(1), e29464.

Guyonnet, B., Aliaume, C., Albaret, J.-J., Casellas, C., Zerbi, A., Lasserre, G., & Do Chi, T. (2003). Biology of *Ethmalosa fimbriata* (Bowdich) and fish diversity in the Ebrie Lagoon (Ivory Coast), a multipolluted environment. *ICES Journal of Marine Science: Journal du Conseil*, *60*(2), 259-267.

Hilton-Taylor, C. (2000). *2000 IUCN red list of threatened species: Vol. XVIII*. IUCN, Gland (Suiza). Species Survival Commission.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Infante, C., Blanco, E., Zuasti, E., Crespo, A., & Manchado, M. (2007). Phylogenetic differentiation between Atlantic Scomber colias and Pacific *Scomber japonicus* based on nuclear DNA sequences. *Genetica*, *130*(1), 1-8.

Kébé, M., Samba, A., & Touré, A. O. (2015). *L'ethmalose de l'Afrique du Nord-ouest Biologie, Socio-économie et Gouvernance*. Commission sous régionale des pêches.

Keč, V. Č., & Zorica, B. (2013). Length–weight relationship, age, growth and mortality of Atlantic chub mackerel *Scomber colias* in the Adriatic Sea. *Journal of the Marine Biological Association of the United Kingdom*, *93*(2), 341-349.

Kiparissis, S., Tserpes, G., & Tsimenidis, N. (2000). Aspects on the demography of Chub Mackerel (*Scomber japonicus* Houttuyn, 1782) in the Hellenic Seas. *Belgian Journal of Zoology*, *130*(1), 3-7.

Knijn, R. J., Boon, T. W., Heessen, H. J., & Hislop, J. R. (1993). Atlas of North Sea fishes. *ICES cooperative research report*, *194*, 268.

Laë, R. (1997). Does overfishing lead to a decrease in catches and yields? An example of two West African coastal lagoons. *Fisheries Management and Ecology*, *4*(2), 149-164.

Le Gall, J. (1934). Le tassergal ou blue fish (*Pomatomus saltatrix* lacépède= temnodon saltator linné). Résumé des connaissances acquises sur la biologie et l'utilisation de ce poisson. *Revue des Travaux de l'Institut des Pêches Maritimes*, *7*(1), 27-85.

Lorenzo-Nespereira, J. M. (1993). Determinación de la talla de primera madurez sexual y período reproductivo de la caballa *Scomber japonicus* (Houttuyn, 1782) de las Islas Canarias. *Bol. Inst. Esp. Oceanogr.*, *9*(1), 15-21.

Lucio, P. (1993). Biological notes of Spanish mackerel (*Scomber japonicus*) in the Bay of Biscay, 1990-1993. *Working Document presented at*.

Marchal, E. (1991). Nanisme et sédentarité chez certaines espèces de. *ORSTOM*, 201-208.

McGregor, H. V., Dima, M., Fischer, H. W., & Mulitza, S. (2007). Rapid 20th-century increase in coastal upwelling off northwest Africa. *science*, *315*(5812), 637-639.

Medina-Gaertner, M. (1985). *Etude du zooplancton côtier de la Baie de Dakar et de son utilisation par les poissons comme source de nourriture* [PhD Thesis]. Universite de Bretagne Occidentale.

Murta, A. G. (2000). Morphological variation of horse mackerel (*Trachurus trachurus*) in the Iberian and North African Atlantic : Implications for stock identification. *ICES Journal of Marine Science*, *57*(4), 1240-1248.

Ndao, S., & Bonnin, M. (2016). La pêche maritime. In *Droit de l'environnement marin et côtier au Sénégal* (Fonds IRD [F A010069145]; Bonnin Marie, Ly I. , Queffelec B. , Ngaido M., p. 197-222). IRD ; PRCM. http://www.documentation.ird.fr/hor/fdi:010069151

Ndiaye, P. G., & Kébé, M. (2017). *Étude sur la coordination des politiques de pêche et d'environnement dans l'écorégion WAMER* (p. 56). REPAO.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Ndour, I., Diadhiou, H. D., & Thiaw, O. T. (2014). Some reproductive aspects of black mullet *Mugil capurrii* on the Northern coast of Senegal, West Africa. *Aquaculture, Aquarium, Conservation & Legislation*, *7*(5), 405-411.

Ndoye, S., Capet, X., Estrade, P., Sow, B., Dagorne, D., Lazar, A., Gaye, A., & Brehmer, P. (2014). SST patterns and dynamics of the southern Senegal-Gambia upwelling center. *Journal of Geophysical Research: Oceans*, *119*(12), 8315-8335.

Niang-Diop, I. (1995). *Erosion côtière sur la petite côte du Sénégal à partir de l'exemple de Rufisque. Passé. Présent. Futur* [Thèse de Doctorat Géologie, Université d'Angers]. http://cat.inist.fr/?aModele=afficheN&cpsidt=168694

Pagès, J., & Citeau, J. (1990). Rainfall and salinity of a Sahelian estuary between 1927 and 1987. *Journal of Hydrology*, *113*(1-4), 325-341.

Panfili, J., Durand, J.-D., Mbow, A., Guinand, B., Diop, K., Kantoussan, J., Thior, D., Thiaw, O. T., Albaret, J.-J., & Laë, R. (2004). Influence of salinity on life history traits of the bonga shad *Ethmalosa fimbriata* (Pisces, Clupeidae) : Comparison between the Gambia and Saloum estuaries. *Marine ecology Progress series*, *270*, 241-257.

Postel, E. (1950). Note sur *Ethmalosa fimbriata* (Bowdich). *Bulletin d'Information et de Documentation des Sevices d'Elevage et des Industries Animales de L'AOF*, *3*(1), 45-59.

Rebert, J.-P. (1982). *Hydrologie et dynamique des eaux du plateau continental sénégalais* (Document scientifique N° 89; p. 99). Centre de Recherche Océanographique Dakar Thiaroye.

Rodriguez-Roda, J. (1982). Biología de la caballa (o estornino), *Scomber japonicus* (Pneumatophorus) Houttuyn (1782) del Golfo de Cadiz. *Investigaciones Pesqueras*, *46*(1), 143-159.

Sakho, I. (2011). *Évolution et fonctionnement hydro-sédimentaire de la lagune de la Somone, Petite Côte, Sénégal.* [Université de Rouen; Université Cheikh Anta Diop de Dakar, Sénégal]. https://tel.archives-ouvertes.fr/tel-00680519/

Savenije, H. H., & Pagès, J. (1992). Hypersalinity : A dramatic change in the hydrology of Sahelian estuaries. *Journal of Hydrology*, *135*(1-4), 157-174.

Scheffers, W. J., Correa, J. B., & Diagne, O. (1971). *Survey and development of pelagic fish resources. Investigations on the biology and fisheries of Bonga (Ethmalosa fimbriata Bowdich) in the Senegambia, during May 1971-Report 10/71* (p. 71). Centre de Recherche Océanographique Dakar Thiaroye.

Shiganova, T. A. (1998). Invasion of the Black Sea by the ctenophore Mnemiopsis leidyi and recent changes in pelagic community structure. *Fisheries Oceanography*, *7*(3-4), 305-310.

Simier, M., Blanc, L., Aliaume, C., Diouf, P. S., & Albaret, J.-J. (2004). Spatial and temporal structure of fish assemblages in an "inverse estuary", the Sine Saloum system (Senegal). *Estuarine, Coastal and Shelf Science*, *59*(1), 69-86.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Sloterdijk, H., Brehmer, P., Sadio, O., Müller, H., Döring, J., & Ekau, W. (2017). Composition and structure of the larval fish community related to environmental parameters in a tropical estuary impacted by climate change. *Estuarine, Coastal and Shelf Science*, *197*, 10-26.

Smith, C. L. (1997). *National Audubon Society field guide to tropical marine fishes of the Caribbean, the Gulf of Mexico, Florida, the Bahamas, and Bermuda* (Chanticleer Press). Alfred A. Knopf.

Sow, B. (2014). *Etat moyen et variabilité saisonnière de l'upwelling Sénégalo-mauritanien : Approche modélisation* [Thése de doctorat]. Université Cheikh Anata Diop de Dakar.

Stiassny, M. L., Teugels, G. G., & Hopkins, C. D. (2007). The fresh and brackish water fishes of Lower Guinea, West-Central Africa. In *Mugilidae* (M.L.J. Stiassny, G.G. Teugels and C.D. Hopkins, Vol. 2, p. 450-471). IRD Editions.

Thiam, E.-H. I., & Singh, V. P. (2002). Space-time-frequency analysis of rainfall, runoff and temperature in the Casamance River basin, southern Senegal, West Africa. *Water SA*, *28*(3), 259-270.

Thiao, D. and Bunting, S.W. 2022. Socio-economic and biological impacts of the fish-based feed industry for sub-Saharan Africa. FAO Fisheries and Aquaculture Circular No. 1236. Rome, FAO, Worldfish and University of Greenwich, Natural Resources Institute. https://doi.org/10.4060/cb7990en

Thiao, D. (2012). *Bioécologie et exploitation des petits pélagiques au sénégal* (p. 45). Sub-Regional Fisheries Commission. http://www.spcsrp.org/sites/default/files/csrp/projets/pelagics/RapNat/SN/Bioecologie_et_exploitation_des_petits_pelagiques_au_Senegall.pdf

Thiao, D., Mbaye, A., Dème, M., & Diadhiou, H. D. (2017). Focusing on monofilament nets while overlooking the priorities of artisanal fisheries governance in Senegal. *African Journal of Marine Science*, *39*(3), 339-348.

Thiao, D., Sow, F. N., Thiam, N., Fall, M., & Thiam, M. (2016). *Statistiques de la pêche maritime sénégalaise en 2015 : Pêche artisanale, Pêche thonière et Pêche chalutière* (Archives Scientifiques N° 226; p. 50). Institut Sénégalais Recherches Agricoles (ISRA) ,Centre de Recherches Océanographiques de Dakar-Thiaroye (CRODT).

Thiaw, M., Auger, P.-A., Sow, F. N., Brochier, T., FAYE, S., Diankha, O., & Brehmer, P. (2017). Effect of environmental conditions on the seasonal and inter-annual variability of small pelagic fish abundance off North-West Africa : The case of both Senegalese sardinella. *Fisheries Oceanography*, *26*, 583-601. https://doi.org/10.1111/fog.12218

Thomson, J. M. (1997). The Mugilidae of the world. *Memoirs of the Queensland Museum*, *41*, 457-562.

Tsangridis, A., & Filippousis, N. (1991). Use of length-frequency data in the estimation of growth parameters of three Mediterranean fish species : Bogue (*Boops boops* L.), picarel (*Spicara smaris* L.) and horse mackerel (*Trachurus trachurus* L.). *Fisheries Research*, *12*(4), 283-297.

Veiga P. (2023). A first analysis of key small pelagics, octopus, and cuttlefish fisheries for three countries in Northwest Africa. SFP, June 2023.

Veiga P. (2020). A first analysis of key small pelagics, octopus, and cuttlefish fisheries for three countries in Northwest Africa. SFP, May 2020.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Velasco, E. M., Del Arbol, J., Baro, J., & Sobrino, I. (2011). Age and growth of the Spanish chub mackerel *Scomber colias* off southern Spain : A comparison between samples from the NE Atlantic and the SW Mediterranean. *Revista de Biología Marina y Oceanografía*, *46*(1), 27-34.

Vidy, G. (2000). Estuarine and mangrove systems and the nursery concept : Which is which? The case of the Sine Saloum system (Senegal). *Wetlands Ecology and Management*, *8*(1), 37-51.

Wague, A., & Mbodj, O. B. (2002). Etude de quelques aspects de la reproduction chez La sardinelle ronde S*ardinella aurita* (valenciennes, 1847) Pêchée le long des cotes mauritaniennes. *Bulletin Scientifique de l'Institut Mauritanien de Recherches Océanographiques et des Pêches*, *29*, 13-18.

Weiss, R. (1974). Feeding behaviour and formation of fish concentrations in the chub mackerel (*Scomber colias*) in the Northwest African fishing grounds. *ICES Doc*, *15*, 17.

Whitehead, P. J. P. (1985). Clupeoid fishes of the world (suborder Clupeoidei). *Synopsis*, *125*(7), 1-303.

Wilk, S. J. (1977). *Biological and fisheries data on bluefish* (Technical Serie Report N^{o} 11; p. 56). NOAA Northeast Fisheries Science Center.

Zardoya, R., Castilho, R., Grande, C., Favre-Krey, L., Caetano, S., Marcato, S., Krey, G., & Patarnello, T. (2004). Differential population structuring of two closely related fish species, the mackerel (*Scomber scombrus*) and the chub mackerel (*Scomber japonicus*), in the Mediterranean Sea. *Molecular Ecology*, *13*(7), 1785-1798.

Zeeberg, J., Corten, A., Tjoe-Awie, P., Coca, J., & Hamady, B. (2008). Climate modulates the effects of *Sardinella aurita* fisheries off Northwest Africa. *Fisheries Research*, *89*(1), 65-75.

GMC2 project fishery profile

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Fishery: Octopus

Country: Mauritania

Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems.

Project Preparation Phase (PPG)

Submitted by

Rolando Labraña Cornejo
Fisheries Consultant

June 2023

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Overview of the country´s fisheries sector

Mauritania is the world's 31st top fishing country, with average annual catches (2014 - 2018) of 630,000 metric tons (Veiga 2020). Mauritania is the 2nd African top export of fishing products, with an average of exports (2017 - 2020) of almost 960.135 (x 1000 USD) annually, representing Africa's 13% of total African exports (Veiga 2023).

In Mauritania, the Fisheries specific contribution to GDP is between 4 to 10% (Veiga 2020). The total capture production between 2017-21 annual average (% of total annual average) was 804.355 tonnes, being the most important captured species the European pilchard (Sardine), Sardinellas spp., and the Atlantic chub mackerel representing in total 63.33% (Veiga 2023).

According to the FAO FishstaJ trade dataset, which considered data from 2017, Mauritania is the 3rd most important country in Africa in terms of exports of seafood products (Veiga 2020). As for the exports, the three most important groups between 2017 and 2020 exports were Misc marine fish (65%), Fishmeal/fish oil (20%) and Small pelagics (9%). Moreover, the most important seafood commodities were Fish (frozen, nei) (61.72%), Fishmeals (nei) (14.87%), and Mackerels nei (frozen) (5.91%) of the total exports (Veiga 2023). In terms of value, Octopus, Misc marine fish and Fishmeal/fish oil represent 40%, 32% and 19% respectively of the most important exports. Also, in terms of value, the most exported seafood commodities were i) Octopus, frozen, ii) Fish (frozen, nei) and iii) Fishmeals (nei) representing respectively 39,40%, 28,57% and 14,45% (Veiga 2023).

According to FAO (2006-2020), Mauritania has a small domestic market of seafood. In fact, more than 95% of catches from the Economic Exclusive Zone (EEZ) are exported and sold without added value (often fresh in the local market or exported in frozen form) (Veiga 2020).

Fisheries in Mauritania created 226,000 jobs including 66,461 direct jobs (Kébé et Mayif 2022).

Institutional framework

The main actors involved in fisheries management in Mauritania include (Table 32) among others, the Ministry of Fisheries and Maritime Economy (MPEM), public establishments (l'Institut Mauritanien des Recherches Océanographiques et des Pêches (IMROP), Coast Guards), and professional organizations.

The Institutional environment

The design and implementation of fisheries management strategy is the responsibility of the MPEM based on research by IMROP, and with monitoring provided by the Mauritanian Coast Guard (GCM).

The ministère des Pêches et de l'Economie Maritime (MPEM)

The MPEM has the general mission of designing, coordinating, promoting, and monitoring the implementation of Government policy in the areas of fisheries, oceanography, and maritime training with a view to strengthening the sector's contribution to the national development. The MPEM has 7 directorates, three of which are directly involved in fisheries management: General Directorate of Exploitation (DARE); Directorate of the Merchant Navy (DMM) and the Directorate for Resources Development and Studies (DGERH).

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- DARE oversees fisheries development and management plans and fisheries regulations. Once the development plans are in place, DARE is responsible for monitoring, evaluating, and implementing the management plans. Its mission is also to implement policies for the conservation, preservation, and enhancement of resources. It is also responsible for studying the feasibility of quota application files and for managing and monitoring quotas by segment and by fishery.
- DGERH is responsible for managing fisheries in application of management plans and the regulations in force. DGERH is responsible, among other things, for monitoring concession contracts and exploitation quotas, royalties and taxes related to their exploitation as well as the centralization of files of authorized fishing vessels.
- DMM plays an important role, particularly in the registration of ships and fishing boats. Thanks to controls at quay or at sea, DMM is responsible for noting and investigating infringements. It is assisted in its mission by decentralized structures at the regional level and mobile coastal units.

L'Institut Mauritanien des Recherches Océanographiques et des Pêches

IMROP is a research establishment which depends on the MPEM. Its mission is to ensure "monitoring of the state of fishery resources and operating systems as well as the evaluation of the results of the management mechanisms in place". The main activities of the institute consist in the collection and analysis of information on a certain number of species that play an important commercial role, on fleets and on fishing communities. IMROP plays a particularly important role in fisheries management plans and contributes to their implementation. These management plans assign it the role of resource assessment and analysis of catch data. This information on the stocks and their exploitation and the scientific evaluations of the data are made available to the administration, which uses it for the management of the fisheries, in particular for setting the Total allowable catches (TACs).

The National Advisory Council for Fisheries Management and Development (CCNADP)

The CCNAP also plays an important role, advising the development of fisheries management plans and in particular on the determination of the TACs.

Table 45. Summary of the main actors involved in the management of small pelagic fisheries in Mauritania (Source: Gascoigne et al. 2021b).

Organisation	Description	Role
MPEM	Ministère des Pêches et de l'Economie Maritime	Design and implementation of the maritime sector development strategy and fisheries management
IMROP	L'Institut Mauritanien des Recherches Océanographiques et des Pêches	Scientific research, scientific advice on TACs and other management measures.
GCM	Garde Côte Mauritanienne	Contrôle et surveillance at sea, contrôle et surveillance of quotas
SMCP	Société Mauritanienne de la Commercialisation du Poissons	Contrôle et surveillance at sea, contrôle et surveillance of quotas
FNP	Fédération Nationale de la Pèche	Fishers' organization

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FLPA	Fédération Libre de la Pêche Artisanale	Fishers' organization
CCNADP	Conseil Consultatif National pour l'Aménagement et le Développement des Pêcheries	Advice on management plans and the determination of the TAC
CAAP	Commission d'Appui à l'Aménagement des Pêcheries	Implementation of management plans

Co-management arrangements.

The Commission d'Appui à l'Aménagement des Pêcheries (CAAP) main mission is to program, stimulate and coordinate the process of implementing and evaluating Fisheries Management Plans (PAPs). The CAAP is made up private and public partners, i.e., Ministry, GCM, IMROP, OSP, PNBA, Société Mauritanienne de la Commercialisation de Poisson (SMCP), Office Nationale d'Inspection Sanitaire des Produits de la Pêche et de l'Aquaculture (ONISPA), a representative of civil society, among others. The CAAP can suggest all the measures called for by developments in the fisheries concerned, including changes to legislative or regulatory provisions. In practice, it is responsible for monitoring and coordinating the PAP implementation process, it contributes to the realization and validation of the technical, scientific, and institutional studies provided for in the PAP, it participates in the design, the establishment and maintenance of the information system on the fishery, and finally it submits an annual report on the progress of the PAP implementation process to the MPEM (Gascoigne et al. 2021b).

Regulatory framework

The Maritime Fisheries Code recognizes that "the right to fish belongs to the State, which may concede its use in accordance with the provisions of this law and the regulations adopted for its application" (Law N° 2015-17 on July 29, 2015 and its amendments of 2018, Article 5).

The fisheries legal framework in Mauritania, is well developed. In addition to this general framework, based on Law 2015-17 (Code des Pêches) and the associated décret d'application, there is a range of specific legal circulars on TACs, allocation and renewal of fishing concessions and licences, zoning, among others (Gascoigne et al 2021b).

For cooperation with other parties, there is close cooperation between researchers in the main countries which share these stocks, via CECAF. Other regional organisations as the Comission sous regionale des peches (CSRP) and the Conférence Ministérielle sur la Coopération Halieutique entre les Etats Africains Riverains de l'Océan Atlantique (COMHAFAT) also play a role in relation to voluntary activities and projects, but nothing that can be described as 'effective and organised' regarding to management as opposed to science. Various measures are in place to reduce conflict between fishers. The main measure is the zoning system, where the main objective is to reduce interactions between the artisanal, coastal and industrial fisheries. There have also been limits set up on bycatch in the coastal fleet to reduce conflicts with the artisanal fishery (Gascoigne et al 2021b).

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Specific regulations, policies or plans for fisheries sector in protected areas.

The Mauritanian Strategy for the establishment and management of a representative network of protected areas responds to the commitments made by Mauritania at the international level, i.e., the framework of the Convention on Biological Diversity (CBD) and its strategy plan which was updated at the 10th Conference of the Parties (COP 10) in Japan in Nagoya for the period 2011 to 2020 (Ministere de Developpement Durable 2013). All CCLME countries have adopted a policy for the creation of MPAs to better preserve vulnerable habitats (CCLME 2015).

Specific regulations, policies or plans for gender issues in the fisheries sector.

Mauritania have made important progress in terms of adherence to international and regional commitments on gender equality, signing the United Nations Convention on the Elimination of All Forms of Discrimination Against Women "CEDAW", the International Labor Organization (ILO) Convention No. 100 on equal remuneration for men and women and The International Labor Organization (ILO) Convention No. 111 on Discrimination in terms of employment and occupation, the Beijing Declaration and Platform for Action and The Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa (Maputo Protocol) (Estrada 2023). Moreover, since 2015, Ministry of Social Affairs, Children and the Family of Mauritania has a national gender mainstreaming strategy which seeks over a period of ten years to ensure the success of the process of mainstreaming gender issues in all development sectors with a view to promoting gender equality and equity and to guarantee the advancement of women (Ministry of Social Affairs, Children and the Family, 2015). However, the Octopus Management Plan in Mauritania, does not include any gender consideration (Estrada 2023).

Mauritania has signed and ratified the following international agreements:

- United Nations Convention on the Law of the Sea of 1982 (signed 1982 and ratified in 1996).
- Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing and
- International Labour Organisation instruments: Work in Fishing Convention of 2007 (C188) (Member since 20.06.1961), and
- Work in Fishing Recommendation of 2007 (R199).

Mauritania is member of the following RFMOs and Regional Commissions.

- International Commission for the Conservation of Atlantic Tunas (ICCAT).
- Committee for the Eastern Central Atlantic Fisheries (CECAF).
- Ministerial Conference on Fisheries Cooperation Among African States Bordering the Atlantic Ocean (ATLAFCO) (COMHAFAT in French) (participating party).
- Sub-Regional Fisheries Commission (SRFC) (CSRP in French).

Indigenous peoples, ethnic groups or communities in fisheries.

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In Mauritania, minority groups include sub-Saharan ethnic groups (Peulh and Toucouleur, Soninké, and Wolof, 25 percent) and Haratine (45 per cent). It is difficult to provide transparent data on the ethnic composition of the population because the government refuses to disaggregate the data in terms of ethnicity (Pazmiño 2023).

At the international level, there are no specific regulations for indigenous peoples, since Mauritania has not ratified Convention 169 of the International Labour Organization (ILO) on Indigenous and Tribal Peoples in Independent Countries. However, Mauritania signed the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) adopted by the General Assembly on September 13, 2007 (Pazmiño 2023).

The Fisheries Transparency Initiative (FITI)

Mauritania has the status of FiTI Candidate country since December 2018, making Mauritania the first country to reach this status. The FiTI International Board has not validated Mauritania against the FiTI Standard yet. However, the FiTI International Board has tasked the FiTI International Secretariat to launch the validation process in accordance with the FiTI Standard (section D.1) for Mauritania; time frame: December 2018 until March 2022.

Overview of the fishery

Fishing operations

Between 1998 and 2018, landings of cephalopods in Mauritania were estimated about 21 000 and 48 000 tonnes. Octopus representing 80% of the total cephalopods' landings (IMROP 2019). In 2018, the landings for *octopus vulgaris* were 31 500 tonnes (Figure 49), and the average landings between 2015 and 2018 were estimated at 33 900 tonnes (IMROP 2019). Since the European vessels ceased their activities in the country's waters in July 2012, a significant drop in industrial fishing effort targeting octopus in Mauritania can be appreciated and an increase in artisanal landings which now far exceed those from deep-sea and coastal fishing (IMROP 2019).

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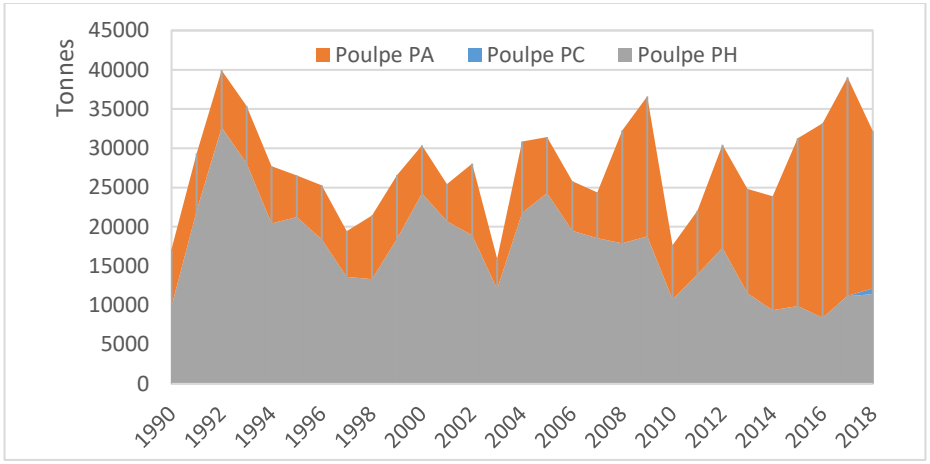


Figure 49. Octopus catches from Artisanal (PA), coastal (PC) and offshore (PH) fisheries segments (IMROP 2019).

All vessels targeting octopus must be Mauritanian flagged and employ national crews. Access to this fishery is authorized under the following three types of concessions (Khallahi et al. 2020).

i) artisanal fishing using pots, traps and jigging.
ii) coastal fishing with pots or traps.
iii) deep-sea bottom trawl fishing.

According to the latest IMROP Working Group (2019), the number of cephalopod vessels increased from 94 (including 85 offshore) in 2016 to 154 vessels in 2018 (including 136 offshore and 18 coastal ice vessels) (Figure 50).

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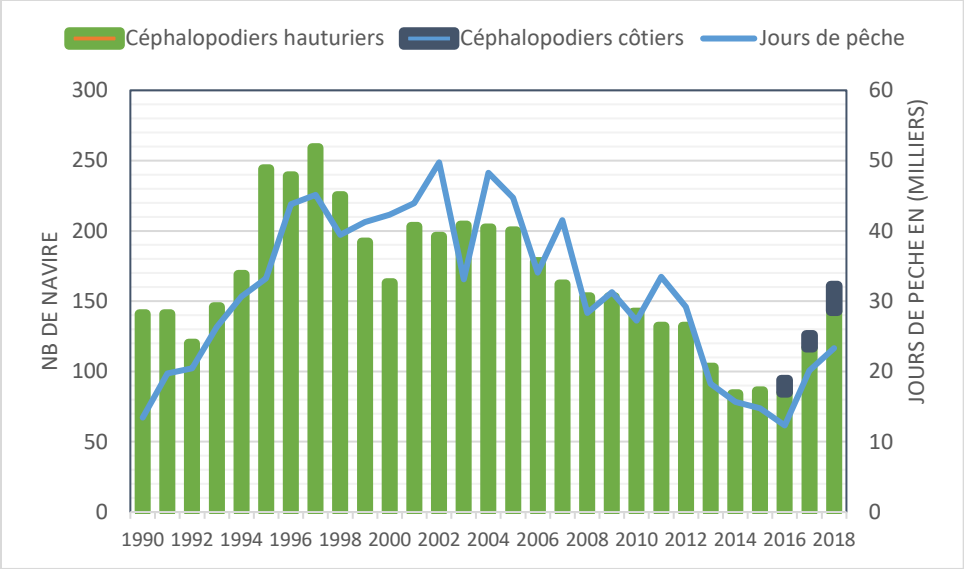


Figure 50. Evolution of the number of cephalopod vessels (offshore and coastal) and the fishing effort in fishing days over the period 1990-2018 (IMROP, 2019): Source: Khallali et al 2020.

Main commodities and products and destinations

For Mauritania, octopus is the 4th most exported seafood commodity with exports yielding 1.5 billion US dollars between 2014 and 2018, placing it as the second top exporter of this commodity in Africa. According to data presented in the octopus management plan of Mauritania, for the period 1992-2001, the annual average volume of cephalopods exported was around 33,000 tons for a value of 115 million US$. Octopus represents 75% of the volume of this exported and 80% of its value (91 million US$) (MPEM 2006).

Within cephalopods, octopus has an average contribution of around 83% of the volumes of cephalopods exported and 88% in terms of value. The traditional markets for cephalopods are Europe (65.4%) and Asia (34.2%). The contribution of the African market remains negligible (0.2%). The Asian market is dominated by Japan. As for the European market, the main customers for Mauritanian octopus are Spain and Italy. Indeed, the breakdown of cephalopod exports by country of destination reveals a dominance of Spain up to 54% of the total value. It is followed by Japan with 25%. These two countries account for 79% of the total value of exports (Naji 2021). Cephalopods are generally exported after freezing in the raw state with very little added value (MPEM 2006).

During the 2012-2019 period (Figure 51), exports of cephalopods were dominated by octopus. The value of cephalopod exports is growing steadily over the period 2013-2019 (Figure 52), this is due to the increase in national catches of cephalopods and to their price.

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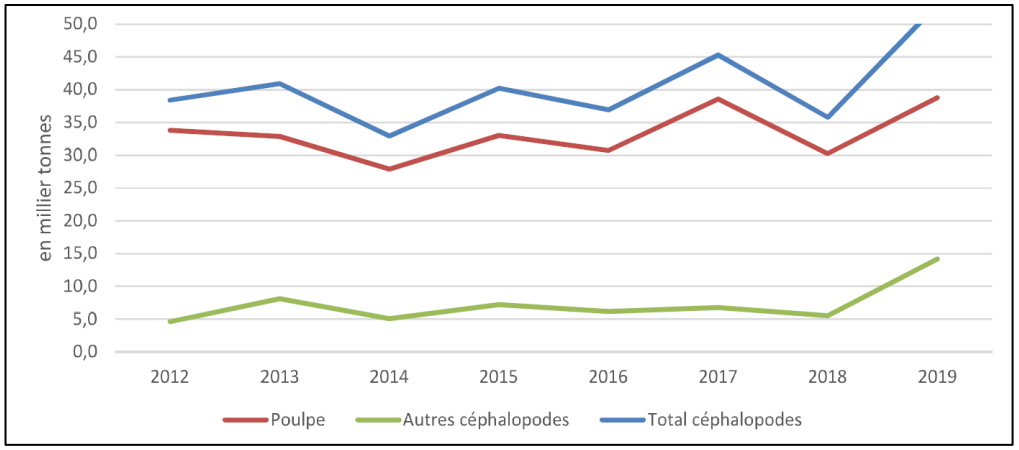


Figure 51. Evolution of cephalopod exports in Mauritania between 2012 and 2019 (in millions of tons). Source: Nayi 2021.

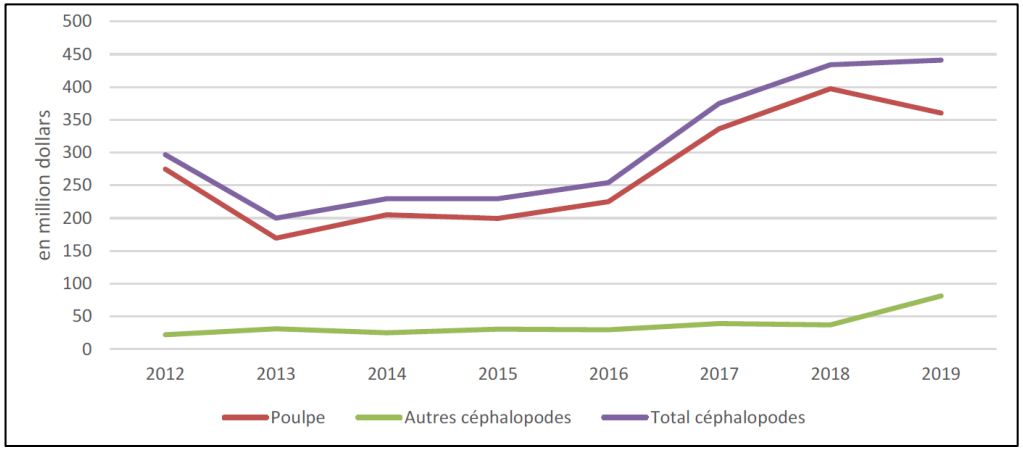


Figure 52. Evolution of cephalopod exports in Mauritania between 2012 and 2019 (in millions of dollars). Source: Naji 2021.

Target species

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The octopus (*Octopus vulgaris*) is a short-lived (1 to 1.5 year) and a fast-growing species. The common octopus, *O. vulgaris*, has a life cycle with several phases: pelagic para-larval phase, juvenile phase and benthic adult phase. The para-larval phase is defined as the juvenile phase, which differs from the adult phase in no way apart from its pelagic lifestyle. In Mauritania, this species reproduces throughout the year with two periods of intense reproduction and recruitment, one in spring and the other in autumn (IMROP 2020). The variability in abundance of *O. vulgaris* is mainly a consequence of recruitment variations which are partially dependent on environmental conditions (Ahmed-Babou et al 2023).

Two distinct stocks exist with a very clear separation of the exploited phases. The first stock found offshore, in the North area (Cap Blanc), composed of larger spawners. This cohort would be related to Moroccan stocks and is exploited from November (cold season). The second stock is located in the central or southern zone (Cap Timiris-Nouakchott). This stock has a coastal distribution and is mainly exploited during the warm season (from June to August) (MPEM 2006).

According to FAO/CECAF (FAO 2016) the population of *O. vulgaris* in Western Africa, based on political or geographic limits rather than on biological reasons, is divided into 3 main units: Dakhla, in Morocco (26 °N-21 °N), Cape Blanc (21°N-16 °N) and Senegal-Gambia (16 °N-12 °N) (FishSource 2022).

Characteristics of the Octopus are described in Table 46.

Table 46. Characteristics of the Common Octopus.

English common name	Local common name	Scientific name	CITES listing	IUCN Red List status
Common octopus	Poulpe	*Octopus vulgaris*	Does not appear	Least concern

Fishing areas

Mauritania has more than 700 kilometers of coastline, which is divided into the following zones: North (Nouadhibou), PNBA (National Park of Banc Arguin), Center, Nouakchott and South Nouakchott (Figure 53) (Bocoum et al 2023).

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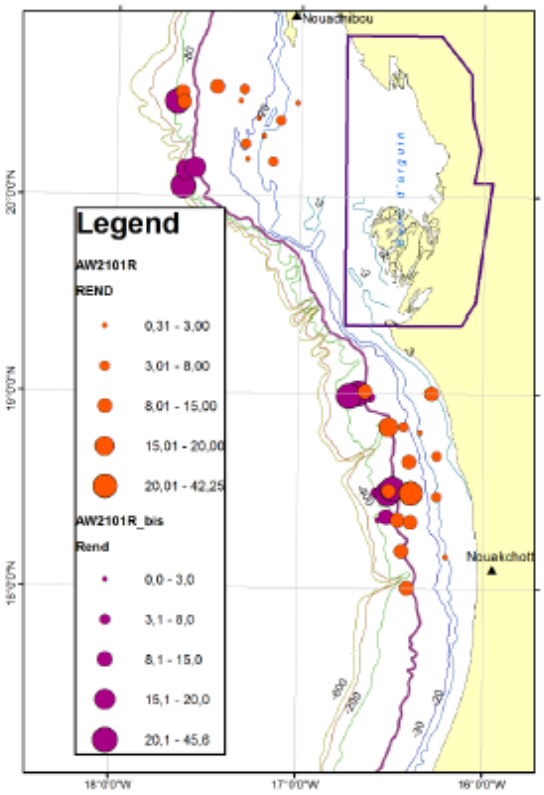


Figure 53. Main octopus yields during the octopus monitoring campaigns carried out in January 2021. Source IMROP 2020.

Stock assessment

In Mauritania, the FAO/CECAF Working Group for the Assessment of Demersal Resources (Subgroup North-between Cap Spartel and the south of Senegal) has the mandate to contribute to the improvement of the management of demersal resources in Northwest Africa. At the national level, the IMROP is responsible to conduct scientific research and stock assessments (FishSource 2022).

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Stock status

The latest CECAF working group assessment suggested that in 2018, the stock was in a state of overexploitation in terms of fishing mortality. The FAO working group and IMROP studies suggests catches show an increasing trend from 2002 to 2018 (FAO 2020, Khallahi et al. 2020), but no reference points are made available (FishSource 2022).

Fisheries management

In Mauritania, the national institutional framework is represented by the Ministry of Fisheries and Maritime Economy and the Secretariat on the State of the Environment. The MPEM is responsible of the design and implementation of the maritime sector development strategy and fisheries management. Moreover, the IMROP is in charge of the scientific research, and of providing scientific advice on TACs and other management measures. The control and enforcement are provided by the GCM, who constitutes the institution in charge of the national fisheries monitoring, control and surveillance (MCS) system.

Fishery under regional management and Regional Fisheries Management Organizations (RFMO).

There is not an RFMO for small pelagics in West Africa, however there are several organizations as the CSRP and COMHAFAT, whose mandate is to support the countries of the region in the management of shared stocks, and in particular small pelagics (Gascoigne et al. 2021b). Nevertheless, none of these organizations have legal or regulatory powers, and so far, countries in the region are not working together to put in place coordinated management measures for shared stocks (Gascoigne et al. 2021b).

Registries

Licensing: All fishing vessels in Mauritania must be licensed, including artisanal, coastal and industrial vessels (Order 28 of 13 Jan. 2016). However, part of the artisanal fleet does not have a license (Inejih 2020 *in* Gascoigne et al 2021b).

Vessel monitoring

The Coast Guard has an important role in the data collection system for this fishery. However, there are difficulties of control at sea, in particular with regard to compliance with the rates of by-catches and captures of juveniles which currently constitute the major infraction in this fishery. Despite these difficulties, the number of offenses is decreasing (MPEM 2006).

Monitoring of landings

The cephalopod fishery is a monitoring priority. The frequency of number of inspections sought per vessel is at least 1 inspection per year and per vessel. The procedure control at sea comprises three stages: (i) the control and verification of documentation, (ii) the gear control (iii) hold control (MPEM 2006).

Onboard monitoring

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The Mauritanian Coast Guard is the main institution of the national fisheries MCS system. The GCM is a security force responsible for civil action in Mauritanian waters. It is responsible for the MCS of fishing activities, the search for people and the rescue at sea. Due to a lack of human, logistical and financial resources, however, the GCM cannot fully play the role that is vested in it (control, in the harbor, at the quay, in warehouses and fishing factories).

Electronic monitoring

Control measures for fishing activities have been reinforced by the obligation to equip industrial and coastal fishing vessels with VMS beacons and the modernization of control vessels at sea. However, the effectiveness of this system still stumbles on the absence of tracking devices at the level of the artisanal segment (VMS, radar reflectors, AIS). Controls of artisanal fishing activities, especially outside the prohibited zone of the PNBA, are always difficult due to the absence of a reliable register of boats and the non-respect of landing points. Research and findings of offenses related to the capture of juveniles remain difficult (Gascoigne et al. 2017).

Regulations

The cephalopod fishery is managed by a management plan based on the limitation of the TAC, supplemented by a set of management measures as a biological rest, mesh size, fishing zones, minimum marketable size, etc. (Khallali et al. 2020).

The management measures currently in force in the fishery are:

- Two biological rest periods per year are applied to protect the recruitment and reproduction in this short-lived species. A fall closure for two months (measure in effect since 1996) and another two-month spring closure (adopted since 2008);
- The minimum authorized mesh size for demersal trawl fishing is 70 mm of stretched mesh (in shrimpers a 50 mm mesh size is tolerated);
- Minimum landing sizes are set for the main cephalopods' resources. For octopus, a minimum weight of 500 g (eviscerated weight) is established.
- Zoning was established in 2006 with a view to preserving the coastal zone and limiting conflicts between different fleet segments. Trawling is prohibited in areas with depths less than 20 meters.

Coastal fishing created by article 6 of law 2015/017 of July 29, 2015 on the Code fisheries, includes vessels of less than or equal to 26 meters in length for the cephalopod fishing (Khallahi et al 2020).

The zoning of the cephalopod fishery reserves an exclusive zone for artisanal fishing. This zoning was introduced in the 2002 Fisheries Code but was only applied in 2006 with the introduction of the VMS. The fishing zone was reviewed in 2012 and 2015, moving the activities of trawlers offshore to better protect the coastal fringe, in particular areas with depths of less than 20 m (Figure 54).

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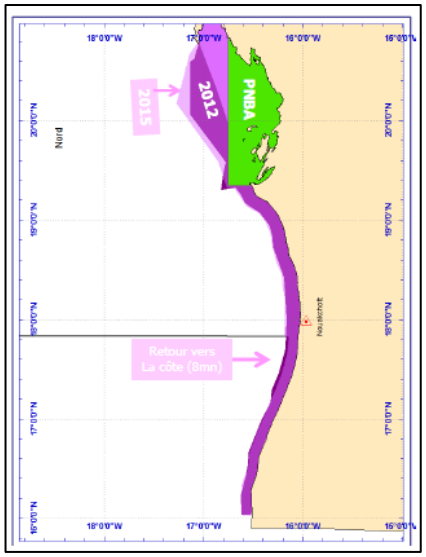


Figure 54. Areas authorized for cephalopod fishing. Source: Khallahi et al. 2020.

Management plans

List the pertinent management plans of the fishery and current status:

- The Octopus Fishery Development Plan approved by Order No. 764/MPEM/2018 of 18/10/2018 updating the Development Plan of the octopus.

The Octopus Management Plan has a duration of five years, with the possibility of being renewed once for a period of two years.

Fisheries agreements

Fishing agreements between EU and Mauritania have been in force since August 1990. The EU-Mauritania Sustainable Fisheries Partnership Agreement (SFPA) is worth €61.625 million per year and is currently the EU's largest fisheries agreement with a third country, both in terms of volumes and fees (Touron-Gardic et al 2022). A new agreement for the period 2021–2026 has been recently concluded, which retains similar fishing possibilities to the previous agreement (232,500 t/year and an optional 15,000 t/year in reserve).

Bycatch

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In Mauritania, measures are in place to protect Endangered, Threatened and Protected (ETP) species; the fishing code prohibits the targeting of marine mammals, seabirds and turtles. The Parc National de Banc d'Arguin (PNBA) is in place to protect populations of seabirds, cetaceans and turtles in particular (Gascoigne et al. 2021).

The main target species in the cephalopod fisheries are octopus (*Octopus vulgaris*), cuttlefish (*Sepia* spp, the majority are *Sepia officinalis*, *Sepia bertheloti* and *Sepia hierredda*) and squid (*Loligo vulgaris*). Among the cephalopod's species, octopus is the dominant species in the sub-region with 65% of landings between 2014 and 2018 (FAO 2020).

The cephalopod fishery has higher rates of discarding. Bycatch captures fluctuated from 30,000 tonnes until 2013, decreasing to 8,000 tonnes from 2014. This is explained due to the departure of the EU fleet that was targeting cephalopods in 2012. According to Khallahi et al. (2020), in 2018 bycatch was largely dominated by demersal species, representing 63%. However, more updated information regarding the bycatch impacts of the common octopus' fishery is unavailable (FishSource 2022).

Interaction with Endangered, Threatened and Protected (ETP) species

A study on the status of marine biodiversity in the Eastern Central Atlantic (West and Central Africa) indicated that 8% of all marine species assessed in this region are in threatened categories, 4% are Near Threatened, 73% are Least Concern, and the remaining 15% are Data Deficient (Polidoro et al. 2017). Moreover, more than 30 species of cetaceans occur in the eastern tropical Atlantic (between Mauritania and Angola) and several human activities are described as impacting cetacean species (FishSource 2022). Nevertheless, specific literature on the impacts of the octopus' fishery in ETP species was not found (Fishsource 2022).

Interaction with protected areas

Measures are in place in Mauritania to protect these species: the Code des Pêches forbids targeting of marine mammals, seabirds and turtles. The Parc National de Banc d'Arguin (PNBA) protects seabird populations, cetaceans and turtles, as well as their habitat (Gascoigne et al. 2021b). Marine protected areas in Mauritania are listed in Table 47.

Table 47. Marine protected areas in Mauritania.

Name	IUCN management category	WDPA ID	Link
Banc d'Arguin	II	797	https://www.protectedplanet.net/797
Banc d'Arguin	Not Reported	17726	https://www.protectedplanet.net/17726
Parc national du banc d'Arguin	Not Applicable	20388	https://www.protectedplanet.net/20388

Impacts on the marine environment

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Mauritanian marine ecosystems are destabilized by anthropic impacts, and fishing is considered to have a big impact (IMROP 2013). Specific information related to impacts of the common octopus' fishery on the ecosystem is unavailable (FishSource 2022).

Fishery Improvement Project (FIPs)

FIPs reported in Mauritania are detailed in Table 48.

Initiatives working with the fishery

List the key ongoing initiatives that are working with the fishery.

GREPPAO: Fisheries Management and Resilience small pelagics in West Africa Mauritania

The objective of the GREPPAO action (2017-2024) is to contribute to the achievement of the overall objective of the PESCAO Programme which is to improve the contribution of fisheries resources to sustainable development, food security and poverty reduction in West Africa.

The specific objectives of the GREPPAO action are:

- Improve the contribution of small pelagic transboundary (Ppt) fisheries to the food security of West African populations.
- Increase the added value created throughout the fisheries sector specific to the Pt.
- Contribute to the management of migratory fisheries related to Ppt.

Table 48. FIPs in Mauritania. Source: Fisheryprogress.

FIP name	Type	Status	FIP lead entity	FIP identification number
Atlantic Ocean blue shark and swordfish - surface longline (FIP-BLUES)	Comprehensive	Active	ANECTEAM (Asociación Nacional de Empresas Comercializadoras y Transformadores de Especies Altamente Migratorias)	11890
Atlantic Ocean tuna - purse seine (Capsen & Grand Bleu S.A.)	Comprehensive	Active	Key Traceability	13544
Atlantic Ocean tuna - purse seine (GSK Marine S.A.)	Comprehensive	Active	Key Traceability	16837

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COMPLETED Atlantic Ocean tropical tuna - purse seine (OPAGAC)	Comprehensive	Completed	OPAGAC	1521
Eastern Atlantic Ocean tuna - pole & line	Comprehensive	Active	Thai Union	11420
Mauritania small pelagics - purse seine	Comprehensive	Active	IMROP	9490
PROSPECTIVE Mauritania octopus - bottom trawl, jig & pot/trap	Prospective	Active	AMPEP/SMCP	20987

“Our Fish” – Tackling industrial fishmeal and fish oil production in West Africa

The main objectives of the project (2022 – 2025) are:

- Improve transparency of finance driving the exploitation of the small Pelagic fishery and FMFO industry in West Africa.
- Build a robust body of evidence spotlighting the realities underpinning FMFO production in West Africa, to be used in targeted corporate
- and policy campaigns.
- Build grassroots capacity to act on information and advocate on the need to address the impacts of FMFO.
- Support effective policy decisions at regional and national levels and reinforce protection of shared pelagic fish stocks.
- Ensure an effective, engaged community of actors continue to work in partnership to guarantee the health of small pelagic fish stocks in West Africa during and beyond the project.

PROMOPECHE/ Spanish Agency for International Development (2017-2024)

Promotion of employment and improvement of the living conditions of artisanal coastal fishermen, young people and women around the protected natural areas of the northern sector of Mauritania,

Specific objectives:

- OS.1 - Integrate the disadvantaged sectors of the city of Nouadhibou into the labor market through the processing of fish products and the realization of diversified economic activities in favor of fishing families.
- SO.2 - Maintain the employment-generating capacity of the artisanal fishing sector, through an approach of sustainable exploitation of resources and reduction of post-harvest losses.

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- SO.3 - Improve training conditions for Mauritanian institutions on the conservation and responsible exploitation of the fishing zone.
- OS.4 - Raise public awareness about more responsible and sustainable fishing.

Shared sardinella: Supporting the implementation of the ecosystem approach to fisheries for the management of shared sardinella stocks in northwest Africa (2017 – 2022) Morocco, Mauritania, Senegal and Gambia

The long-term objective of the programme is to support sustainable fisheries to improve food and nutrition security for people in partner countries.
The Shared sardinella projects centre around two main components:

- Development of knowledge and the strengthening of capacities in
- support of fisheries management planning processes in line with the EAF for the shared sardinella stocks.
- Development, implementation and follow-up to management systems aligned with the EAF and harmonised at the regional level.

Towards Sustainable Management of the Canary Current Large Marine Ecosystem (CCLME) – Initial Support to SAP Implementation (2020-2023)
Cabo Verde, Guinea, Guinea-Bissau, Mauritania, Morocco, Senegal and The Gambia

Objective: To create enabling conditions for effective implementation of the Canary Current Large Marine Ecosystem Strategic Action Programme (SAP).
Expected outcomes:

- Outcome 1.1: Management of the CCLME strengthened with the development of mechanisms for cooperation, partnerships and financing of the SAP.
- Outcome 2.1: Improved knowledge and understanding of the state of the CCLME including fish stocks, vulnerable species and habitats and ecosystem functioning, climate change impacts on the resources and fishing communities.
- Outcome 2.2: Strengthened capacities to enable implementation of an ecosystem approach to fisheries (EAF) in the context of broader multisectoral ecosystem management goals.
- Outcome 3.1: Effective and efficient results-based management and knowledge sharing.

WA8-Improving the management of small pelagics Mauritania, Senegal, the Gambia, Guinea, Guinea Bissau and Cabo Verde (2020 – 2022)

We aim to reduce the over-exploitation of small pelagics through a more sustainable management of the stocks and a more effective protection of the main critical coastal sites, by:

- improving data collection and scientific knowledge of stocks and critical sites of small pelagics
- building capacity for effective management of critical sites and sustainable exploitation of small pelagics supporting civil society advocacy for transparency and implementation of small pelagic fishery regulations strengthening and making the partnership sustainable

Cooperation agreement on maritime fisheries and aquaculture between Morocco and Mauritania (Established in March 11, 2022, and repeals and replaces the cooperation agreement in the field of maritime fisheries signed between the two parties in Nouakchott on June 13, 2000).

This agreement includes, among others:

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- Cooperation in the field of maritime training and activities.
- Cooperation in scientific and technical research.
- Cooperation in the management and development of fisheries.
- Cooperation in the area of processing and marketing of fishery products.
- Cooperation against IUU fishing.

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SWOT analysis

List key strengths, weaknesses, opportunities and weaknesses are detailed in Table 49.

Table 49. SWOT analysis for the Octopus fishery of Mauritania

Strengths	Weaknesses
• The stock and fishery seem to be regularly monitored. • There is an octopus management plan since 2018. • The strategy for the TAC definition is established among scientific and management entities. • There are several management measures in place (e.g., closed seasons, restriction of fishing licenses, minimum weight landing, and minimum mesh sizes). • Stock assessments are carried out on an annual basis. • Since 2018, Mauritanian is part of the FITI initiative.	• Stock assessment reports by IMROP are not made available regularly. • Discard rates are very high. • Information on the possible effects of the octopus' fishery (artisanal and industrial) in the environment (e.g., ETP species, benthic impacts) is unknown.
Opportunities	Threats
• There is a place for improvement in several parts of the value chain. • An Octopus FIP has been launched.	• Mauritanian waters are considered to be vulnerable to IUU fishing but there is no specific information related to the octopus fishery.

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Literature

Ahmed-Babou, D., Demarcq, H., Meissa, B., & Bez, N. (2023). Portfolio of distribution maps for Octopus vulgaris off Mauritania.

CCLME Project (2015). Canary Current Large Marine Ecosystem (CCLME) Transboundary Diagnostic Analysis (TDA). CCLME Project Coordination Unit, Dakar, Senegal. 140 pp. Also available in French.

Gascoigne J, Inejih CA and Y Jaridi (2021). Rapport de pré-évaluation, Pêcherie de courbine par filet maillant (filet courbine) et pirogue, Mauritanie. Marine Stewardship Council. GB2786. Final Report.

Gascoigne J, Inejih CA and Y Jaridi (2021). Mauritania small pelagics fishery by the coastal fleet summary report. Summary. Marine Stewardship Council. GB2786. Summary Report.

Estrada C. (2023). Gender Analysis. Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems. Project Preparation Phase (PPG).

FAO. 2020. Report of the FAO/CECAF Working Group on the Assessment of Demersal Resources – Subgroup North Nouakchott, Mauritania, 2–10 December 2019 / Rapport du Groupe de travail FAO/COPACE sur l'évaluation des ressources démersales – Sous-groupe Nord Nouakchott, Mauritanie, 2–10 decembre 2019. FAO.

FishSource (2022). Common octopus Cape Blanc. https://www.fishsource.org/stock_page/2236

IMROP (2019). Aménagement des ressources halieutiques et gestion de la biodiversité au service du développement durable. Nouadhibou du 11 au 14 février 2019. Rapport de Synthèse. 9eme edition du groupe de travail scientifique de l'IMROP.

IMROP (2020). Note succincte sur l'état de la ressource du poulpe en Mauritanie. Ministère des pêches et de l'économie maritime. République Islamique de Mauritanie.

Khallahi B., H. Taleb, C. B. Barham, B. M. Habibe, E. A. Kane et M. E. Bouzouma (Eds). (2020). Aménagement des ressources halieutiques et gestion de la biodiversité au service du développement durable. Rapport du Neuvième Groupe de Travail de l'IMROP, Nouadhibou, Mauritanie, 11-14 février 2019. 246p.

MPEM (2006). Plan d'aménagement du poulpe. République Islamique de Mauritanie.

Pazmiño A. (2023). Baseline report on indigenous peoples´ relationship with target fisheries and seafood value chains. Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems (GMC2).

Polidoro, B. A., G. M. Ralph, K. Strongin, M. Harvey, K. E. Carpenter, R. Arnold, J. R. Buchanan, K. M. A. Camara, B. B. Collette, M. T. Comeros-Raynal, G. De Bruyne, O. Gon, A. S. Harold, H. Harwell, P. A. Hulley, T. Iwamoto, S. W. Knudsen, J. de D. Lewembe, C. Linardich, K. C. Lindeman, V. Monteiro, T. Munroe, F. K. E. Nunoo, C. M. Pollock, S. Poss, B. Russell, C. Sayer, A. Sidibe, W. Smith-Vaniz, E. Stump, M. Sylla, L. Tito De Morais, J.-C. Vié, and A. Williams. (2017). The status of marine biodiversity in the Eastern Central Atlantic (West and Central Africa). Aquatic Conservation: Marine and Freshwater Ecosystems:n/a-n/a. http://onlinelibrary.wiley.com/doi/10.1002/aqc.2744/abstract

Vazquez-Rowe, I., Moreira, M. T., & Feijoo, G. (2012). Environmental assessment of frozen common octopus (Octopus vulgaris) captured by Spanish fishing vessels in the Mauritanian EEZ. Marine Policy, 36(1), 180-188.

Veiga P. (2023). A first analysis of key small pelagics, octopus, and cuttlefish fisheries for three countries in Northwest Africa. SFP, June 2023.

Veiga P. (2020). A first analysis of key small pelagics, octopus, and cuttlefish fisheries for three countries in Northwest Africa. SFP, May 2020.

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GMC2 project fishery profile

Fishery: Octopus

Country: Senegal

Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems.

Project Preparation Phase (PPG)

Submitted by

Rolando Labraña Cornejo

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Fisheries Consultant

Bocar Sabaly BALDE
ISRA/CRODT

June 2023

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Overview of the country´s fisheries sector

Senegal is the fifth African top fishing country, with an average wild production (2017 - 2020) of almost 500,000 metric tons annually, representing Africa's 6.7% of total production (Veiga 2023). Senegal's fishing fleet is by far the largest in the West African sub-region (including Nigeria and Ghana). In 2005, the number of fishing units stood at 13,903, while the latest census in 2015 reported 18,284 fishing units, over 90% of which were motorised (CRODT, 2016).

In Senegal, agriculture, forestry, and fishing represented 16.6% of GDP (2018) (Veiga 2020). The total capture production between 2017-21 annual average (% of total annual average) was 501.611 tonnes, being the most important captured species the madeiran sardinella, the round sardinella and the skipjack tuna representing in total 43.37% (Veiga 2023). As for the exports, the three most important groups between 2017 and 2020 exports were Small pelagics (37%), Misc marine fish (31%) and Tuna (14%). In addition, the most important seafood commodities were i) fish (frozen, nei) ii) jack and horse mackerel (frozen) and iii) sardines, sardinellas, brisling or sprats (frozen) with 28,76%, 15,58% and 13,02% of the total exports (Veiga 2023). In terms of value, Misc marine fish (31%), Small pelagics (18%), Tuna (17%) and Octopus (11%) were the most important exports. Also, in terms of value, the most exported seafood commodities were i) Fish (frozen, nei) ii) Octopus (frozen) iii) Fish (fresh or chilled, nei) iv) Jack and horse mackerel (frozen) representing 20,49%, 10,52%, 9,55% and 8,46% respectively (Veiga 2023).

In recent years, exports of fishery products have experienced significant growth, mainly on the continents of Africa and Asia. During 2019, Africa absorbed a quantity of 205,424.35 tons against 183,637.04 tons in 2018, an increase of 21,787.31 tons in absolute value and 11.86% in relative value. The main importing country remains Ivory Coast, which has become a major export market. Exports to other countries such as Burkina Faso, Mali and Ghana, increased in 2019, which placed African exports in 1st place in terms of Senegal's exports of all kinds, i.e., more by 70%. Exports to Europe decreased, from 50,512.77 tonnes in 2018 to 38,119.14 tonnes in 2019, i.e., a drop of -24% in relative value. For the Asian continent, the volume exported represents 29,201.40 tonnes, an increase of 12.22% in relative value compared to 2018 (26,028.78 tonnes). As for exports to America, they increased with a weight of 12,492.10 tons in 2019 against 11,998.98 tons in 2018, i.e., a significant increase of 493.12 tons (DPM 2019).

In addition, the artisanal fishing sector provides around 60,000 direct jobs and contributes, directly and indirectly, to providing an income for around 600,000 people, i.e. one Senegalese active in fishing out of six (Greenpeace, 2012).

Institutional framework

The fisheries sector was successively part of the Ministry of Rural Economy (from 1959 to 1969), the Ministry of Rural Development (from 1969 to the the 80s). Since then, the fisheries sector has been managed by the Secrétariat d'Etat de la Pêche maritime. Around 1988 and 1989, this management was entrusted to the Ministry of Animal Resources. In 1990, that Fisheries was given its own Ministry, responsible for the the sea. From this point of view, the fisheries sector not yet a priority for the government. priority. In fact, it was only in 1993 that the fisheries sector entrusted to a full Ministry: the Ministry of Fisheries and Maritime Transport. This Ministry became the Ministry of Maritime Economy in 2004.

Before 2002, inland fishing was the responsibility of the Ministry of the Environment. Since that date, inland fishing inland fisheries came under the authority of the Ministry of Fisheries through the Direction de la Pêche continentale et de and Aquaculture. This scheme, which covers all aspects of aspects of fishing (maritime and continental) and aquaculture ensures greater coherence.

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Under Decree 2004-572 of April 30, 2004, the Ministry of the l'économie maritime is responsible, among other things, for the implementation of government policy in the the field of fisheries, aquaculture, merchant marine management and exploitation of the seabed.

The Local Artisanal Fisheries Councils (CLPA)

The Local Artisanal Fisheries Councils (CLPA) were set up by the Maritime Fishing Code (Law 98-32 of 14 April 1998), with the aim of promoting the participation of professionals and their involvement in discussions and initiatives concerning the planning and development of fishing.

These local councils must bring together local representatives of the administration, local authorities, artisanal fishermen (from different groups), processors, fishmongers and fish farmers.

It is responsible for:

- organising the fisheries sector
- setting up and revitalising fishing councils
- defining local fishing standards
- organising fishing seasons and defining fish farming and aquaculture development programmes.

Professional organisations

Both small-scale and industrial fishermen have set up associations, either on their own initiative or at the instigation of the State.

Industrial fishing professionals are brought together in various associations, the best known of which are the Groupement des Armateurs et Industriels de la Pêche Maritime au Sénégal (GAIPES) and the Union des Pêcheurs et Mareyeurs Exportateurs du Sénégal (UPAMES).

Artisanal sea fishing professionals are brought together in groups, the most prominent of which are the Fédération Nationale des Groupements d'Intérêt Economique de Pêcheurs (FENAGIE-PECHE) and the Fédération Nationale des Groupements d'Intérêt Economique de Mareyeurs du Sénégal (FENAMS), the Collectif National des Pêcheurs artisanaux du Sénégal (CNPS), the Union Nationale des GIE de Mareyeurs du Sénégal (UNAGIEMS), the Fédération Nationale des Femmes Transformatrices de Produits halieutiques et Micro-mareyeuses (FENATRAMS). These organisations are represented in the regions, departments and maritime localities.

Their main aim is to defend the interests of their members.

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In 2003, these umbrella organisations came together to form a consultation body known as the Conseil National Interprofessionnel de la Pêche au Sénégal (CONIPAS). However, there are a significant number of fishermen outside the associative movement.

Fishing professionals are also members of the Dakar Chamber of Commerce, Industry and Agriculture (CCIAD). This is a public establishment of a professional nature. It is responsible for defending the general interests of the various economic sectors it represents, and is therefore in close contact with the public authorities. The CCIAD is therefore an advisory body for all matters within its remit that are referred to it by the State authorities. It is also a promotional body, as it can and must initiate suggestions and proposals in all economic, social, tax, legal and customs fields, and on all issues concerning the economic life of its consular area, helping to improve the prosperity of its member companies. Each region of the country has a regional chamber of commerce, industry and agriculture.

The institutional environment

Directorate of Maritime Fisheries (DPM)

The Directorate of Maritime Fisheries (DPM) is responsible for designing and implementing policies for the development of maritime fisheries. It is also responsible for enforcing regulations relating to the organisation and control of sea fishing activities. The main departments making up the DPM are, at central level, the Industrial Fisheries Division, the Small-scale Fisheries Division, the Maritime Fisheries Development Division, and the Improvement, Experimentation and Extension Division. The DPM has regional departments in each of Senegal's seven maritime regions.

Directorate of Fisheries Protection and Surveillance (DPSP)

Decree no. 2000-833 of 16 October 2000, which organises the Ministry of Fisheries, establishes the DPSP, which replaces the former Senegal Fisheries Protection and Surveillance Project. This project was set up in 1981, as part of cooperation between Senegal and Canada, to deal with threats to fisheries resources in the EEZ. Canadian funding came to an end in 1991 and the government, convinced of the urgent need for a fisheries surveillance system, sought ways and means of ensuring the structure's operation.

The DPSP's mission is to protect and monitor the Exclusive Economic Zone to ensure compliance with fisheries regulations.

The DPSP has three divisions (administrative, operational and scientific) and coastal stations.

Directorate of Inland Fisheries (DPC)

Prior to March 2000, inland fisheries were the responsibility of the Ministry of the Environment. The Inland Water and Wildlife Management Division was responsible for implementing national policy in this area, initiating programmes to develop fishing and fish farming, and monitoring all activities in this sub-sector. This division was represented in certain regional Water and Forestry Inspectorates (Ziguinchor, Kolda, Saint-Louis).

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Today, inland fishing is placed under the supervision of the Ministry of Fisheries by Decree no. 2000-833 of 16 October 2000.

Decree no. 010270 of 31 December 2003 governs the organisation and operation of the DPCA, which comprises the Inland Fisheries Division, the Aquaculture Division and the Resource Management and Development Division.

Fisheries Processing Industries Division

Formerly a division of the DPM, the Fisheries Processing Industries Division was created in 2004. Its mission is to implement the policy defined for the processing, conservation and marketing of fishery and aquaculture products at industry level.

The Merchant Navy Directorate

Its mission is to implement the rules laid down by international conventions in the fields of maritime safety and marine environmental pollution. It is also responsible, among other things, for the design, preparation and application of legislation and regulations in the fields of fishing, commercial and pleasure vessel safety and marine environmental pollution. It comprises the Maritime Safety and Pollution Prevention Division, the Maritime Transport Division and the Seafarers, Maritime Labour and Training Division.

The Centre de Recherches Océanographiques de Dakar-Thiaroye (CRODT)

The Centre de Recherches Océanographiques de Dakar-Thiaroye (CRODT) is the department of the Institut Sénégalais de Recherches Agricoles (ISRA; www.isra.sn) specialising in fisheries and aquaculture sciences. Its mission is to contribute to the development of the marine and continental fisheries and aquaculture sector by (i) improving knowledge and creating new technologies, (ii) supporting professionals, administrations and development partners and (iii) monitoring scientific developments.

Co-management arrangements

The State, NGOs and development partners, as well as communities, to introduce measures aimed at reducing these negative impacts. The approach advocated by most of the players who have been working in this field for some years now has been to delegate power to grassroots players and to promote local co-management initiatives for resource management (Dieng et al, 1998, Mbaye, 2005).

Although local organisations such as the CLPAs are often cited as the co-management body, the Fisheries Administration is still the structure most recognised as being responsible for implementing and monitoring regulatory measures (Figure 55). This situation can be explained by the fact that not only does the Fisheries Administration ratify the measures taken by decree and penalise offenders, but also and above all by the fact that some stakeholders equate the CLPA with the

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Fisheries Administration, which provides the chair and secretariat. Nevertheless, this could mean a lack of visibility of the role of the CLPAs, not to say the local organisations of professionals before the Fisheries Administration.

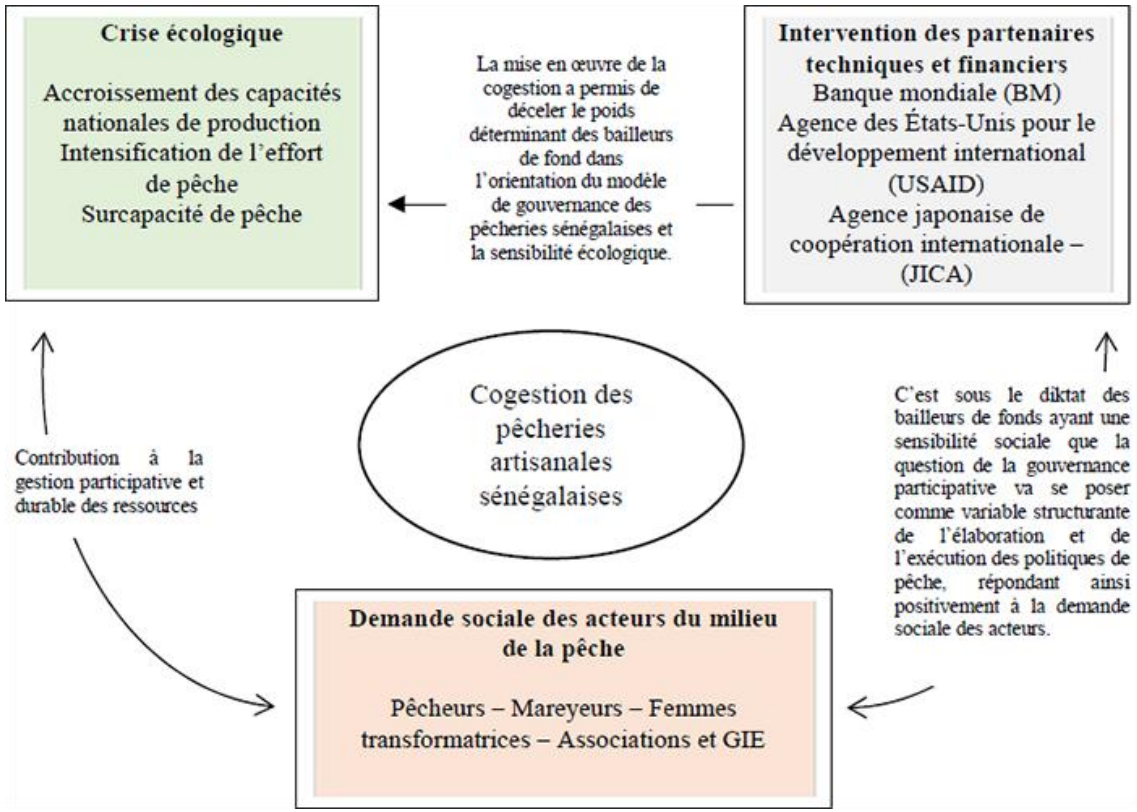


Figure 55. Socio-historical contours of the implementation of co-management in Senegal, against a backdrop of ecological crisis and intervention by technical and financial development partners in a strong context of social demand from stakeholders (Dème et al., 2022).

Regulatory framework

Specific regulations, policies or plans for fisheries sector in protected areas.

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Senegal has created marine protected areas in the framework of international environmental treaties, mainly the Convention on Biological Diversity (CBD). All CCLME countries have adopted a policy for the creation of MPAs to better preserve vulnerable habitats. Mauritania has a UNESCO World Heritage Sites called the Banc D'Arguin National Park (CCLME 2015).

Specific regulations, policies or plans for gender issues in the fisheries sector.

Senegal have made important progress in terms of adherence to international and regional commitments on gender equality, signing the United Nations Convention on the Elimination of All Forms of Discrimination Against Women "CEDAW", the International Labor Organization (ILO) Convention No. 100 on equal remuneration for men and women and The International Labor Organization (ILO) Convention No. 111 on Discrimination in terms of employment and occupation, the Beijing Declaration and Platform for Action and The Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa (Maputo Protocol) (Estrada 2023).

Moreover, the Emerging Senegal Plan (ESP), which is Senegal's only policy and strategy reference framework, includes in its programming the promotion of gender equity and equality as one of the principles that should accompany the development process. Indeed, as part of the economic and sustainable development of the biodiversity sector in Senegal, good governance requires the participation of all stakeholders in management so that the interests of artisanal fishers are legitimately represented in all processes. Accordingly, the Senegalese government has set up a National Strategy for Gender Equality and Equity, the aim of which is to: "To make Senegal an emerging country, without discrimination, where men and women will have the same opportunities to participate in its development and enjoy the benefits of its growth".

Senegal has signed and ratified the following international agreements:

- United Nations Convention on the Law of the Sea of 1982 (signed 1982 and ratified in 1984).
- Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing and
- (iii) the International Labour Organisation instruments: Work in Fishing Convention of 2007 (C188) (Member since 04.11.1960), and
- the Work in Fishing Recommendation of 2007 (R199).

Senegal is member of the following RFMOs and Regional Commissions.

- International Commission for the Conservation of Atlantic Tunas (ICCAT).
- Committee for the Eastern Central Atlantic Fisheries (CECAF).
- Ministerial Conference on Fisheries Cooperation Among African States Bordering the Atlantic Ocean (ATLAFCO) (COMHAFAT in French) (participating party).
- Sub-Regional Fisheries Commission (SRFC) (Commission Sous Régionale des pêches - CSRP in French).

Indigenous peoples, ethnic groups or communities in fisheries.

In Senegal, the Wolofs are a typical ethnic group, representing almost half of the population. In addition, the Lébous are part of the Wolof community in Senegal. Traditionally fishers and farmers concentrated in the Cape Verde peninsula (Dakar) which they occupied when the first settlers arrived in the region. The other groups in Senegal, are the Diolas which are located mostly in Casamance (Deme et al 2023).

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The Fisheries Transparency Initiative (FITI)

The FiTI is a global multi-stakeholder partnership that aims to increase transparency and participation for greater sustainability in marine fisheries. Senegal has been slow since 2016 to complete the steps required to join this important FITI standard. However, professionals in Senegal's small-scale fishing sector have repeatedly expressed their desire to see the public commitment of His Excellency, the President of the Republic of Senegal, to have Senegal join the FITI initiative become a reality. The FiTI is an opportunity for Senegal to publicise the efforts made by the State to develop the fisheries sector.

Overview of the fishery

Fishing operations

In Senegal, small-scale fisheries have higher landings of octopus than industrial fisheries, and the landing gap between these two sectors has increased since 2014 (Figure 1). Indeed, during the period 2006 to 2021, the average landings are 3550 and 1683 tons respectively for artisanal and industrial fishing (Source CRODT and DPM 2022). Artisanal fishing has experienced several peaks during this period. It should be noted that production increased considerably in 2011 (+161.5%) and in 2018 (+108.2%). However, in 2013 and 2014, there was a decrease in catches from artisanal fisheries (1347 and 1074 tons respectively) compared to industrial fisheries (2008 and 1889 tons respectively).

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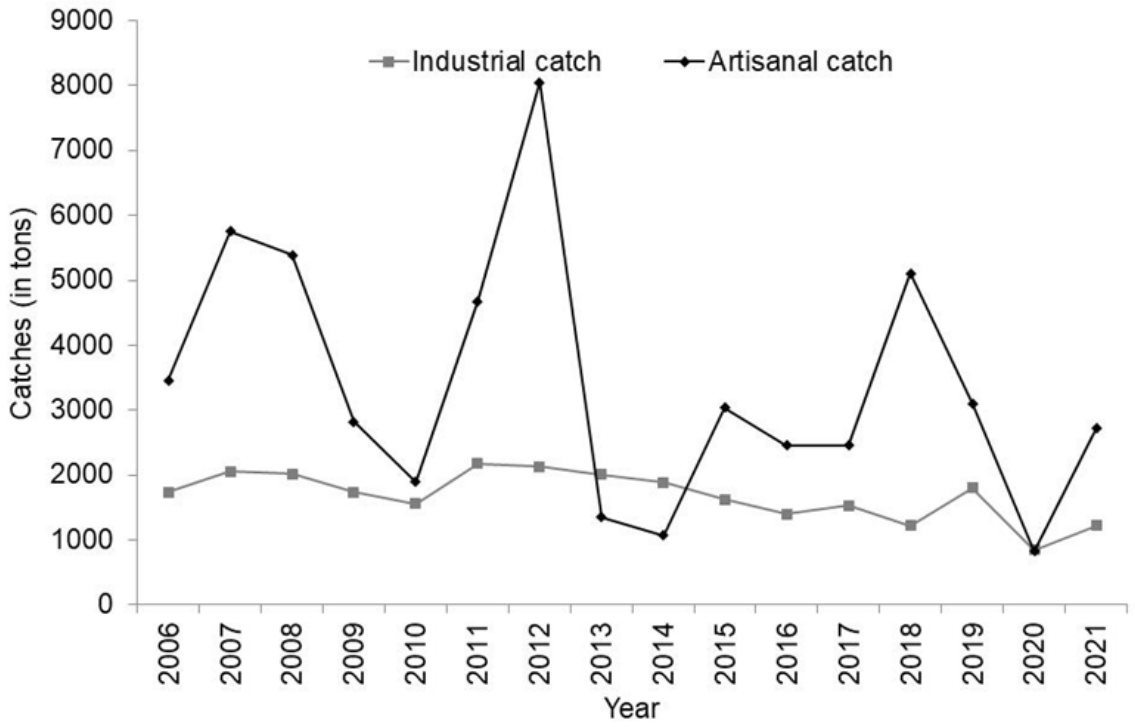


Figure 56. Octopus landings by small scale fisheries and industrial fisheries from 2006 to 2021 (Source: CRODT and DPM 2021).

In Senegal, the small-scale fishery uses hand jigs, pots, traps, and trammel nets, primarily during the summer season when its population is highest (Diedhiou et al 2019). The small-scale fishing sector also employs motorized pirogues with either line or hand jigs. These hand jigs are conical, with a lead of 200–400 g and a base of 5–6 hooks arranged in a crown. However, it should also be noted that small-scale fishers that land various fish with a set net often also land octopus as bycatch (Diedhiou et al., 2019).

In 2005, the number of pirogues represented 1,609, of which almost half (44%) were based in the Cape Verde area, while the Grande Côte and the Petite Côte respectively concentrated 28% and 27% of the boats. In April 2014, the CRODT counted 651-line pirogues for octopus between the localities of Saint-Louis and Djifère (DPM 2016).

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The industrial fishing uses trawling, and the fleet sector operates under a coastal demersal fishing license (option 'cephalopod') with a mesh size of 70 mm or a demersal fishing license (option shrimp) and incidentally capture small octopus in relatively large quantities due to the 40 to 50 mm mesh they use (DPM 2016, Diedhiou et al 2019).

In 2013, out of 82 industrial fishing vessels with licenses to operate in Senegalese waters, there were 57 trawlers with the "option cephalopod" license (69.5% of the total) and 25 trawlers with the "option shrimp" license (30.5%). There foreign coastal trawl fishing is practically non-existent today with the end of the fisheries agreement protocol with the European Union (EU) in 2006 (DPM 2016).

Target species

Octopus (Octopus vulgaris)

Biology

The common octopus, *O. vulgaris*, has a life cycle with several phases: pelagic para-larval phase, juvenile phase and benthic adult phase. The para-larval phase is defined as the juvenile phase, which differs from the adult phase in no way apart from its pelagic lifestyle. In Senegal, the octopus life cycle has been studied by Caverivière and al. (2002), whose key points are summarized below: At hatching, larvae have an average weight of 1.4 mg. The length of larval life also depends on temperature; and in rearing, benthic life on the bottom begins 33 to 54 days after birth (21-27°C), with planktonic larvae reaching 3 months in cold waters at the limit of distribution. Bottom colonization takes place at a weight of around 200 g, i.e. 125 times the birth weight. The young octopus is then similar to the adult and gradually switches from planktonic to benthic food. The octopus is characterized by systematic post-reproductive senescence. This leads to obligatory semelparity, with only one reproduction per individual. The adult period in the life cycle is short and ends with the death of the individual, which rapidly follows the reproductive phase. Garcia-Cabrera (1968) notes that the octopus life cycle is well-defined in cold waters, but may show anomalies in waters with thermal irregularities.

Octopuses are ready to reproduce at a very early age (Caverivière et al., 2002; Hernández-Garcıa et al., 2002), in Senegal as early as 260 g for some males and later for females, from 500 g (Caverivière et al., 2002). Sexual maturation takes around 7 months for females, but only 3 months for males (Idrissi et al., 2006). Female sexual maturity peaks from March to May and from September to October. The two recruitment periods are one month apart from these two sexual maturity periods. Sizes at first sexual maturity differ according to octopus harvesting areas.

According to FAO/CECAC (FAO 2016) the population of Octopus vulgaris in Western Africa, based on political or geographic limits rather than on biological reasons, is divided into 3 main units: Dakhla, in Morocco (26 °N-21 °N), Cape Blanc (21°N-16 °N) and Senegal-Gambia (16 °N-12 °N) (FishSource 2022).

Geographical distribution

The octopus is a benthic species that can be found from the coast to the edge of the continental shelf. in a wide variety of habitats (rocks, coral reefs or seagrass beds). It is a cosmopolitan It is a cosmopolitan species that colonizes environments at depths of between 0 and 200 m (Caverivière et al., 2002). *O. vulgaris* is a benthic and exclusively coastal species (Caverivière et al. al., 2002). It can be found on all types of bottom: rocky, sandy, but the bottoms with the greatest presence correspond to fine to coarse sand sediments with high carbonate content. In sandy and sandy-muddy areas, diving observations have shown that octopuses occupy

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burrows octopus occupy burrows whose depth and diameter are a function of the size of the individual (Caverivière et al., 2002). Burrows are preferred habitats because they offer octopus protection from predators. Octopuses only leave this habitat to feed or reproduce.

The first mass appearances of octopus off the Sahara were in the late 1960s; initially in the north (Morocco), octopus' populations then spread southwards (Senegal). Since then, there have been considerable variations in catches from one year to the next. One of the most plausible hypotheses put forward to explain the massive appearance of octopus in 1960s in West Africa, is the significant over-exploitation of demersal fish. As for the inter-annual variations in octopus abundance, these are mainly due to the particularly in Senegal, where strong abundance-environment relationships have been demonstrated (Thiaw, 2010).

Fisheries exploitation

In the 1960s, cephalopods caught accidentally were discarded (Bakhayokho, 1981). The first Japanese trawlers targeting cephalopods (cuttlefish and squid) arrived in 1973. After trawler fishing, artisanal fishing was added in 1975. Senegalese industrial fishers then began exploiting octopus, due to its high market value. But the fishery developed significantly in 1986, when landings of this species in Senegal reached 10,000 tonnes, bringing about a profound change in Senegal's demersal fishery. The industrial fleet, made up of ice-cream and freezer vessels, developed in the early 1980s. Thereafter, their numbers have varied over the years: around 40 iceboats and 100 freezers. From 1994 onwards, Senegal signed fishing agreements with the EU, for a maximum of 43 boats in the latest agreement of 2006. From 1989 onwards, a large number of artisanal fishermen converted to octopus fishing (Thiaw, 2010).

Two types of fleets exploit the octopus' resource in Senegal: artisanal fishing and industrial fishing.

Artisanal fishing is the main economic activity in coastal areas. The main zone is off the Petite Côte, between the Cape Verde peninsula and the Gambia, accounting for 98% of octopus landings in 1997 (Lanco, 1999). The pirogue fleet numbered 11500 pirogues in 1996 and 10707 in 1997 (Barry et al., 2002). The fleet is made up of wooden boats of various sizes and types. The exact number of pirogues fishing for octopus is unknown; there is no artisanal fishery exclusively targeting this resource. In fact, octopus-fishing units are characterized by a mix of fishing gears: stillnets, handlines and traps. This practice enables flexible adaptation throughout the year to seasonal variations in resource abundance. This fishery uses jigs to catch octopus. The jig consists of a central rod weighted with lead of varying weights, and around which 5 to 6 hooks are arranged concentrically, in one or two tiers, on which colored bait strips are attached. The artisanal fishing zone extends to six or seven miles off the coast (Thiaw, 2010).

Industrial fishing is carried out by trawlers exploiting the demersal resources of Senegal's continental shelf and slope. Today, there is a national fleet based in Dakar (120 units in 2006). The foreign fleet (Italy, Greece, France, Spain, Portugal, Gambia, Cape Verde) operating under fishing agreements (26 units in 1997) is no longer present since fishing agreements were not renewed in 2005 (Thiaw, 2010).

There are no trawlers specialized in octopus fishing. The opportunistic strategy of these fisheries enables them to target different demersal species depending on the tide or the season. By-catches of octopus reported in other segments of the industrial fishery, i.e. other fisheries targeting resources other than octopus, are relatively low (Thiaw, 2010).Characteristics of the Octopus species as the CITES listing and the IUCN Red List Status is detailed in Table 50.

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Table 50. Octopus species for Senegal.

English common name	Local common name	Scientific name	CITES listing	IUCN Red List status
Octopus	Yaranka	*Octopus vulgaris*	Not Evaluated	Least Concern

Main commodities and products and destinations

Four companies specialized in processing octopus are based in Dakar (Direction des Pêches Maritimes 2016), and another in Zinguinchor. The companies based in Dakar are Ocean Fish, Africa Fish, Blue Fish and Atlas Fish. In Zinginchor, Senefand processes octopus. Additionally, nearly a dozen companies in Dakar and Mbour process octopus according to orders or the season. In addition to the octopus fished by the industrial fleet, the processing facilities are supplied by wholesalers (marecayeurs) who buy octopus directly from artisanal fishers or from other collecting middlemen (Direction des Pêches Maritimes 2016).

According to Diedhiou et al. 2019, factories do not appear to make a profit, they instead expect to realize their margins in terms of price change. Factories set the purchase price for wholesalers, taking into account costs and potential profits. The purchase price of the raw material is fixed by the wholesaler, who takes into account ice and transportation expenses (Diedhiou et al. 2019).

Octopuses are not typically consumed in Senegal, they are more commonly exported to the European Union (EU) and Asia. In 2016, octopus exports to the EU and Asia reached 4886 tonnes. The majority of cephalopod products exported to the EU market (Spain, Italy, Greece, Portugal, and France) are frozen (91.8%), with fresh products representing only 3.6% of the total. Of the cephalopod products exported to the EU, the octopus ranks highest with gross revenue of US$22.6 million and a volume of 3966 tonnes, amounting to 15.7% of the total (Diedhiou et al. 2019).

Regarding the Asian market, 92% of cephalopod exported to Asia is frozen representing the leading cephalopod export to the Asian market. Among cephalopods exported to Asia, 72.9% are octopus destined for Japan, with a gross revenue of US$3.5 million, 13.5% are octopus destined for China, with a gross revenue of US$648,111.40; and 5.8% are exported to South Korea, with a gross revenue of US$272,889 (Diedhiou et al. 2019).

The octopus is generally marketed in two main forms of packaging: one is block-packed octopus, and the other is IQF (Individual Quick Frozen or Curled One by One). Generally, except specific request of certain customers, boats freeze octopus in block; on the other hand, the processing plants often do the IQF. The IQF is more profitable format for octopus since generally for the same size of octopus the IQF is sold at 10 to 15% more expensive than the block (Direction des Pêches Maritimes 2016).

On the period 1995–2014, the trend in the price per kg of octopus fluctuated between US$0.73 to US $6.015 due to the high demand from Western countries. However, in 2015–2016, the price per kg of octopus decreased from US$4.158 to US$3.36 (Diedhiou et al 2019).

Fishing areas

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Senegal extends over 196,722 km² between 12° and 17° north latitude, and between 11° and 18° west longitude. Its continental shelf, between the shore and the 200 m isobath, is not very uneven and covers an area of 600 km², unevenly distributed according to depth: 15% between 0 - 10 m, 49% between 10 - 50 m and 36% between 50 -200 m (Domain, 1977). At the level of Cape Verde (Dakar), the plateau narrows considerably, and the 200 m isobath is only 5 nautical miles from the coast in the south of the country, while a few dozen kilometres further north, the Kayar trench cuts deeply into it. These two obstacles, although passable by pelagic species, are responsible for certain hydroclimatic and ecological particularities in the region. The exclusive economic zone (EEZ) of 180,895 km² is marked by an estuarine zone made up of the three deltaic zones of the Senegal, Sine Saloum and Casamance rivers. The Senegalese coastline is characterised by large urban areas (Saint-Louis, Dakar, Mbour, Joal, etc.) and a multitude of villages (Kayar, in particular), most of which are home to fishing communities. The Senegalese coast, which is 718 km long, can be divided into three geographical entities: the Grande Côte, the Petite Côte and the Casamance (Figure 57).

Grande côte, the northern part of the coastline

The grande côte (Figure 20) stretches from Saint-Louis (16°04 N) in the north to the pointe des Almadies (14°36 N). It is characterized by high swells, a series of dunes and barrier beaches, the most important of which is the Langue de Barbarie. A large mudflat, located on either side of the mouth of the Senegal River (15°15 N - 16°30 N), is between 20 and 80 m deep. This area is home to cold, salty waters from October onwards, which cover the entire continental shelf by January. In fact, the inflow from the Senegal River acts as a boundary for a short period, forming a thin, desalinated surface layer that does not reach the bottom. This is due to the action of lower rainfall on the extended, shallow continental shelf in the northern zone, compared with Casamance in the southern zone. There is a large canyon at Kayar (15°00 N). Soft bottoms (sand, mud, mix of the two) dominate, with rocky bottoms located within the 6-mile limit. The Grande Côte concentrates very important fishing centers such as Saint-Louis, Fass Boye, Mboro, Lompoul, Yoff and above all Kayar in relation to the ecological conditions present and a strong presence of traditional fishing communities such as the guet-ndariens (Thiaw et al. 2017).

Petite côte, nursery area for small pelagic fish

The Petite côte (14° 36 N to 13° 36 N; Figure 20) is rich in geomorphology and biodiversity: sandy strips and spits, cliffs, bays, lagoons and mangrove estuaries (Saloum estuary, Somone lagoon-estuarine system). Sedimentary features include sandy seabeds (Somone) mixed with mud and flat relief. Warm, salty tropical waters circulate here from May to July, under the influence of monsoon flows. Winds from the north and south-east (speed 7 m.s-1) predominate during the cold dry season from November to May on the Petite Côte, while during the rainy season from June to October, winds come mainly from the west and south-west, with a reduction in wind speed (by 5 m.s-1) (Diara, 1999). These winds generate various phenomena (e.g. tides, swells, currents, upwelling) which are responsible for variations in sea level (Niang-Diop, 1995). Seasonal variability in wind forcing is the main driver of seasonal variability in surface chlorophyll. The small coast is home to a seasonal upwelling cell that governs ambient temperature fluctuations in the region (Faye et al. 2015). Due to the platform's topography, the northerly trade winds induce a strong tongue-shaped upwelling core formation in winter/spring Combined with sunlight, the nutrient-rich and nutrient-rich groundwater favours phytoplankton production (Auger et al. 2016). Phytoplankton is at the base of the food chain in all ocean ecosystems and serves as a food source for the higher trophic levels that house small pelagic fish.

The Sine Saloum estuary (13 ° 55 ' - 14 ° 10' North and 16 ° 00 - 16 ° 80 West; Figure 20) located in the Petite côte was referred to the category of reverse-functioning estuaries in 1967 (Pagès & Citeau, 1990). It concentrates an important avifauna, particularly waterfowl, especially during winter. It has a surface area of around 800 km² of open water and comprises three main branches from north to south: the Saloum, the Diomboss and the Bandiala. In the south-western part of the Sine Saloum system, there is a dense network of small mangrove-covered inlets of seawater known locally as "bolongs" (Simier et al., 2004; Vidy, 2000). In the Sine

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Saloum estuary, water temperature varies, with maximum values of around 32°C between June and October and lower values of between 21 and 22°C from December to February (Gueye et al., 2012). This variation has an effect on the salinity of the environment. Indeed, during the cold season (November-June), which corresponds to the dry season on the continent, water salinity at the ocean surface reaches 36-36.5 ‰. In contrast, during the warm season (July-October), water salinity drops to 35-35.5 ‰ under the impact of river water (Gac & Kane, 1986). The dry season, which lasts eight to ten months, is characterized by maximum air temperatures and evaporation values in March and April, and by seawater entering the Saloum delta and causing intense salinization. This intrusion leads to an increase in salinity of up to 80-100 ‰ (Pagès & Citeau, 1990). The Sine Saloum estuary is also characterized by the presence of numerous small fish due to its role as a nursery and protection against predators (Sloterdijk et al., 2017).

Casamance or southern part

The Casamance (13° 04 N and 12° 20 N) or southern zone is located between the Gambia and Guinea-Bissau borders. Here, the continental shelf reaches its maximum width, almost 54 miles, and the rocky seabed lies offshore, mainly on the shelf break. Its estuary is in fact a ria that flows 250 km into the interior of the continent (Sakho, 2011). It receives freshwater inflows only during the rainy season, which lasts only 5 months, from June to October. The climate is essentially characterized by the alternation of a wet season from July to October and a dry season during which the highest temperatures are recorded between April and June, with average monthly values between 24 and 29°C (Thiam & Singh, 2002). During the dry season, from October to May, the many small streams that make up the Casamance River are often dry. Reduced rainfall in the Casamance river basin and rising temperatures have led to a flow deficit and saline intrusion (Savenije & Pagès, 1992; Thiam & Singh, 2002).

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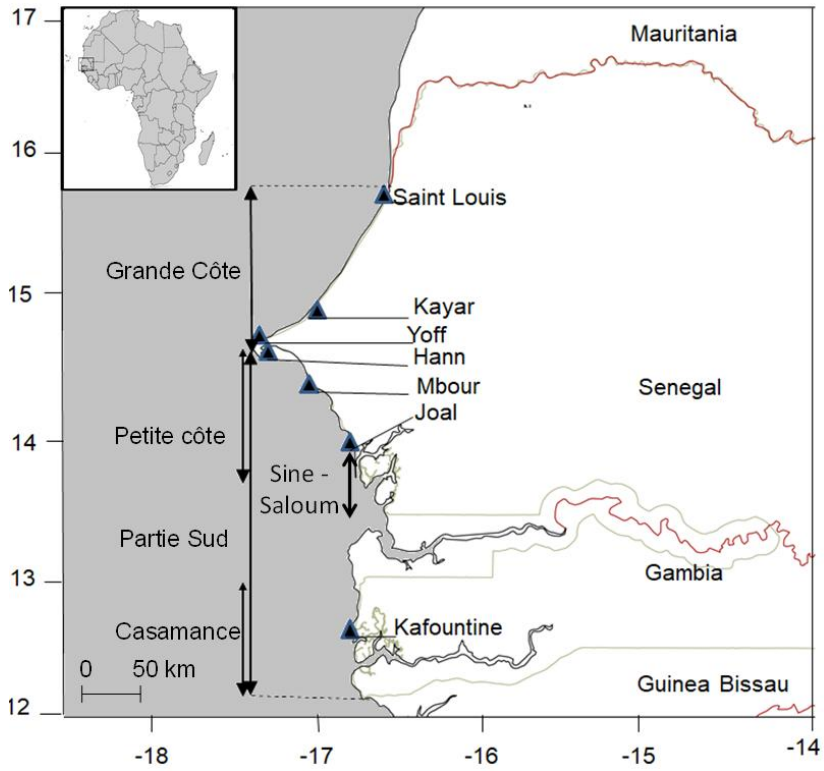


Figure 57. Map of the study area with the location of the main landing ports along the Senegalese coast. The Grande côte includes Saint-Louis, Kayar and Yoff; the Petite côte includes Hann, Mbour and Joal and the Casamance (Kafountine). (Source: Balde et al. 2018).

Stock assessment

The FAO Fisheries Committee for the Eastern Central Atlantic (CECAF) is a regional structure for scientific cooperation on stock assessment and providing management recommendations. CECAF has a working group for small pelagics, composed of national scientists from Morocco, Mauritania, Senegal, Gambia and Spain. The Small Pelagic Working Group meets annually to review and analyse data and conduct stock assessments for each small pelagic stock. CECAF has a range of stock assessment techniques, but generally the choice of approach is severely limited by the data available. In Senegal, stock assessments are also conducted by the CRODT.

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Stock status

Assessments are carried out by the FAO/CECAF demersal working group. The latest assessments of the CECAF working group suggested that the stock of *Octopus vulgaris* was at “full exploitation” (in terms of biomass) for the Senegal-Gambia zone (FAO 2020).

Fisheries management

The management of Senegal's marine fisheries resources is entrusted to the State. They are under the administrative authority of the Ministry of Fisheries and Maritime Economy (MPEM). The Fisheries Code has undergone several revisions since its creation in 1976. Indeed, the Fishing Code created in 1976 was revised for the first time in 1987 by Law 87-27, which in turn was revised in 1998 by Law 98-32. Law 98-32 is accompanied by Decree 98-498 which identifies the areas of coverage of the law and the provisions of management plans and technical management measures. However, the 1998 Fisheries Code has been repealed by the 2015 Fisheries Code.

Fishery under regional management and Regional Fisheries Management Organizations (RFMO).

There is not an RFMO for octopus in West Africa, however there are several organizations as the Comission sous regionale des peches and Conférence Ministérielle sur la Coopération Halieutique entre les Etats Africains Riverains de l'Océan Atlantique, whose mandate is to support the countries of the region in the management of shared stocks, and in particular small pelagics (Gascoigne et al 2021). Nevertheless, none of these organizations have legal or regulatory powers, and so far, countries in the region are not working together to put in place coordinated management measures for shared stocks (Gascoigne et al 2021).

Registries

Until 2005, artisanal fishing was subject to a free access regime. However, since 2005, the exercise of this activity in maritime waters under Senegalese jurisdiction has been subject to obtaining a fishing permit for all nationals wishing to engage in artisanal maritime fishing. The artisanal fishing permit varies according to the fishing gear and the length of the boat. Thus, a distinction is made between an A permit for fishing on foot, a B permit for pirogues of 0 to 13 metres and a C permit for pirogues of more than 13 metres (see Fall 2009). For foreign artisanal fishers authorised to fish under a reciprocity agreement, the conditions for their activities are defined in the agreement or protocol linking their country to Senegal. Industrial fishing vessels must obtain fishing licences.

Vessel monitoring

Inspection of vessels after landing
Inspection of Senegalese vessels and foreign nationality vessels that land at a fishing port, in accordance with the legal and regulatory provisions in force. There is a maritime patrol operation which aims to control vessels, of any nationality, present in waters under Senegalese jurisdiction. They are carried out in collaboration with the French Navy, which uses its naval resources and the launches of the DPSP. In addition, air patrol operations are carried out in collaboration with the Air Force and the French Elements in Senegal (EFS).

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Participatory monitoring of artisanal fisheries
Since 2005, the State of Senegal has adopted a new approach to monitoring and controlling artisanal fisheries, called participatory surveillance. It is a system in which fishers have the mission of controlling activities together with local administrative agents.

Monitoring of landings

The collection of scientific data is in charge of the CRODT and the MPEM. CRODT has a coverage in all national landing sites, and uses data for scientific research, scientific advice on management measures. The MPEM collects data for production and export matters.

Regulations

Senegalese octopus management measures can be categorized into the following three groups: fishing zones, biological rest, and fishing permits and licenses. Each of these is discussed in further detail in the following subsections.

Fishing zones: Daily fishing and tide fishing are practiced, with 95% of octopus lines taking part in the former. Meanwhile, tide fishing is typically practiced 2–3 days per week during the cold season (Diedhiou et al 2019).

Biological rest: The biological rest period for octopuses for small-scale fisheries has been set during the spawning season, from September 20 to October 31. However, this period is not the same for all landing sites and for industrial fisheries. All octopus fisheries (i.e., industrial and small-scale) must comply with biological rest regulations. The minimum mesh size for fish-cephalopod trawlers remains at 70 mm, and the mesh nets may not be altered in any way that increases their effectiveness (Diedhiou et al 2019). The biological rest period for young octopuses is established differently than that of mature octopuses. These periods are set annually by the CLPAs. Once note largest landing of young octopuses they create an adaptive management plan which is presented to their local authority (Prefect or Sub-Prefect) so they can adapt a new implementation plan (Diedhiou et al 2019).

Fishing permits and licenses Since 2006, Senegalese royalty fees for small-scale fishing permits rang from US$9 to US$45 per year. Additionally, the royalty fee for a coastal demersal fishing license under the option ‘fish-cephalopod’ goes from US$17.22 to US$49 per GRT per year (established in May 2013) (Diedhiou et al 2019).

Management plans

The latest Octopus Fishery Management Plan was published in 2016. This plan is structured around short-term management measures and medium/long-term management measures. As for the medium/long-term management measures, the plan establishes the prerequisites for the transition to a system of individual transferable quotas (ITQs), notably the setting of fishing possibilities, the registration and marking of pirogues, the introduction of specialized fishing licenses/permits, the strengthening of the CLPAs, the management of the fishery by the different segments, the determination of fishing possibilities: total allowable catches (TACs), the possibilities of allocating them in ITQs, the system of payment of fees, and the monitoring of the catch (FAO 2023).

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In addition, it provides a system of octopus valorisation, the eco-certification of the fishery, and the strengthening of the capacities of the CLPAs in terms of negotiation. A Public Private Partnership (PPP) allows for an equitable sharing of the rent that will be generated and an incentive for the private sector to develop wealth in the fishery. In the framework of the implementation of the management plan, risks and risk mitigation measures are taken into account. Secondly, it provides for the establishment of a fishery information system, the monitoring of the implementation and revision of the management plan; and a logical framework for intervention (FAO 2023).

Fisheries agreements

In the framework of the Sustainable Fisheries Partnership Agreement (SFPA) between the EU and Senegal, 15,000 octopus clay pots were submerged in 2019 in Senegalese local waters with the goal of creating artificial reefs and an environment for the reproduction of octopus (clay pots were elaborated by women near Mbour). The immersion of octopus clay pots is part of the support for small-scale fishing under the SFPA (Framework Agreement 2014 – 2019, entered into force in November 2014 and can be renewed for additional 5 years).

There is also a memorandum of understanding for the implementation of an octopus management plan between Morocco and Senegal, which includes support from Morocco to Senegal in research (related to stock assessment, estimation of exploitable catch), definition and approval of the MP (in the implementation of quotas, fishing zones, fishing gear, etc.), legal support (for the implementation of the MP), and training of Senegalese professionals in research, catch traceability and control of fishing activities.

Bycatch

No information on bycatch for the target fishery.

Interaction with ETP species

No interaction with ETP species documented for the target fishery.

Interaction with protected areas

Following the recommendation of the national parks congress held in September 2003 to protect at least 5% of the coastal and marine areas of each coastal country, Senegal created five Marine Protected Areas (MPAs) in 2004 by decree 2004-1408 of November 4, 2004. These MPAs are Saint-Louis, Kayar, Joal-Fadiouth, Abéné and Bamboung, covering a total area of 1,030 km² (Table 51).

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The Bamboung Marine Protected Area covers almost 70 km2. It is located in the southern part of the Saloum Delta. Bamboung is bounded to the north by the Diombos inlet, to the south by the Kabaye and Kolé forests, to the east by the Bandiala bolong and to the west by the Diogaye forest. The MPA is located in the rural community of Toubacouta, in the department of Foundiougne, part of the Fatick region. The Joal-Fadiouth Marine Protected Area covers an area of 174 Km2 and includes the commune's maritime outbuildings, an arm of the sea and a large network of mangroves. It is administratively located in the Thiès region, Mbour department, and geographically situated in the commune of Joal-Fadiouth. The Saint-Louis Marine Protected Area lies within the maritime domain of the Saint-Louis region, straddling the commune of Saint-Louis and the rural community of Ndiébène Gandiol. With a surface area of 496 km2, it is the largest marine protected area in the country. The Kayar Marine Protected Area covers 171 km2 and is made up entirely of the maritime dependencies of the Commune of Kayar and the Kayar marine trench. The Abéné Marine Protected Area straddles the rural communities of Kafountine and Diouloulou in the Ziguinchor region. It covers an area of 119 km2 and extends from the Gambian border to the Kafountine fishing wharf. The Abéné Marine Protected Area straddles the rural communities of Kafountine and Diouloulou in the Ziguinchor region. It covers a surface area of 119 km2 and extends from the the Gambian border to the Kafountine fishing port.

For exemple, In the Kayar MPA, the five species considered to be focal points by members of the and sharks for their bio-ecological role), thiof, octopus and sardinella for their socio-economic for their socio-economic importance in terms of income generation and food security. The results obtained by Ecoutin et al. (2014) showed an increase in fish abundance in the Bamboung MPA in the two years following its closure (2004 and 2005). They explained this phenomenon by an increase in the number of individuals belonging to estuarine species of marine origin and estuarine, phytophagous and zooplanktonohagous marine species (*Ethmalosa fimbriata* and *Sardinella maderensis*).

Table 51. Marine protected areas in Senegal.

Name	IUCN management category	WDPA ID	Link
MPA Saint-Louis	VI	352704	https://www.protectedplanet.net/352704
MPA Kayar	VI	352705	https://www.protectedplanet.net/352705
MPA Joal-Fadiouth	VI	352706	https://www.protectedplanet.net/352706
MPA Bamboung	II	555651496	https://www.protectedplanet.net/555651496
MPA Abéné	V	352707	https://www.protectedplanet.net/352707

Impacts on the marine environment

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Not reported.

Fishery Improvement Project (FIPs)

FIPs reported in Senegal are detailed in Table 52.

Table 52. Existing FIPs in Senegal. Source: FisheryProgress.org.

FIP Name	FIP Type	Progress Rating	Status
Atlantic Ocean blue shark and swordfish - surface longline (FIP-BLUES)	Comprehensive	A - Advanced Progress	Active
Atlantic Ocean tuna - longline (StarKist)	Comprehensive	C - Some Recent Progress	Active
Atlantic Ocean tuna - purse seine (Capsen & Grand Bleu S.A.)	Comprehensive	A - Advanced Progress	Active
Atlantic Ocean tuna - purse seine (GSK Marine S.A.)	Comprehensive	A - Advanced Progress	Active
COMPLETED Atlantic Ocean tropical tuna - purse seine (OPAGAC)	Comprehensive		Completed
Eastern Atlantic Ocean tuna - pole & line	Comprehensive	A - Advanced Progress	Active

Initiatives working with the fishery

List the key ongoing initiatives that are working with the fishery.

Projet « Aménagement Durable des Pêcheries du Sénégal » (AduPeS)

The project (2013-2017) was funded by the European Union. The project aims to set up a sustainable management system for certain fisheries (octopus and deepwater shrimp management plans) and an evaluation and scientific advice system for all demersal fisheries in Senegal. The overall objective is to increase the contribution of Senegal's demersal fisheries to sustainable economic growth.

Project to study the promotion of fisheries co-management through value chain development (PROCOVAL)

The project was funded by JICA (3 years). The main objective of the project is to promote co-management through value chain development. Among the activities carried out was the development of the octopus value chain.

Octopus pots project in Senegal

The project was funded by the European Union (5 years). As part of the Sustainable Fisheries Partnership Agreement (SFPA) between the European Union (EU) and the Republic of Senegal, 15,000 clay pots were placed in Senegalese waters this year to form artificial reefs providing a favorable habitat for octopus reproduction.

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The clay pots were made by women living in villages near Mbour and Nguéniene. The clay pot immersion technique is an integral part of the strategy to support artisanal fishing under the APPD agreement. Irène Mingasson, EU Ambassador to Senegal, officially inaugurated this year's clay pot immersion on September 12, 2019 in Guéréo, near Dakar. The artificial breeding grounds provided by the clay pots have led to a considerable increase in octopus numbers since the practice began in 2006. This generates significant income for local communities, in particular for the women who make the clay pots, for artisanal fishermen who have an abundant stock of octopus to catch, and for local fish merchants. As a result, octopus pots not only preserve and restore the ecosystem and increase the biomass of the species, they also help to maintain local artisanal fishing on a viable basis.

SWOT analysis

The key strengths, weaknesses, opportunities, and weaknesses are listed in Table 53.

Table 53. SWOT analysis for Senegal Octopus fishery.

Strengths	**Weaknesses**
• Fishers and main stakeholders of the fishery participate in local management bodies called CLPAs. • Existence of an Octopus Management Plan since 2016.	• No information on bycatch for the octopus' fishery. • No information of interactions with ETP species. • No impacts on the environment have been reported.
Opportunities	**Threats**
• Improve the octopus catch of the artisanal fleet in order to increase octopus' quality for markets. • The Global Octopus SR selected Senegal, among other countries to launch a FIP. • Increase transparency by publishing minutes of CLPAs.	• The stock is considered fully exploited (FAO 2018). • There are IUU issues (Veiga 2020). • Information on the impacts in the ecosystem is insufficient (Veiga 2020).

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Literature

Auger, P.-A., Gorgues, T., Machu, E., Aumont, O., & Brehmer, P. (2016). What drives the spatial variability of primary productivity and matter fluxes in the North-West African upwelling system? A modelling approach and box analysis. *Biogeosciences*, *13*(23), 6419-6440. https://doi.org/10.5194/bg-13-6419-2016

Ba, A., Schmidt, J., Dème, M., Lancker, K., Chaboud, C., Cury, P., Thiao, D., Diouf, M., & Brehmer, P. (2017). Profitability and economic drivers of small pelagic fisheries in West Africa : A twenty year perspective. *Marine Policy*, *76*, 152-158.

Bakhayokho, M. (1981). *Résultats des chalutages de prospection de céphalopodes sur la côte sénégambienne* (p. 35) [Rapport scientifique]. CRODT.

Bakun, A. (1990). Global climate change and intensification of coastal ocean upwelling. *Science*, *247*(4939), 198-201.

Baldé, B. S., Brehmer, P., Sow, F. N., Ekau, W., Kantoussan, J., Fall, M., & Diouf, M. (2018). Population dynamics and stock assessment of *Ethmalosa fimbriata* in Senegal call for fishing regulation measures. *Regional Studies in Marine Science*, *24*, 165-173. https://doi.org/10.1016/j.rsma.2018.08.003

Barry, M. D., Thiao, D., & Ndaw, S. (2002). Les statistiques de la pêche maritime sénégalaise dans la base régionale StatBase. *Pêcheries maritimes, ecosystèmes et sociétés en Afrique de l'Ouest: Un demi-siècle de changement. Actes du Symposium International Dakar-Sénégal-24-28 juin*, 25-36.

Barton, E. D., Field, D. B., & Roy, C. (2013). Canary current upwelling : More or less? *Progress in Oceanography*, *116*, 167-178. https://doi.org/10.1016/j.pocean.2013.07.007

Binet, T., Failler, P., & Thorpe, A. (2012). Migration of Senegalese fishers : A case for regional approach to management. *Maritime Studies*, *11*(1), 1.

Caverivière, A., Thiam, M., & Jouffre, D. (2002). *Le poulpe commun Octopus vulgaris. Sénégal et côtes nord-ouest africaines*. Editions IRD, Paris, Colloques et séminaires.

CRODT (2016). *Statistiques de la pêche maritime sénégalaise en 2016 : Pêche artisanale, Pêche thonière et Pêche chalutière* (p. 65). Centre de Recherche Océanographique Dakar Thiaroye.

Dème, E. hadj B., Brehmer, P., & Failler, P. (2022). La pêche artisanale sénégalaise à l'épreuve de la cogestion : Le local désormais utilisé comme échelle de planification des politiques de pêche. *Revue Gouvernance*, *19*(2), 25-50.

Diara, M. (1999). *Formation et évolution fini-holocènes et dynamique actuelle du Delta Saloum-Gambie (Sénégal-Afrique de l'Ouest) : Géomorphologie, stratigraphie, sédimentologie et dynamique sédimentaire* [Thése Sciences Naturelles]. Université de Perpignan.

Diedhiou, I., Yang, Z., Ndour, M., Dème, M., Fall, M., Thiaw, M., Thiam, N., & Li, S. (2019). Socioeconomic dimension of the octopus "*Octopus vulgaris*" in the context of fisheries management of both small-scale and industrial fisheries in Senegal. Marine Policy, 106, 103517.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Direction des Pêches maritimes (DPM), 2022. Résultats généraux des pêches maritimes. Ministère des pêches et de l'économie maritime. Direction des Pêches Maritimes.

Domain, F. (1977). *Carte sedimentologique du plateau continental senegambien. Extension a une partie du plateau continental de la Mauritanie et de la Guinee Bissau.* (Note explicative N° 68; p. 17). ORSTOM. http://agris.fao.org/agris-search/search.do?recordID=FR19780287958

Ecoutin, J.-M., Simier, M., Albaret, J.-J., Laë, R., Raffray, J., Sadio, O., & de Morais, L. T. (2014). Ecological field experiment of short-term effects of fishing ban on fish assemblages in a tropical estuarine MPA. *Ocean & Coastal Management*, *100*, 74-85.

Estrada C. (2023). Gender Analysis. Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems. Project Preparation Phase (PPG).

Fall, M. (2009). *Pêcherie démersale côtière au Sénégal – Essai de modélisation de la dynamique de l'exploitation des stocks* [Université de Montpellier 2]. http://horizon.documentation.ird.fr/exl-doc/pleins_textes/divers13-04/010050294.pdf

FAO. (2020). Report of the FAO/CECAF Working Group on the Assessment of Demersal Resources – Subgroup North Nouakchott, Mauritania, 2–10 December 2019 / Rapport du Groupe de travail FAO/COPACE sur l'évaluation des ressources démersales – Sous-groupe Nord Nouakchott, Mauritanie, 2–10 decembre 2019. CECAF/ECAF 20/83. Rome. https://doi.org/10.4060/cb1539b

FAO. (2018). Report of the FAO/CECAF Working Group on the Assessment of Demersal Resources – Subgroup North. Tenerife, Spain, from 6 to 15 June 2017/Rapport du Groupe de travail FAO/COPACE sur l'évaluation des ressources démersales – Sous-groupe Nord. Tenerife, Espagne, du 6 au 15 juin 2017. CECAF/ECAF Series/COPACE/PACE Séries. No. 18/78. Rome, FAO. Licence: CC BY-NC-SA 3.0 IGO. 489 pp. http://www.fao.org/3/ca1003b/ca1003b.pdf

FAO. (1982). *Rapport du groupe de travail spécial sur les stocks de céphalopodes de la région nord du COPACE* (FAO Fisheries Report N° 82/24; p. 180). FAO.

Faye, S., Lazar, A., Sow, B. A., & Gaye, A. T. (2015). A model study of the seasonality of sea surface temperature and circulation in the Atlantic North-eastern Tropical Upwelling System. *Frontiers in Physics*, *3*, 76. https://doi.org/10.3389/fphy.2015.00076

Fréon, P., Stéquert, B., & Boëly, T. (1979). *Les pêches sénégalaises : Description et analyse des captures et des rendements des principales espèces pélagiques côtières*. http://www.documentation.ird.fr/hor/fdi:31701

Gac, J. Y., & Kane, A. (1986). Le fleuve Sénégal : II. Flux continentaux de matières dissoutes à l'embouchure. *Sci. Geol. Bull*, *39*(2), 151-172.

García-Cabrera, C. (1968). Biología y pesca del pulpo (*Octopus vulgaris*) y choco (*Sepia officinalis*) en aguas del Sáhara español. *Publicación Técnica de la Junta Estatal de Pesca*, *7*, 98-141.

Gascoigne J, Inejih CA and Y Jaridi (2021). Mauritania small pelagics fishery by the coastal fleet summary report. Summary. Marine Stewardship Council. GB2786. Summary Report.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Greenpeace. (2012). *Main basse sur la Sardinelle* (Le scandale des autorisations de pêche au Sénégal: un drame en cinq actes, p. 24). Greenpeace.

Gueye, M., Tine, M., Kantoussan, J., Ndiaye, P., Thiaw, O. T., & Albaret, J.-J. (2012). Comparative analysis of reproductive traits in black-chinned tilapia females from various coastal marine, estuarine and freshwater ecosystems. *PloS one*, *7*(1), e29464.

Hernández-Garcıa, V., Hernández-López, J. L., & Castro-Hdez, J. J. (2002). On the reproduction of Octopus vulgaris off the coast of the Canary Islands. *Fisheries Research*, *57*(2), 197-203.

Idrissi, F. H., Koueta, N., Idhalla, M., Belghyti, D., & Bencherifi, S. (2006). Les modalités du cycle sexuel du poulpe *Octopus vulgaris* du Sud marocain (Tantan, Boujdour). *Comptes Rendus Biologies*, *329*(11), 902-911.

Lanco, S. (1999). *Adaptation d'un modèle structural à une ressource instable pour mesurer l'impact de fermetures de pêche : Apllication au stock de poulpe sénégalais* [PhD Thesis]. Institut de Recherche pour le Développement (IRD); ENSA.

McGregor, H. V., Dima, M., Fischer, H. W., & Mulitza, S. (2007). Rapid 20th-century increase in coastal upwelling off northwest Africa. *science*, *315*(5812), 637-639.

Ndiaye, P. G., & Kébé, M. (2017). *Étude sur la coordination des politiques de pêche et d'environnement dans l'écorégion WAMER* (p. 56). REPAO.

Ndoye, S., Capet, X., Estrade, P., Sow, B., Dagorne, D., Lazar, A., Gaye, A., & Brehmer, P. (2014). SST patterns and dynamics of the southern Senegal-Gambia upwelling center. *Journal of Geophysical Research: Oceans*, *119*(12), 8315-8335.

Niang-Diop, I. (1995). *Erosion côtière sur la petite côte du Sénégal à partir de l'exemple de Rufisque. Passé. Présent. Futur* [Thèse de Doctorat Géologie, Université d'Angers]. http://cat.inist.fr/?aModele=afficheN&cpsidt=168694

Pagès, J., & Citeau, J. (1990). Rainfall and salinity of a Sahelian estuary between 1927 and 1987. *Journal of Hydrology*, *113*(1-4), 325-341.

Rebert, J.-P. (1982). *Hydrologie et dynamique des eaux du plateau continental sénégalais* (Document scientifique N° 89; p. 99). Centre de Recherche Océanographique Dakar Thiaroye.

Sakho, I. (2011). *Évolution et fonctionnement hydro-sédimentaire de la lagune de la Somone, Petite Côte, Sénégal.* [Université de Rouen; Université Cheikh Anta Diop de Dakar, Sénégal]. https://tel.archives-ouvertes.fr/tel-00680519/

Savenije, H. H., & Pagès, J. (1992). Hypersalinity : A dramatic change in the hydrology of Sahelian estuaries. *Journal of Hydrology*, *135*(1-4), 157-174.

Simier, M., Blanc, L., Aliaume, C., Diouf, P. S., & Albaret, J.-J. (2004). Spatial and temporal structure of fish assemblages in an "inverse estuary", the Sine Saloum system (Senegal). *Estuarine, Coastal and Shelf Science*, *59*(1), 69-86.

Sloterdijk, H., Brehmer, P., Sadio, O., Müller, H., Döring, J., & Ekau, W. (2017). Composition and structure of the larval fish community related to environmental parameters in a tropical estuary impacted by climate change. *Estuarine, Coastal and Shelf Science*, *197*, 10-26.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Sow, B. (2014). *Etat moyen et variabilité saisonnière de l'upwelling Sénégalo-mauritanien : Approche modélisation* [Thése de doctorat]. Université Cheikh Anata Diop de Dakar.

Thiam, E.-H. I., & Singh, V. P. (2002). Space-time-frequency analysis of rainfall, runoff and temperature in the Casamance River basin, southern Senegal, West Africa. *Water SA*, *28*(3), 259-270.

Thiao, D. (2012). *Bioécologie et exploitation des petits pélagiques au sénégal* (p. 45). Sub-Regional Fisheries Commission. http://www.spcsrp.org/sites/default/files/csrp/projets/pelagics/RapNat/SN/Bioecologie_et_exploitation_des_petits_pelagiques_au_Senegall.pdf

Thiaw, M. (2010). *Dynamique des ressources halieutiques à durée de vie courte : Cas des stocks de pulpe et de crevettes exploités au Sénégal* [Université de Rennes, ENSAR]. http://www.theses.fr/2010NSARH079

Veiga P. (2023). A first analysis of key small pelagics, octopus, and cuttlefish fisheries for three countries in Northwest Africa. SFP, June 2023.

Veiga P. (2020). A first analysis of key small pelagics, octopus, and cuttlefish fisheries for three countries in Northwest Africa. SFP, May 2020.

Vidy, G. (2000). Estuarine and mangrove systems and the nursery concept : Which is which? The case of the Sine Saloum system (Senegal). *Wetlands Ecology and Management*, *8*(1), 37-51.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Annex 16: List of relevant projects for coordination and collaboration

Project name and Country	Executing Agency	Start date	Final Date	Funding Source	Project Objectives	Investment (USD)	Elements for coordination / collaboration with the present project
Senegal: Natural Resources Management Project	Ministry of Environment, Sustainable Development, and Ecological Transition and Ministry of Fisheries and Maritime Economy	2023	2028	World Bank	To improve the management of fish and forest resources and access to related economic opportunities in target areas.	USD 100 million	This project has relevant actions in synergy with the GMC2: PDO2: Development and implementation of local community-based management plans, including (a) update of existing local management plans (b) development of four new local management plans (Fass-Boye, Mbour, Cap-Skirring, and Kafountine), PDO4: Improvement in the quality of fisheries landings and transformation of seafood. It will track to what extent the handling and transformation of seafood products at project sites comply with hygiene and sanitation standards of the Codex Alimentarius and the provisions of the Fisheries Code. (a) preselected landing sites: Fass Boye, Cap Skirring, and Ouakam and (b) preselected processed sites: Kayar, Mballing, Niodior, Diogué, and Kafountine. IR2a. Establishment of an artisanal fishing permit system linked to management plan. IR2b. Reliable key fisheries management data published online regularly (Number/Score) IR2c. Representation of all relevant local stakeholders groups in community-based fisheries management planning processes. IR3d. Improved cookstoves distributed Detailed information in this document: https://www.gtai.de/resource/blob/867538/4ff88902fa2d0a63c4085949e6ae419c/PRO20210201607808.pdf
CFI in West Africa	FAO	2019	2024	GEF	The Coastal Fisheries Initiative operates in the West African nations of Cabo Verde, Côte d'Ivoire and Senegal to strengthen fisheries governance and management and improve the seafood value chain, fish products and working conditions. The CFI team will work with stakeholders in Senegal to make coastal fisheries more sustainable	USD 6.5 million in GEF funding and USD 45 million in co-financing for a period of five years	This initiative looks forward to strengthen fisheries governance and management and improve the seafood value chain, fish products and working conditions. This initiative can help to understand the fisheries governance and managements in Senegal, specifically the possibility to launch co-management platforms.

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Project name and Country	Executing Agency	Start date	Final Date	Funding Source	Project Objectives	Investment (USD)	Elements for coordination / collaboration with the present project
					while protecting the environment and delivering economic and social benefits for the population. FAO and partners will carry out a number of activities, including: - Improving fisheries governance and management; - Restoring mangrove forests for better fisheries; - Capacity building and best practices in coastal fisheries.		
Fisheries Transparency Initiative (FiTI) Ecuador, Mauritania, Panama, Senegal	FiTI International Secretariat	2021	2024	Various donors	The Fisheries Transparency Initiative has been developed as a unique effort that complements and supports other national, regional and global efforts for achieving responsible fisheries governance. The goal of the FiTI is to increase transparency and participation in fisheries governance for the benefit of a more sustainable management of marine fisheries. The FiTI is a global initiative and does not focus on a single country or on a region. Also, the FiTI is not owned or operated by one organisation, nor does it represent the work of a single interest group. Instead, the diversity of different stakeholders is a central feature of how the FiTI works, for national implementations as well as international governance.	USD 66,000.00	The FiTI Standard it is a voluntary initiative that provides governments, the fishing industry (both large-scale and small-scale), and civil society with a comprehensive and credible way to achieve and maintain high levels of transparency on the management of the marine fisheries sector and the activities of fishers and fishing companies. FiTI represents an opportunity to government to information on the fisheries sector allowed for better-informed decisions to help safeguard the national fisheries in collaboration with a multi stake holder group. The FiTI Standard include 12 transparency requirements which are applicable for all countries (for more 1. Public Registry of National Fisheries Laws, Regulations and Official Policy Documents. 2. Fisheries Tenure Arrangements. 3. Foreign Fishing Access Agreements. 4. The State of the Fisheries Resources. 5. Large Scale Fisheries (Vessel Registry, Payments for fishing, Recorded catch data). 6. Small-Scale Fisheries. 7. Post-Harvest Sector and Fish Trade 8. Fisheries Law Enforcement. 9. Labour Standards. 10. Fisheries Subsidies. 11. Official Development Assistance.

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							12. Beneficial Ownership. Up to September 2023, Senegal was a committed country, Ecuador and Mauritania were candidate countries, and Panama was a target country
FISHGOV 2 "Enhancing sustainable fisheries management and aquaculture development in Africa: A programme for accelerated reform of the sector" African Union	African Union Development Agency (AUDA)	2021	2025	European Commission has provided funding	"The objective is to improve food security, livelihoods and wealth creation in sustainable fisheries and aquaculture, aligned with African Union's 2063 Agenda, through evidence-based African Union decisions on sustainable fisheries and aquaculture policies, coherence and coordination of fisheries and aquaculture policies in Africa with the Policy Framework and Reform Strategy (PFRS) and other priorities of the African Union and adequate representation and participation of Africa in international fisheries and aquaculture fora and other relevant global instruments."	EUR 12,000,000 from EU.	"The FishGov 2 Project aims to achieve three specific objectives: i. AU decisions on sustainable fisheries and aquaculture policies are evidence-based ii. Fisheries and aquaculture policies in Africa are coherent with the PFRS and other AU priorities and coordinated at continental, regional and national levels iii. Africa is adequately represented and effectively participates in international fisheries and aquaculture fora and ably domesticates relevant global instruments. FishGov 2 supports the implementation of the AU's Blue Print Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa and the recent Africa Blue Economic Strategy. These key instruments guide the interventions for addressing food security and increasing economic avenues generated through the fisheries and aquaculture sector."
GREPPAO: Fisheries Management and Resilience small pelagics in West Africa Mauritania	11ème FED Régional	2017	2024	European Union in the framework of the PESCAO program	The objective of the GREPPAO action is to contribute to the achievement of the overall objective of the PESCAO Programme which is to improve the contribution of fisheries resources to sustainable development, food security and poverty reduction in West Africa. The specific objectives of the GREPPAO action are: 1.Improve the contribution of small pelagic transboundary fisheries to the food security of West African populations. 2. Increase the added value created throughout the fisheries sector specific to the Pt.		Coordination and collaboration with this project will interesting because they look forward to improving the management of migratory fisheries in West Africa, including Senegal. Specific objectives 1 and 3 seem the most relevant for synergic work with GMC2. Obj 1: diagnosis of the marketing conditions of the Pts in order to identify possible elements for improvement (economic, health and regulatory). In a second phase, the action will focus on specifying, in collaboration with national and regional institutions, the measures to be taken in order to **make the fishing industries more efficient and increase the consumption of Ppt**. Obj 3. The action will first of all focus on **mapping migratory movements and fish flows from these fisheries along the specific or**

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					3. Contribute to the management of migratory fisheries related to Ppt.		**common chains of sedentary fisheries** (from the fishing ground to the place of consumption). It will then **work with national administrations and the two subregional fisheries organisations (SCRP and CPCO)** to: 1. **ensure that catches from migrant fisheries are taken into account in the statistics of fishing countries** and countries of fish repatriation 2- **Develop policies and measures specific to migratory fisheries**. Contact: Moustapha Deme Moustapha.deme@gmail.com Centre de recherches océanographiques de Dakar-Thiaroye / Institut Sénégalais de recherches Agricoles (CRODT / ISRA)
Morocco – World Bank loan for "Blue Economy Program for Results" Morocco		2022	2027	Borrower: Ministry of Economy and Finance Implementing agencies: Moroccan National Tourist Office (ONMT), Moroccan Society of Touristic Engineering, Direction of Ports and Public Maritime Domain, National Agency for the Development of the Aquaculture, National Institute for Fisheries Research (INRH), Department of Maritime Fisheries (DPM), Department of Water and Forests, Ministry of Energy Transition and Sustainable Development	"Develop Morocco's institutional frameworks, improve integrated management of natural resources, and strengthen selected sectors for a climate-resilient blue economy in Targeted Areas"	USD 350,000,000 LOAN	"The second component looks at investment in key blue sector activities. These include sustainable tourism and the aquaculture subsector, professional training in managing the blue economy, the protection and management of ecosystem services, and improving climate resilience in targeted areas. The resulting job creation and economic growth should help stimulate economic recovery from the COVID-19 pandemic. The program will contribute to food security by establishing aquaculture farms and conserving marine resources in protected areas. Gender equality and youth participation will be encouraged through incubator programs and technical support."

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"Our Fish" – Tackling industrial fishmeal and fish oil production in West Africa	Feedback Global	Oct 2022	Sep 2025	Oceans 5	The main objectives of the project are: 1: Improve transparency of finance driving the exploitation of the small Pelagic fishery and FMFO industry in West Africa. 2: Build a robust body of evidence spotlighting the realities underpinning FMFO production in West Africa, to be used in targeted corporate and policy campaigns. 3: Build grassroots capacity to act on information and advocate on the need to address the impacts of FMFO. 4: Support effective policy decisions at regional and national levels and reinforce protection of shared pelagic fish stocks. 5: Ensure an effective, engaged community of actors continue to work in partnership to guarantee the health of small pelagic fish stocks in West Africa during and beyond the project.	USD 1,217,000	There is a possibility of collaboration with FeedBack Global who is going to be working spotlighting the realities of FMFO production in West Africa with the European companies. FeedBack Global will be pushing companies on building policies on sustainable practices and to comply in certifications. This work can create synergies with the small pelagics FIP of Mauritania.
PROMOPECH E	ILO	2017	2021	European Union	Main goal: Contribute to regional stability and better management of migration, by addressing the root causes of instability, forced displacement of populations and irregular migration, increasing economic opportunities, equal opportunities, security and development. Specific goal: Promote the creation of sustainable and decent jobs in the artisanal fishing sector to increase economic opportunities for young people in coastal regions, Nouakchott and Nouadhibou in Mauritania	EUR 14,000,000	The project focuses mainly on **improving the legal and institutional framework of the artisanal fishing sector.** Contact: Antonio Gonzalez Alaminos gonzalezalaminos@ilo.org Boureima, Faycal Siddkou boureima@ilo.org
PROMOPECH E/ Spanish Agency for International	EU / AECID	2019	2023	European Union	Promotion of employment and improvement of the living conditions of artisanal coastal fishermen, young people and women around the	EUR 10,000,000	Could be interesting to know the work they accomplished related to processing of fish products. The project worked with 3 cooperatives of women improving processing facilities. The

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Development Cooperation					protected natural areas of the northern sector of Mauritania, Specific objectives: - OS.1 - Integrate the disadvantaged sectors of the city of Nouadhibou into the labor market through the **processing of fish products** and the realization of diversified economic activities in favor of fishing families. - SO.2 - Maintain the employment-generating capacity of the artisanal fishing sector, through an approach of sustainable exploitation of resources and reduction of post-harvest losses. - SO.3 - Improve training conditions for Mauritanian institutions on the conservation and responsible exploitation of the fishing zone. - OS.4 - Raise public awareness about more responsible and sustainable fishing.		project supported the fabrication of ceramic pots to encourage responsible fishing. https://ec.europa.eu/trustfundforafrica/sites/default/files/t05-eutf-sah-mr-05_aecid_peche.pdf To contact the Horn of Africa region of the EU Emergency Trust Fund for Africa: intpa-eutf-hoa@ec.europa.eu
Save the Blue Five – Regional approach to protect migratory marine megafauna in the Southeast Pacific Region	GIZ	2023	2027	International Climate Initiative (IKI)	The project aim is: conservation and long-term survival of marine megafauna species along their main migratory routes in the Southeastern Pacific Region (SEPR) is improved. The project objective is: regional governance for the conservation of migratory marine megafauna in the SEPR is improved through political dialogue, monitoring efforts, conservation financing, awareness generation, and access to training and information.	EUR20,000,000	This regional project will work in Costa Rica, Panama, Colombia, Ecuador, Peru and Chile. The focus is migratory marine megafauna: whales, dolphins, sharks, marine turtles, and manta rays, that are referred to as the "Blue 5" species. The project has four expected outputs: Output I: Strengthened Regional Political Dialogue and Management Strategies Output II: Coordinated Regional Biodiversity Monitoring Output III: Public Private Partnerships and other Financing Mechanisms Output IV: Regional communication and capacity-building strategy. The GMC2 project can have synergies with the entire project, but mainly in those activities related to output III which include direct work with the fisheries sector.
Senegal Dekkal Geej (Restoring the Sea)	Implementer: Winrock International	Mar/2019	Mar/2024	USAID	Improve management of Senegal's fisheries for ecological resilience. Over 5 years, The DG program will	USD15,000,000.	Relevant strategic approaches:

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					build on previous USAID interventions in the fisheries sector which have contributed to substantial progress towards sustainable fishery management that is accountable, equitable and inclusive. Vision: A sustainable, equitable and inclusive fisheries management system is established in Senegal by 2024, resulting in the conservation of biological diversity; the regeneration of priority stocks; the strengthening of community resilience and food security; and an increased contribution to GDP and peoples' living standards.		"1. ADVOCACY: Strengthened constituent demand and engagement for more sustainable, accountable, and equitable fisheries management; 3. CO-MANAGEMENT: Strengthened institutional capacity for decentralized co-management of fisheries at all levels of governance; 4. BEHAVIOR CHANGE: Piloted and strengthened initiatives that effectively incentivize behavior change toward sustainable fishing practices; 5. LIVELIHOODS: Enhanced livelihoods along sustainable fisheries value chains; **Contact:** Jon Anderson jon.anderson@winrock.org Matthew Maltby matthew.maltby@winrock.org Operations Deputy Chief of Party **Ndeye Fatou Guéye**; ndeyefatou.gueye@winrock.org Tel: 77 656 68 80
Shared sardinella: Supporting the implementation of the ecosystem approach to fisheries for the management of shared sardinella stocks in northwest Africa Morocco, Mauritania, Senegal and Gambia	Food and Agriculture Organization of the United Nations (FAO), in close collaboration with the Institute of Marine Research (IMR) in Norway	2017	2022	Norwegian Agency for Development Cooperation (Norad)	The long-term objective of the programme is to support sustainable fisheries to improve food and nutrition security for people in partner countries. The Shared sardinella projects centre around two main components: 1. Development of knowledge and the strengthening of capacities in support of fisheries management planning processes in line with the EAF for the shared sardinella stocks. 2. Development, implementation and follow-up to management systems aligned with the EAF and harmonised at the regional level.		To r8equest data of the Nansen programme: https://www.fao.org/in-action/eaf-nansen/data-access-requests/en/ Contacts : Merete Tandstad | Courriel : Merete.Tandstad@fao.org Joseph Zelasney | Courriel : Joseph.Zelasney@fao.org info-eaf-nansen@fao.org Anne Beathe Tvinnerheim, Assistant Director anne.beathe.tvinnereim@norad.no

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Socio-environmental Fund for the conservation of Sailfish and the sustainable development of Artisanal Fishing (FOPESCA) Guatemala	Centro de Estudios del Mar y Acuicultura de la Universidad de San Carlos de Guatemala (CEMA).	16 October 2019	indefinite	Asociación Empresas de Pesca Turística y Deportiva (EPESTURDE)	FOPESCA is an environment fund aimed at the conservation of sailfish in the Pacific coast of Guatemala.	To be raised	FOPESCA was established in 2021 and will invest in the development of tourist and sport fishing (i.e., the main target and charismatic species is the sailfish), and the promotion of sustainable artisanal fishing (to reduce the impact on sailfish) on the Guatemalan Pacific coast. EPESTURDE collect donations from sport fishers, the funds will be invested in initiatives to be executed by CEMA. The GMC2 project must identify complementarities and synergies with the initiatives of FOPESCA since: 1. Both initiatives will be focusing on the same fleet and fishery. That is, the dorado and shark fishery based on Buena Vista and Puerto Quetzal. 2. The sailfish is common bycatch of the dorado and shark fishery.
Strengthening decent work in the fishing sector in Ecuador and Peru Ecuador	International Labour Organization (ILO)	15 dec 2021	14 jun 2026	U.S. Department of Labor (USDOL)	Objective: Strengthen decent work in the fishing sector in Ecuador and Peru, with the potential for scalability in some Latin American countries. Outcome 1. Strengthened mechanisms to address labour rights violations associated with IUU fishing. Outcome 2. Greater action by workers and civil society to address violations of labour rights in the fishing sector in South America. Outcome 3. Strengthening the capacity of workers' organizations, responsible authorities and the private sector to address violations of labor rights in the fishing sector.	USD 5 million	The GMC2 project will have direct coordination with the ILO project and its work in Ecuador. The PRODOC integrates the use of ILO tools (e.g., labour audits) and and analyses into the GMC2 strategy. https://www.ilo.org/lima/programas-y-proyectos/WCMS_853341/lang--es/index.htm https://www.ilo.org/lima/sala-de-prensa/WCMS_832912/lang--es/index.htm https://www.dol.gov/newsroom/releases/ilab/ilab20211222 https://www.ilo.org/lima/sala-de-prensa/WCMS_863393/lang--es/index.htm
Habla Tiburón. Strengthening Galapagos seascapes governance and ensuring the sustainable management of	WWF and Charles Darwin Foundation	March 2023	February 2028	USAID	1. Protected marine areas in the Galapagos are sustainably and equitably managed with effective public participation. 2. The necessary conditions for the long-term viability of shark and ray populations are realized, including the substantial elimination of the illegal	12,000,000	The project is funded with resources of the USAID/Ecuador – New Environmental and Economic Reactivation Partnerships Initiative. The project will focus on the USAID request to strengthen Galapagos seascapes governance and to ensure the sustainable management of shark and ray populations. The GMC2 project will have direct coordination with the Habla Tiburón project, since the USAID

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shark and ray populations					harvest of sharks and rays and the trade in shark and ray parts		project will have direct work with the oceanic longline fishery for large pelagic fish and will seek to develop incentives to reduce the bycatch of sharks.
Strengthening the Governance of Natural Resources in Ecuador	WWF	2022	2024	USAID	To create conditions to eliminate conservation crimes like IUU fishing, wildlife trafficking, and illegal logging and mining.	Not available	This project has a set of activities aimed at combatting IUU fishing which includes training of fisheries inspectors and building capacities within justice and enforcement agencies to detect and investigate IUU and hold accountable those who have committed such crimes. The GMC2 project will integrate the advances of this USAID project into the work with the co-management platforms, the FIPs, and the fisheries management plans.
Towards Sustainable Management of the Canary Current Large Marine Ecosystem (CCLME) – Initial Support to SAP Implementation Cabo Verde, Guinea, Guinea-Bissau, Mauritania, Morocco, Senegal and The Gambia	FAO, implementing agency. Fishery Committee for the Eastern Central Atlantic (CECAF), executing agency	January 2020	December 2023	GEF (GEF ID 9940)	Objective: To create enabling conditions for effective implementation of the Canary Current Large Marine Ecosystem Strategic Action Programme (SAP). Expected outcomes: Outcome 1.1: Management of the CCLME strengthened with the development of mechanisms for cooperation, partnerships and financing of the SAP. Outcome 2.1: Improved knowledge and understanding of the state of the CCLME including fish stocks, vulnerable species and habitats and ecosystem functioning, climate change impacts on the resources and fishing communities. Outcome 2.2: Strengthened capacities to enable implementation of an ecosystem approach to fisheries (EAF) in the context of broader multisectoral ecosystem management goals. Outcome 3.1: Effective and efficient results-based management and knowledge sharing.	USD 1,826,000 GEF USD 6,600,000 Co-financing	This is 18-months medium size project that faced delays because of the COVID-19 pandemic. The initiation workshop of the project was held virtually on November 2021. The deadline was extended to June 2023, but it is possible that the project will close by the end of 2023. The project focuses on the development of a consortium for SAP implementation and a SAP financing strategy. In addition, the project team is prepared a PIF for a GEF full size project to continue the support to SAP implementation. During implementation the GMC2 project will have develop connections with the SAP consortium (once established) and collaboration and synergies with the new GEF project to be launched. https://www.fao.org/in-action/canary-current-lme/en/ https://www.thegef.org/projects-operations/projects/9940

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PROBLUE	World Bank	2018	Unknown	Australia, Canada, Denmark, EU, France, Germany, Iceland, Ireland, Norway, Sweden, United Kingdom, USA.	The programme has four objectives: 1. Improving fisheries by tackling the underlying causes of overfishing and strengthening aquaculture sustainability. 2. Addressing threats posed to ocean health from marine pollution, including litter and plastics, from marine or land-based sources. 3. Enhancing sustainability of key oceanic sectors such as tourism, maritime transport and offshore renewable energy. 4. Building government capacity to manage marine resources, including nature-based solutions, and to mobilize private sector finance.	USD 204 million at 2022	PROBLUE is the World Bank´s blue economy programme. It is funded by a multi-donor trust fund administered by the World Bank to support client countries to advance towards a Blue Economy approach. The programme supports activities in the client countrie. In 2022 it had invested USD94.14 million in 143 activities in 80 countries. PROBLUE supports FiTI. During implementation, GMC2 must be aware of PROBLUE activities supported in the six target countries and to ensure collaboration and synergies in pertinent interventions. https://www.worldbank.org/en/programs/problue
Value chain integration in fishing and aquaculture (INCAVPESCA) Belize, Guatemala, Honduras and Nicaragua.	Organización del Sector Pesquero y Acuícola del Istmo Centroamericano (OSPESCA)	2019	30 June 2023	Republic of China (Taiwan)	Objective: To advance in the process of integration and harmonious development of the fishing and aquaculture sector of the SICA countries and contribute to the well-being of the population linked to its value chain, through coordinated actions for productive development and regional governance. Specific objectives: 1. To develop new regional protocols for aquaculture production and good fishing practices that contribute to generate new sources of employment and income and improving the supply of fishery and aquaculture products. 2. To Support decision-making processes by updating information on the evolution of the fishing and aquaculture sector in the SICA countries, as well as improving the production and commercial skills of the actors in the value chain, including consumers, under the	USD 1,5 million Taiwan USD 250,000 counterpart.	The project was delayed due to COVID-19. It was officially launched on 12 – 13 March 2020. The expected closing date is 30 June 2023. In Guatemala the project is working on two lines. The first one is the Artisanal Fisheries Information Collection - CIPESCA - an information collection methodology, with a regional application, which aims to update and disseminate sectoral information. CIPESCA activities began in August 2020, which included training sessions for members of fishing associations in data collection and digitization of these data in a computer programme. CIPESCA provided computer equipment to five associations of fishers. However, these organisations did not share the information and did not make use of the computer equipment. Therefore, DIPESCA had to collect the computer equipment. In November 2022, 9 fishermen and woman collectors were hired with a salary of $400/month. 2 women are working in the pacific (Las Lisas and Buena Vista) and 2 women part of the DIPESCA team, are also supporting in the project, one in Hawaii and one in Champerico.

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					principles of social, family and gender equality inclusion. 3. To contribute to the sustainable use of fishing resources, by strengthening the regional governance model of OSPESCA and inter-institutional and intersectoral management in the SICA countries.		The other line of the project, is the Regional Bootcamp for XtraOrdinary Entrepreneurs, aimed at strengthening the entrepreneurial skills and soft skills of women beneficiaries of the project: Integration of the Value Chain in Fisheries and Aquaculture (INCAVPESCA) in the countries of Belize, Guatemala, Honduras and Nicaragua. The program provided tablets to 14 women who graduated, where 9 are located in the pacific of Guatemala (4 in Champerico, 1 in Buena Vista, 2 in Las Lisas, and 2 in Sipacate). Possible collaboration: Ospesca can provide a baseline with information on landings of artisanal fisheries in Guatemala that will contribute to the creation of the FIP. Another objective is to support women involved in artisanal fisheries in Guatemala to better market their products, the focus of the project is on landings and entrepreneurship in Guatemala, Buena Vista, one of the main landing sites for this project. https://www.sica.int/documentos/proyecto-incavpesca_1_121049.html
WA8-Improving the management of small pelagics Mauritania, Senegal, the Gambia, Guinea, Guinea Bissau and Cabo Verde	MAVA Fondation pour la nature	2020	2022	MAVA Fondation pour la nature	We aim to reduce the over-exploitation of small pelagics through a more sustainable management of the stocks and a more effective protection of the main critical coastal sites, by: improving data collection and scientific knowledge of stocks and critical sites of small pelagics building capacity for effective management of critical sites and sustainable exploitation of small pelagics supporting civil society advocacy for transparency and implementation of small pelagic fishery regulations strengthening and making the partnership sustainable	The average annual budget for the action plan is estimated at € 1,170,000.	The project works on small pelagics fisheries. They are focussed on cooperation of management of small pelagics. As an expected results, the projects aims that these countries implements FITIs standards https://mava-foundation.org/wp-content/uploads/2021/10/AO8-mini-OAP-phase-2-ENG.pdf **Marie Madeleine Gomez** Manager, West Africamariemadeleine.gomez@fondationmava.org Marie Madeleine Gomez sent several documents of the project.

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Sustainable management of tuna fisheries and biodiversity conservation in the areas beyond national jurisdiction	FAO	2022	2027	GEF (GEF ID 10622)	To achieve responsible, efficient and sustainable tuna harvests and biodiversity conservation in the ABNJ in face of a changing environment	USD 14,378,000	This is a global project that builds upon the results of the previous GEF 4581 project that worked with the Tuna RFMOs. This project will work with the IATTC. The GMC2 project will develop connections with the IATTC in particular to the actions of outcome 3.1. "sustainable management of sharks and rays is enhanced through three shark stock assessments using improved data". The GMC2 project will foster that the information on shark catches from the longline fisheries is feed into the IATTC process. Also, the GMC2 project will encourage that IATTC undertake stock assessments of the shark populations.
AWA' Ecosystem Approach to the management of fisheries and the marine environment in West African waters	Federal Ministry of Education and Research (BMBF/Germany) and the IRD (AIRD/France)	2013	2017	BMBF	The principal goal is to permit members States of Sub Regional Fisheries Commission to implement sustainable fisheries management systems in marine environment with biological, economics and socials plans. The specific objectives are: 1.Strengthening management mechanism fisheries of States members of SRFC ; 2.Outstanding importance in the broader scientific context of the analysis of global climate change and of paramount relevance of their impacts on fisheries resources for West Africa 3.Capacity building students, with institutes researchers and West Africans universities. The long term goal of the strategic partnership is to develop an ocean observation and modeling platform able to monitor, simulate and forecast some of the most important parameters driving the dynamics of oceanic ecosystems (temperatures, sea	2 474 556 €	Following the AWA project ('AWA' Ecosystem Approach to the management of fisheries and the marine environment in West African waters (42 laboratories, 14 countries). PI: Patrice Brehmer), the general objective of the AWA programme is to support fisheries research in the 7 West African countries under the jurisdiction of the sub-regional fisheries commission (Mauritania, Senegal, Cape Verde, Gambia, Guinea Bissau, Guinea and Sierra Leone) based in Senegal, without neglecting associated countries bordering the Atlantic Ocean coast such as the Republic of Côte d'Ivoire, Benin, etc. The aim is to strengthen and develop a partnership that began in 2013 with CSRP and was formalised in 2018 by the signing of a framework collaboration agreement with IRD. Coordination Patrice BREHMER patrice.brehmer@ird.fr

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					level, chlorophyll and oxygen levels), and the key resources for marine life off continental West Africa		
Beyond 30x30: Securing resilience in the Eastern Tropical Pacific through enhanced transboundary cooperation. Colombia, Costa Rica, Ecuador, Panama.	Conservation International	2023		GEF (GEF ID 11267)	Ensure the long-term resilience and conservation of at least 31,250,000 ha of the Eastern Tropical Pacific Marine Corridor area – Central ETP - by strengthening regional governance, coordinating blue economy investments and conservation efforts and securing regional connectivity and improved management	14,378,899	This proposed project aims to strengthen the operation of the Eastern Tropical Pacific Marine Corridor (CMAR). It includes interventions in Costa Rica, Panama, Colombia and Ecuador, mainly focused in marine protected areas. In Ecuador, it only includes the Galapagos archipelago. Probable collaboration and synergies will focus on the interventions of the component 3 which aims to promote a regional blue economy and includes a regional 5-year blue economy plan is developed and integrated into the CMAR Regional Action Plan (outcome 3.1) and financial sustainability of blue economy actions is ensured (outcome 3.2). These include work with the fisheries sector.
USAID Fish Right Programme	University of Rhode Island	2018	2025	USAID	To influence system change within the fisheries sector by improving resource user compliance with agreed upon fisheries practices resulting in increased fish biomass in the selected marine key biodiversity areas.		The USAID Fish Right Programme is implemented in the Philippines and has five specific objectives: Objective 1. Put in place at least 2.5 million hectares of marine area under improved management effectiveness and sustainability based on a suite of regulatory and economic instruments; Objective 2. Improve capacities and accountability of at least 50 institutions to implement resilient and ecosystem-based fisheries management; Objective 3. Establish and/or improve at least 40 policies/regulations that support resilient and ecosystem-based fisheries management; Objective 4. Enhance participation and leadership of at least 100 civil society organizations or networks of organizations (representing women and men) in resilient and ecosystem-based fisheries management; and Objective 5. Increase investments leveraged from at least eight public-private partnerships that

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Project name and Country	Executing Agency	Start date	Final Date	Funding Source	Project Objectives	Investment (USD)	Elements for coordination / collaboration with the present project
							contribute to resilient and ecosystem-based fisheries management. The project includes supply chain strategy to promote the trade of responsibly sourced fish. For this purpose, the Better Seafood Philippines (BSP) initiative was established. BSP developed a Responsible Seafood Sourcing Standard and actions to engage value chain actors on both the supply and demand side, and for both domestic and export fisheries, The GMC2 project will use the experience of the BSP to develop market engagement trials in Guatemala, Ecuador and Senegal and a buyer engagement pilot in Morocco.
Towards Joint Integrated, Ecosystem-based Management of the Pacific Central American Coastal Large Marine Ecosystem (PACA)	UNDP	2023	2027	GEF (GEF ID 10076)	To promote ecosystem-based management of the Pacific Central American Large Marine Ecosystem through the strengthening of regional governance.	7,147,209	This project will prepare the TDA and SAP for the PACA LMEC (component 1), will implement pilto interventions on comon key issues (component 2) and will facilitate knowldege management and exchange (componet 3). The GMC2 project will closely collaborte with the PACA project in particular in the development of the TDA and SAP and the regional pilot on conservation and management of billfishes.
Biodiversity Conservation, Ecological Connectivity Ecological and Integrated Coastal Zone Management in Guatemala.	Fundaeco.	2023	2026	French Global Environment Facility (FFEM)	To strengthen the governance, planning, protection and restoration of Guatemala's coastal areas to ensure the conservation of marine and coastal ecosystems and maintain regional ecological connectivity through Integrated Coastal Zone Management (ICZM) for the benefit of local populations. The project aims to replicate the ICZM model developed and implemented by FUNDAECO for many years on the Pacific coast, as well as to strengthen protection activities on the Caribbean coast, developing new innovative aspects of	Unknown	The effects contemplated by the project are: - better governance and improved management of the Guatemalan coastlines, considering the ecological challenges of the territories. - improved and strengthened conservation of the ecosystems of the two Guatemalan coasts and significant progress in the conservation of the Pacific coast, which is currently poorly protected. - greater involvement and benefits for local populations, through the development of sustainable blue tourism, more sustainable fisheries management, the development of new productive activities and the training of young people for green and blue jobs - and the development of sustainable financial mechanisms to ensure long-term financing for the

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Project name and Country	Executing Agency	Start date	Final Date	Funding Source	Project Objectives	Investment (USD)	Elements for coordination / collaboration with the present project
					the ICZM model. The project will be implemented on the entire Caribbean coast, and in three pilot sites on the Pacific coast: Manchón-Guamuchal, Sipacate-Naranjo, Monterrico/Hawaii.		protection and conservation of Guatemala's coasts.
Evaluation of the current state of demersal and small pelagic fish fisheries in the Central Eastern Pacific of Guatemala.	Centro de Estudios del Mar y Acuicultura (CEMA)-Universidad de San Carlos de Guatemala.	2023	2023	Universidad de San Carlos de Guatemala.	To evaluate the current state of demersal and small pelagic fish fisheries in the central-eastern Pacific of Guatemala to generate relevant information for decision making that will promote their sustainable management and management, and medium-term fisheries management.	Unknown	This project will focus on solving this problem in a more specific way, focusing on the evaluation of the current state of demersal and small pelagic fish fisheries in the Pacific of Guatemala. During the year 2023, through biological-fishery monitoring and participatory mapping, variables such as species composition, spatial and temporal distribution of the population dynamics of these resources, and identification of fishing areas will be investigated. The results of this research include the generation of relevant information for decision-making to promote the current management of these fisheries and considerations for sustainable management and fisheries management in the medium term. Specifically, it is expected that the results will allow informed decisions on fisheries management in Puerto San José, Iztapa and the Monterrico Hawaii corridor. In addition, the results are expected to be useful for the development of future research and management plans for fisheries resources in the region, as well as for community education and awareness of the importance of sustainable management of fisheries resources in Guatemala.

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Annex 17: Country profiles

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SOCIOECONOMIC PROFILE (ECUADOR)

Population	**17,510,643 inhabitants, 50.5% women/49.5% men. (2020)**
Ethnicity	**Mestizo 71.9%, Montubio 7.4%, Afroecuadorian 7.2%, Indigenous 7%, White 6.1% and other 0.4%**
Income level	**GDP per capita USD 5,965.1 (2021)** **GDP USD 106.1B (2021)**
Main economic activities	**9.4% agriculture, 31.2% industry, 53.4% services and 16.8% manufacturing (2021)**
Poverty	**MPM= 4.3%; Gini index= 45.8% (2021)**
Health	**Healthy life expectancy at birth(years) = 68.5 years (2019)** **Maternal mortality ratio (per 100 000 live births) = 66 (2020)** **Under-five mortality rate (per 1000 live births) = 12 (2021)**
Malnutrition/food insecurity	**PoU=15.4% (2019-2021)** **Food insecurity= 36.8% (2019-2021)**
Education	**3.7% of GDP (2021)** **Adult Literacy Rate=92.8%/Female ALR=92.1% (2017)** **Youth Literacy Rate=94.9%/Female YLR 95.8% (2019)**
Human Development Index	**HDI=0.740/ Ranking 95 (2021)**
Gender issues	**GII=0.362 (2021)** **GDI=0.980 (2021)**
3HHRR	**Pillars to be strengthened: *violence against women, far-reaching restrictions on women's and girls' access to reproductive health care, disregard for indigenous rights, lack of protection of refugee's rights, poor prison conditions.***
Security	**Intentional Homicide Rate (per 100,000 people) = 14 (2021)** **Ecuadorian refugees= 1,662 (2019)**
Main Social Issues[372]	**Poverty, unemployment, gender wage gap, violence against women, limited access to reproductive health care.**

Summary

Population	The latest Population and Housing Census of 2010[373] reported 14,483,499 inhabitants to that year. According to the projections of the National Institute of Statistics and Census of Ecuador[374], by **2020 the population was 17,510,643, of which 50.5% are women and 49.5% men.**
Ethnicity	According to the 2010 Census[375], ethnic groups in Ecuador are **Mestizo (mixed Indigenous and White) 71.9%, Montubio 7.4%, Afroecuadorian 7.2%, Indigenous 7%, White 6.1% and other 0.4%.**

[372] Based on the result of the indicators above.
[373] https://www.ecuadorencifras.gob.ec/censo-de-poblacion-y-vivienda/
[374] https://www.ecuadorencifras.gob.ec/proyecciones-poblacionales/
[375] https://www.ecuadorencifras.gob.ec/?s=etnicos

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Income level	The Gross Domestic Product **(GDP)** in Ecuador was **USD 106.17 billion**[376] in 2021, with an annual growth of 4.2% (the lowest % of the three Latin American countries targeted by the GMC2) and represents 0.01 percent of the world economy. The **GDP per capita in 2021 was USD 5,965.13**[377] (higher than Guatemala but lower than Panama). Ecuador is suffering the impact of COVID 19 particularly intensely, both due to some structural weaknesses in the country, as well as due to temporary circumstances[378]. Likewise, from a social standpoint, the crisis is having a strong impact on the living conditions of the citizens of Ecuador. Unemployment[379] has deteriorated households' income, with over 72% and 80% of households reporting a reduction in income from wages and family businesses, respectively.
Main economic activities	For long time, the Ecuadorian economy relied heavily on primary sector such as ***agriculture, oil, forestry, and aquaculture***. However, changes in global market trends and technology development have led to the development of other sectors such as the textile, food processing and service sectors. According to WDI-World Bank data, the ***services sector*** contributed with more than half of the GDP **(53.4%)** in 2021, while the other sectors contribution to the GDP was **9.4% agriculture/forestry/fishing, 31.2% industry and 16.8% manufacturing.** Ecuador also depends on its petroleum resources, which accounted for about a third of the country's export earnings in 2017[380]. However, the oil sector, despite being one of the most productive in the economy, has a very limited capacity to generate employment[381], according to INEC statistics, in 2018 it generated 0.60% of jobs. In contrast, the ***agriculture, livestock, hunting, forestry and fishing*** sector generated 28.30% of jobs in the same year.
Poverty	**The multidimensional poverty rate** (MPM) **in Ecuador was 4.3%**[382] **in 2021** (much lower than Guatemala (22.2%). **Ecuador's Gini Index in 2021 was 45.8%**[383] (Not so far from the latest values available for Panama (50.9%) and Guatemala (48.3%). As of June 2022,[384], poverty in urban and rural areas was reduced compared to the same period in 2021. In urban areas it went from 24.2% to 16.7% and in rural areas from 49.2% to 42.9%. Ecuador's high poverty and income inequality **most affect indigenous, mixed race, and rural populations**[385]. According to the World Bank[386], by May 2021, employment fell by 14% from pre-pandemic levels. The same source indicates that 3 out of 10 workers had lost their pre-pandemic job, half of them becoming unemployed and the rest leaving the labour force altogether. Furthermore, 16% percent of all workers went from formal jobs before the pandemic to informal ones.

[376] https://databank.worldbank.org/source/world-development-indicators
[377] https://databank.worldbank.org/source/world-development-indicators
[378] https://www.oecd.org/dev/Impacto-macroeconomico-COVID-19-Ecuador.pdf
[379] The World Bank. Poverty & Equity Brief Ecuador. (May 2021). Accessed on September 20, 2022. https://www.worldbank.org/en/topic/poverty/publication/poverty-and-equity-briefs Latin America & the Caribbeanhttps://www.worldbank.org/en/topic/poverty/publication/poverty-and-equity-briefs
[380] The CIA *World Factbook 2019-2020 Ecuador*. Accessed on September 20, 2022 https://www.cia.gov/the-world-factbook/countries/ecuador/#economy
[381] Caria, S. (2019). Caracterización del perfil económico-productivo de Ecuador. Friedrich Ebert Stiftung (FES)
[382] https://www.worldbank.org/en/topic/poverty/brief/multidimensional-poverty-measure
[383] Most recent year available according to the WB. https://databank.worldbank.org/reports.aspx?source=2&series=SI.POV.GINI
[384] https://www.ecuadorencifras.gob.ec/documentos/web-inec/POBREZA/2022/Junio_2022/202206_Boletin_pobreza.pdf
[385] https://www.cia.gov/the-world-factbook/countries/ecuador/
[386]The World Bank. Poverty & Equity Brief Ecuador. (May 2021). Accessed on September 20, 2022. https://www.worldbank.org/en/topic/poverty/publication/poverty-and-equity-briefs

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	Women, especially those with children, young adults, and people with less education, have been more negatively impacted by job losses. UNDP data[387] shows that, over 15 years, women are at a disadvantage in the participation of the labour force with a representation of 53.3% in relation to men 76.5%.
Health	The World Health Statistic Data Set[388] of the World Health Organization (WHO), shows a ***Healthy life expectancy at birth (years)*** **of 68.5** in 2019 (slightly lower than Panama (68.7), but higher than Guatemala (62.3)). It also shows a ***Maternal Mortality Ratio (per 100 000 live births)*** **of 66** in 2020 and ***Under-five Mortality Rate (per 1000 live births)*** **of 12** in 2021 (the lowest rate within the 6 GMC2 countries).
Malnutrition/ food insecurity	The 2022 Report of the *State of Food Security and Nutrition in the World*[389] indicates that **Ecuador had 36.8% of *prevalence of moderate or severe food insecurity in the population* in the 2019-2021 period** and **15.4 % of *prevalence of undernourishment in total population (PoU)***. Ecuador is vulnerable to climate change and prone to natural disasters, including droughts, floods, volcanic eruptions, and earthquakes. These, combined with soil erosion and environmental degradation, threaten food systems, and may increase malnutrition and poverty rates[390]. Between August 2021 and March 2022, more than 400,000 Ecuadorians fell into severe food insecurity[391].
Education	The UNESCO Institute for Statistics[392] reported that **government expenditure on education was 3.7% of the GDP in 2021**. It also reported an *Adult Literacy Rate of 92.8 in 2017* and a lower *Female Adult Literacy Rate of 92.1%* in the same year. *Youth Literacy Rate was 94.9%* and *Female Youth Literacy Rate* was 95.8% (2019).
Human Development Index	**In 2021, Ecuador ranked 95[393] of 191 countries with an HDI (Human Development Index) of 0.740,** classified in the category *High Human Development*, being the second highest value of the 3 Latin American countries. This is associated with its good performance in education, related to e*xpected years of schooling (14.6 years) and mean years of schooling (8.8 years) and to a gross national income (PPP $) of $ 10,312,* the second highest compared to the rest of the GMC2 countries. However, the latter indicator value is much higher for men ($ 13,180) than for women ($ 7,451). It is worth noting that the HDI for men is also slightly higher than for women (women 0.731 and men 0.745).
Gender Issues	**In 2021, Ecuador ranked 85 of 170 countries with a GII (Gender inequality index) of 0.362[394].** Ecuador shows a lower gender gap in the positions held by women in parliament with 39.4% (in relation to other GMC2 target countries in LA). However, the gap in participation in the labour remains relevant, with a

[387] https://hdr.undp.org/data-center/documentation-and-downloads
[388] https://www.who.int/data/gho/publications/world-health-statistics
[389] FAO, IFAD, UNICEF, WFP and WHO. 2022. The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable. Rome, FAO. https://www.fao.org/documents/card/en/c/cc0639en
[390] https://docs.wfp.org/api/documents/WFP-0000142003/download/?_ga=2.179195490.750494906.1663708619-495170798.1662980512
[391] https://docs.wfp.org/api/documents/WFP-0000142003/download/?_ga=2.179195490.750494906.1663708619-495170798.1662980512
[392] https://uis.unesco.org/en/country/ec
[393] https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf
[394] https://hdr.undp.org/data-center/documentation-and-downloads

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	53.3% rate for women and 76.5% for men. **The country had a GDI (Gender Development Index) of 0.980[395] in 2021,** corresponding to one of the highest values of the GMC2 target countries. While most of the GDI indicators have favorable values to gender equality, the *estimated gross national income per capita* (*PPP $) has a significant GAP and* still represents a great challenge to the advance of women in the country (women $ 7,451 and men $13,180).
HHRR	Monitoring reports[396] issued by HHRR organizations in Ecuador revealed that the country continues to face significant human rights challenges related to ***weak institutions, Corruption in Government[397], poor prison conditions, laws that give authorities broad powers to limit judicial independence, violence against women, far-reaching restrictions on women's and girls' access to reproductive health care[398], disregard for indigenous rights[399], lack of protection of refugee's rights*** *(specially from Venezuela)**.***
Security	According to the World Bank[400] data, the **Intentional Homicide Rate** (per 100,000 people) in Ecuador was **14 in 2021**. According to the UNDP[401], **Ecuador reported 1,662 refugees** around the world in 2019.
Main social issues	**Poverty, unemployment, gender wage gap, violence against women, limited access to reproductive health care.**

SOCIOECONOMIC PROFILE (PANAMA)

Population	**4,351,267 inhabitants, 50% women/50% men (2021)**
Ethnicity	**Mestizo 65.0% Native Panamanians 12.3% Afro-descendants 9.2% Afro-descendant Mulattoes 6.8% Caucasian 6.7%**
Income level	**GDP per capita USD 14,617.60 (2021)** **GDP USD 63.6B (2021)**
Main economic activities	**2.6% agriculture, 27.7% industry, 5.4% manufacturing and 66.0% services (2021)**
Poverty	**MPM=19.1% (2017); Gini index=50.9% (2021)**

Summary

[395] https://hdr.undp.org/gender-development-index#/indicies/GDI

[396] https://www.amnesty.org/en/location/americas/south-america/ecuador/report-ecuador/; https://www.hrw.org/world-report/2021/country-chapters/ecuador; https://www.state.gov/reports/2021-country-reports-on-human-rights-practices/ecuador/

[397] Ecuadorian law provides criminal penalties for corruption by public officials, but the government has not implemented the law effectively, and officials have engaged in corrupt practices. Ecuador ranked 105 out of 180 countries surveyed for Transparency International's 2021 Perceptions of Corruption Index and received a score of 36 out of 100. *https://www.state.gov/reports/2022-investment-climate-statements/ecuador/*

[398] Part of the stigmatization and discrimination stems from the violation of the right to receive complete, clear, accessible and up-to-date information on reproductive health and health care options. In Ecuador, consensual abortion is a crime punishable by up to two years in prison for women who consent to an abortion. Exceptions are only considered if the life and health of the pregnant person are at risk, and in all cases of sexual violence. *https://www.hrw.org/es/news/2021/07/14/ecuador-criminalizar-el-aborto-vulnera-derechos-y-afecta-la-salud*

[399] In June 2022, indigenous organizations of Ecuador, called for protests, asking the authorities to guarantee the collective rights of indigenous peoples; intervene to lower the prices of food and other essential goods; guarantee indigenous peoples' access to health, education and employment; and repair the social and environmental impacts of mining and oil extraction in indigenous territories. *https://www.hrw.org/news/2022/08/13/ecuadors-recurrent-cycle-violence-over-indigenous-rights*

[400] https://data.worldbank.org/indicator/VC.IHR.PSRC.P5?locations=EC

[401] https://hdr.undp.org/data-center/documentation-and-downloads

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Health	**Healthy life expectancy at birth(years) =68.7 years (2019)** **Maternal mortality ratio (per 100 000 live births) = 50 (2020)** **Under-five mortality rate (per 1000 live births) =14 (2021)**
Malnutrition/food insecurity	**PoU=5.8%** (2019-2021) **Food insecurity=N/D**
Education	**3.5% of GDP (2021)** **Adult Literacy Rate=95.7%/Female ALR=95.4% (2019)** **Youth Literacy Rate=98.9%/Female YLR= 98.9% (2019)**
Human Development Index	**HDI=0.805/ Ranking 61**
Gender issues	**GII=0.392 (2021)** **GDI=1.017** (2021)
HHRR	**Pillars to be strengthened: independence of the judiciary, government corruption, freedom of expression and media.**
Security	**Intentional Homicide Rate (per 100,000 people) = 12.7 (2021)**
Main Social Issues[402]	**Social inequality, unemployment, crime, corruption, impunity**

Population	In the latest *National Population and Housing Census[403] (INEC)* carried out by the government of Panama in 2010, the total population was 3,405,813[404]. According to the World Bank data, the projected population of Panama for the year 2021 was **4,351,267**[405]**,** of which **50% are women.** The urban population of Panama is more than 70%, the highest in the Central American region.
Ethnicity	The 2010 Census indicated that population in Panama was **65% Mestizo** (mixed European and Amerindian), **12.3% Native Panamanians** (many different ethnic groups), **9.2% Afro-descendants**, **6.8% Afro-descendants Mulattoes**, and **6.7% Caucasian**[406]**.**
Income level	The Gross Domestic Product **(GDP)** of Panama was **USD 63.6 billion** [407] in 2021 with a **15.3% annual growth** (highest growth compared to Guatemala and Ecuador). The COVID-19 pandemic led to a major contraction in GDP in 2020 and a 2.7 percentage points increase in the poverty rate, but the economy started to recover with a considerable growth in 2021, driven by copper mining, construction, manufacturing, and commerce[408]. The **GDP per capita of Panama was USD 14,617.60**[409] in 2021 (the highest value compared to Ecuador and Guatemala), which places it as a high-income country.

[402] Based on the result of the indicators above.
[403] https://www.inec.gob.pa/publicaciones
[404] The National Statistics and Census Institute includes projected population only for the year 2020 (4,278,500).
[405] Based on The United Nations Population Division (2019 revision) https://data.worldbank.org/indicator
[406] https://www.inec.gob.pa/publicaciones
[407] https://databank.worldbank.org/source/world-development-indicators
[408] https://www.worldbank.org/en/country/panama/overview
[409] https://databank.worldbank.org/source/world-development-indicators

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Main economic activities	Panama has been one of the fastest growing economies in the world in the past decade, where construction, real estate and commerce drove most of the economic performance[410]. The Panama Canal has historically played a considerable role in the economy. **Services sector represented 66.0% of GDP in 2021**, while **agriculture, forestry and fishing sectors contributed to 2.6%, industry 27.7%,** and **manufacturing 5.4%** (WDI-World Bank data[411]). Trade in fish and production in Panama have been reduced in the last two decades. In 2020 fisheries accounted for 0.30% of GDP[412].
Poverty	Along with the economic growth, middle class has been expanding in Panama, however, **in 2017[413] the Multidimensional Poverty Headcount Ratio (% of total population)[414] amounted to 19.1%.** Panama has one of the highest levels of inequality in the Latin American region based on its **Gini index** (2021) **of 50.9**[415] (the highest value among the Latin American countries targeted by the GMC II). Rural areas are disproportionally poor, with a rate of extreme poverty six times higher than in urban areas. Indigenous communities are some of the most disadvantaged groups, with over half living in poverty. On the other hand, the COVID-19 pandemic affected jobs in the construction, logistics, retail, and tourism sectors, resulting in 130,000 people (mostly in urban areas) falling into poverty in 2020[416].
Health	The World Health Statistic Data Set[417] of the World Health Organization (WHO) shows a ***Healthy life expectancy at birth (years)*** **in Panama of 68.7** in 2019 (the highest value compared to Ecuador (68.5) and Guatemala (68.7)). ***Maternal Mortality Ratio (per 100 000 live births)*** **was 50** in 2020, and ***Under-five Mortality Rate (per 1000 live births)*** **was 14** in 2021. Panama exhibits marked inequalities in health coverage and services; communicable diseases are still prevalent in the rural and poor population, and there are clear geographical inequalities in the infant mortality rate and other health related statistics[418].
Malnutrition/ food insecurity	According to the latest report on the *State of Food Security and Nutrition in the World 2022*[419]**, Panama had a 5.8%** ***prevalence of undernourishment in total population (PoU)***, lower than Ecuador (15.4%) and Guatemala (16%)[420]. Panama has made significant progress in reducing malnutrition rates; however, disparities are still prevalent, especially in rural areas mainly inhabited by indigenous people,

[410] OECD (2017), Multi-Dimensional Review of Panama: Volume 1: Initial Assessment, OECD Development Pathways, OECD Publishing, Paris, https://doi.org/10.1787/9789264278547-en
[411] https://databank.worldbank.org/source/world-development-indicators
[412] https://www.fao.org/3/cc5647en/cc5647en.pdf
[413] Most recent year available.
[414] The Multidimensional Poverty Headcount Ratio (% of total population) of Panama was reported using the national poverty measure which considers, among others, the aspects of education, employment, infrastructure, and services. For other countries' profiles where it was available, the April 2022 Update World Bank's Multidimensional Poverty Measure (MPM) was used. Therefore, the multidimensional poverty value provided for Panama cannot be compared to the one reported for other countries.
[415] https://databank.worldbank.org/reports.aspx?source=2&series=SI.POV.GINI
[416] The World Bank. Poverty & Equity Brief Panama. (May 2021). Accessed on September 20, 2022. https://www.worldbank.org/en/topic/poverty/publication/poverty-and-equity-briefs
[417] https://www.who.int/data/gho/publications/world-health-statistics
[418] WHO. 2018. Estrategia de Cooperación Resumen https://apps.who.int/iris/bitstream/handle/10665/136632/ccsbrief_pan_es.pdf
[419] FAO, IFAD, UNICEF, WFP and WHO. 2022. The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable. Rome, FAO. https://www.fao.org/documents/card/en/c/cc0639en
[420] There is no recorded data for prevalence of moderate or severe food insecurity in the population of Panama in recent years.

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	who are vulnerable and could be particularly affected by inflation and rising prices of food in the current context.
Education	The UNESCO Institute for Statistics[421] reported **government of Panama expenditure on education as 3.5% of the GDP in 2021** (higher than Guatemala (3.1%) but lower than Ecuador (3.7%)). The same source reported an *Adult Literacy Rate of 95.7% in 2019* and a *Female Adult Literacy Rate of 95.4%* in the same year. *Youth Literacy Rate was 98.9%* in 2019 with the same value for the *Female Youth Literacy Rate*. Panama has made important progress; however, the education system does not yet reach all children and adolescents; limited enrolment is persistent in indigenous, rural, and marginalized urban areas[422].
Human Development Index	**In 2021 Panama ranked 61[423] of 191 countries with a HDI (Human Development Index) of 0.805** (higher for women 0.812 than men 0.798), classified in the *Very High Human Development* category. Panama HDI ranking is higher than Ecuador (0.740) classified as *High Human Development,* and Guatemala (0.627) classified as *Medium Human Development.* As almost all countries due to the COVID-19 pandemic, Panama saw a small reversal from its 2019 HDI value (0.815).
Gender Issues	**In 2021 Panama ranked 96 of 170 countries with a GII (Gender inequality index) of 0.392[424],** showing a lower inequality than Guatemala (0.481), but higher than Ecuador (0.362)**.** Adolescent birth rate remains high at 69.9 (births per 1,000 women ages 15–19)**,** and there is still a large gap in the **share of seat in parliament (22.5% held by women)**. In the same year of reference**, the country had a GDI (Gender Development Index) of 1.017[425],** corresponding to the highest value of the GMC II target countries in Latin America.
HHRR	According to the 2022 Panama Country Report on Human Rights Practices of the US Department of State[426], during the reference year significant human rights issues included credible reports of serious problems with the **independence of the judiciary**; serious **restrictions on free expression and media**, including threats to enforce criminal libel laws to limit expression; serious **government corruption**[427]**; and laws barring consensual same-sex sexual conduct between adults in some security forces that were unenforced.**
Security	According to the World Bank[428] data, the **Intentional Homicide Rate** (per 100,000 people) in Panama was **12.7 in 2021**, lower than Guatemala (20) and Ecuador (14) in the same year. Besides violent and

[421] https://uis.unesco.org/en/country/pa
[422] https://www.unicef.org/executiveboard/media/3176/file/2021-PL9-Panama_CPD-EN-ODS.pdf
[423] https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf
[424] https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf
[425] https://hdr.undp.org/gender-development-index#/indicies/GDI
[426] United States Department of State (2022) Country Reports on Human Rights Practices for 2022 https://www.state.gov/reports/2022-country-reports-on-human-rights-practices/panama/
[427] According to the OHCHR, corruption can have a devastating impact on the availability, quality and accessibility of human rights-related goods and services: *https://www.ohchr.org/en/good-governance/corruption-and-human-rights#:~:text=Corruption%20can%20have%20a%20devastating,and%20ultimately%20the%20State%20itself.*
[428] https://databank.worldbank.org/reports.aspx?source=2&series=VC.IHR.PSRC.P5&country=

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	street crimes, because of its geostrategic location, Panama is a port of entry and destination for human trafficking, illicit firearms, and drugs; and there is a high incidence of money laundering activities[429]. According to the UNDP, Panamá had 54 refugees around the world in 2019.
Main social issues	**Social inequality, unemployment, crime, corruption, impunity**

SOCIOECONOMIC PROFILE (GUATEMALA)

Population	**17,602,431inhabitants, 51% women/49% men (2023)**
Ethnicity	**Ladino 56.0% Mayan 41.7% Other 2.3%**
Income level	**GDP per capita USD 5,025.54 (2021)** **GDP USD 85.9B (2021)**
Main economic activities	**9.9% agriculture, 22.0% industry, 14.0% manufacturing and 61.5% services (2021)**
Poverty	**MPM=21.6%; Gini index=48.3% (2014)**
Health	**Healthy life expectancy at birth(years) = 62.3 years** **Maternal mortality ratio (per 100 000 live births) = 96** **Under-five mortality rate (per 1000 live births) =2**3
Malnutrition/food insecurity	**PoU=16%** (2019-2021) **Food insecurity=55.9% (2019-2021)**
Education	**3.1% of GDP (2021)** **Adult Literacy Rate=80.8%/Female ALR=76.7% (2018)** **Youth Literacy Rate=94.6%/Female YLR 93.9% (2018)**
Human Development Index	**HDI=0.627/ Ranking 135 (2021)**
Gender issues	**GII=0.481 (2021)** **GDI=0.917** (2021)
HHRR	**Pillars to be strengthened: inequality and discrimination, the justice system and the fight against impunity, democratic spaces and citizen participation, freedom of expression.**
Security	**Intentional Homicide Rate (per 100,000 people) = 20 (2021)**

Summary

[429] https://ocindex.net/country/panama

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Main Social Issues[430]	Poverty, social inequality, migration, violence, exclusion and discrimination, food insecurity, unemployment, illiteracy

Population	In the latest *National Population and Housing Census[431] (INE)* carried out by the government of Guatemala in 2018, the population was 14,901,286. The National Statistics Institute[432] includes projected population for the year 2023, corresponding to **17,602,431 inhabitants, of which 51% are women.**
Ethnicity	The 2018 Census indicates that the Guatemalan population identifies with different ethnic groups, being the predominant **Ladino**[433] **56.0%** and **Mayan 41.7%.** Other ethnic groups in the country are **Xinca 0.2%, Afro descendant/Creole/Afromestizo 0.2%, Garifuna 0.1% and Foreigners 0.1%.**
Income level	Guatemala is the largest economy in the Central American region. The Gross Domestic Product **(GDP)** of Guatemala was **USD 85.9 billion** [434] in 2021, with an **8% annual growth** (higher growth in relation to Ecuador but lower than Panama). The COVID-19 pandemic ended three decades of economic growth. Nevertheless, Guatemala had one of the smallest GDP contractions in 2020 in Latin America (-1.5% compared to a regional average of -6.7%)[435]. **The GDP per capita of Guatemala was USD 5,025.54[436]** in 2021 (the lowest value compared to Ecuador and Panama), which places it as an upper middle-income country, however long-standing social and infrastructure gaps still take place.
Main economic activities	Agriculture is the most labor-intensive sector in Guatemalan economy, which **employs around 31% of the workforce**. However, the **agriculture, forestry and fishing sectors contributed in 2021 to only 9.4% of GDP**. The GDP contribution in 2021 by other sectors was **22.2% industry**, **14.0% manufacturing** and **62.1% services** (WDI-World Bank data[437]). The key agricultural exports of Guatemala include knit and woven apparel, sugar, coffee, tea, fruits, and vegetables[438]. Another key component to Guatemala's economy is remittances from over two million migrants most of whom have settled in the United States. The role of the fishing sector is considered small in the national economy, possibly less than 1% of GDP, however, the employment and contribution of artisanal fisheries are not well represented by national statistics (*FAO[439]*).

[430] Based on the result of the indicators above.
[431] https://www.censopoblacion.gt/documentacion/
[432] https://www.ine.gob.gt/ine/proyecciones/
[433] Ladino o mestizo is generally referred to a person of predominantly mixed Spanish and indigenous descent.
[434] https://databank.worldbank.org/source/world-development-indicators
[435] https://www.worldbank.org/en/country/guatemala/overview
[436] https://databank.worldbank.org/source/world-development-indicators
[437] https://databank.worldbank.org/source/world-development-indicators
[438] https://www.trade.gov/country-commercial-guides/guatemala-market-overview
[439] https://www.fao.org/fishery/en/facp/gtm

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Poverty	**The Multidimensional Poverty Rate (MPM) registered in Guatemala was 22.2%** in 2014[440]. The World Bank Macro Poverty Outlook[441] highlights that despite stable economic growth, there has been little progress in reducing poverty in recent years. Rural areas, the northern and northwest regions, and indigenous groups exhibit higher levels of monetary and nonmonetary poverty, lower living standards, and more limited economic opportunities, thus forcing people to migrate. The impact of the pandemic increased extreme poverty by more than three percentage points, reaching 18.7% in 2020. Guatemala has a high degree of inequality in wealth distribution based on its **Gini index** (2014[442]) **of 48.3%**[443], a slightly lower value than Panama (50.9 (2021)) and higher than Ecuador (45.8(2021)). According to the IMF assessment,[444] the Guatemalan economy near-term outlook is favorable; nonetheless, inflation could adversely affect purchasing power, especially among the vulnerable.
Health	The World Health Statistic Data Set[445] of the World Health Organization (WHO), shows a ***Healthy life expectancy at birth(years)*** **in Guatemala of 62.3** in 2019 (the least value compared to Ecuador (68.5) and Panama (79.3)), a ***Maternal Mortality Ratio (per 100 000 live births)*** **of 96** in 2020, and ***Under-five Mortality Rate (per 1000 live births)*** **of 23** in 2021; the latter are higher values than almost all the other countries targeted in the GMC II, and are amongst the highest in the Latin American region.
Malnutrition/ food insecurity	According to the latest report on the *State of Food Security and Nutrition in the World 2022*[446]**, Guatemala had a 55.9%** ***of prevalence of moderate or severe food insecurity in the population*** **in the 2019-2021 period** and **16 % of** ***prevalence of undernourishment in total population (PoU)***, higher than Ecuador (15.4%) and Panama (5.8%) in the same period. The prevalence of stunting in children under 5 is one of the highest in the world, and the highest in Latin America and the Caribbean. Indigenous and rural populations in Guatemala are disproportionately affected with prevalence of stunting reaching around 70% in these areas[447].
Education	The UNESCO Institute for Statistics[448] reported **government expenditure on education as 3.1% of the GDP in 2021** (Guatemala has the lowest % of the GDP invested in education compared to other Latin American countries targeted by the GMC II**)**. The same source reported an *Adult Literacy Rate of 80.8% in 2018* and a lower *Female Adult Literacy Rate of 76.7%* in the same year. *Youth Literacy Rate was 94.6%* in 2018 and *Female Youth Literacy Rate* was 93.9% in the same year. Guatemala has the highest illiteracy rates for the population age 15 and over in the Central American region. The country faces important challenges in quality, coverage, and ethnic disparities in access to education.

[440] https://www.worldbank.org/en/topic/poverty/brief/multidimensional-poverty-measure
[441] https://thedocs.worldbank.org/en/doc/e408a7e21ba62d843bdd90dc37e61b57-0500032021/related/mpo-gtm.pdf
[442] Most recent year available.
[443] https://databank.worldbank.org/reports.aspx?source=2&series=SI.POV.GINI
[444] https://www.imf.org/en/Countries/GTM
[445] https://www.who.int/data/gho/publications/world-health-statistics
[446] FAO, IFAD, UNICEF, WFP and WHO. 2022. The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable. Rome, FAO. https://www.fao.org/documents/card/en/c/cc0639en
[447] USAID.2021. Guatemala: Nutrition Profile (Updated December 2021) (usaid.gov)
[448] https://en.unesco.org/countries/guatemala

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Human Development Index	**In 2021, Guatemala ranked 135[449] of 191 countries with a HDI (Human Development Index) of 0.627** (higher for men 0.650 than women 0.596). Guatemala is classified in the *Medium Human Development* category. Guatemala HDI ranking is lower than Ecuador (0.740) classified as *High Human Development,* and Panama (0.805) classified as *Very High Human Development.*
Gender Issues	**In 2021, Guatemala ranked 121 of 170 countries with a GII (Gender inequality index) of 0.481[450],** showing the highest inequality value compared to Ecuador and Panama**.** Besides a high maternal mortality ratio and adolescent birth rate**,** Guatemala exhibits large gaps in the **share of seat in parliament (19.4% held by women)** and the **female labour force participation rate (37.4%)**. In the same year of reference**, the country had a GDI (Gender Development Index) of 0.917[451],** corresponding to the lowest value of the GMC2 target countries in Latin America. This value also indicates large social gaps between men and women and a significant gender gap in the *estimated gross national income per capita (PPP $)* indicator (Women $ 4,909 and Men $ 12,614).
HHRR	According to the latest report of the United Nations High Commissioner for Human Rights on the situation of HHRR in Guatemala (2022)[452] the country faces systemic and structural challenges that relate to **inequality and discrimination**, the **justice system and the fight against impunity**, **democratic spaces and citizen participation,** including **freedom of expression**. The same report states that OHCHR documented cases of attacks and reprisals against human rights defenders, journalists, and justice officials in 2021.
Security	According to the World Bank[453] data, the **Intentional Homicide Rate** (per 100,000 people) in Guatemala was **20 in 2021**, higher than Ecuador (14) and Panama (12.7) in the same year. Although the rate of crimes in Guatemala are very high, the country has improved dramatically from previous years (homicide rate was 45 in 2009). Guatemala is part of the Central American Northern Triangle, a region that faces challenges regarding insecurity, gang violence, extortion, impunity, and poverty, resulting in large waves of migration from these countries. According to the UNDP, Guatemala had 22,774 refugees around the world in 2019 (the country with the highest rate (of the six targeted) after Mauritania).
Main social issues	**Poverty, social inequality, food insecurity, migration, violence, exclusion and discrimination (against indigenous people, women, young people and LGBTI people), unemployment, illiteracy.**

SOCIOECONOMIC PROFILE (SENEGAL)

Population	**17,738,795 inhabitants, 50.2% women/49.8% men. (2022)**

[449] https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf
[450] https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf
[451] https://hdr.undp.org/gender-development-index#/indicies/GDI
[452] https://www.ohchr.org/en/documents/country-reports/ahrs4920-situation-human-rights-guatemala-report-united-nations-high
[453] https://data.worldbank.org/indicator/VC.IHR.PSRC.P5?locations=GT

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Ethnicity	**Wolof 39.7%, Pular 27.5%, Serer 16%, Mandinka 4.9%, Jola 4.2%, Soninke 2.4%, other 5.4%**
Income level	**GDP per capita USD 1,636.89 (2021)** **GDP USD 27.6B (2021)**
Main economic activities	**15.3% agriculture, 24.7 % industry, 14.8% manufacturing and 49.6% services (2021)**
Poverty	**MPM=32.3 %; Gini index=38.1% (2018)**
Health	**Healthy life expectancy at birth(years) =59.4 years (2019)** **Maternal mortality ratio (per 100 000 live births) = 261 (2020)** **Under-five mortality rate (per 1000 live births) =39 (2021)**
Malnutrition/food insecurity	**PoU=7.5% (2019-2021)** **Food insecurity=49.2% (2019-2021)**
Education	**5.6% of GDP (2021)** **Adult Literacy Rate=51.9%/Female ALR=39.8% (2017)** **Youth Literacy Rate=68.3%/Female YLR 64.7% (2019)**
Human Development Index	**HDI=0.511/ Ranking 170 (2021)**
Gender issues	**GII=0.530 (2021)** **GDI=0.874 (2021)**
HHRR	**Pillars to be strengthened: *excessive use of force, freedom of expression, right to health, workers' rights, women, children and LGBTI people's rights, violence against women, child labour***
Security	**Intentional Homicide Rate (per 100,000 people) = 0.3 (2015)** **Senegalese refugees= 17,600 (2019)**
Main Social Issues[454]	**Poverty, unemployment, child labour, illiteracy, limited exercise of girls and women rights (maternal health and education), GBV and relevant gender GAP in incomes.**

Population	According to the *last General Census of Population and Housing, Agriculture and Livestock (RGPHAE) of 2013*, population of Senegal was 13,508,715[455]. *The 2022 Yearbook of the Population of Senegal*[456] prepared by the National Agency for Statistics and Demography, indicates that the projected **population for that year was 17,738,795, of which 50.2% are women.**
Ethnicity	The ethnic groups[457] in Senegal are **Wolof 39.7%**, **Pular 27.5%, Serer 16%, Mandinka 4.9%, Jola 4.2%, Soninke 2.4%, other 5.4%** (includes Europeans and persons of Lebanese descent) (2019 est.). The

[454] Based on the result of the indicators above.
[455] Agence nationale de la Statistique et de la Demographie. Atlas Demographique du Senegal- Rapport Final. (2016). Accesed on September 2022. https://www.ansd.sn/Indicateur/autres-documents-sur-la-population
[456] Agence nationale de la Statistique et de la Demographie. Annuaire de la Population du Sénégal. (2022) Accessed on Jun,2023. https://www.ansd.sn/Indicateur/projections-demographiques
[457] https://www.cia.gov/the-world-factbook/countries/senegal/#people-and-society

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	Senegalese population is **mainly Muslim (96%**) made up by several ethnic groups including the Wolof, the Fula, the Serer, the Mandinka, and the Jola[458].
Income level	The Gross Domestic Product **(GDP)** in Senegal was **USD 27.6 billion[459]** in 2021(the second highest GDP of the three African countries targeted by the GMC2), with an annual growth of 6%, and represents 0.02 percent of the world economy. The health crisis of COVID-19 had an impact on the Senegalese economy in 2020, which registered a growth rate of 1.3%, after reaching 4.6% in 2019[460], however, in 2021 the economy began its recovery, in part due to the Adjusted and Accelerated Priority Action Plan, led by the resumption of the extractive sector, construction, and commercial activity connected to a strong demand, as well as transport services[461]. The Gross Domestic Product per capita in 2021 was **USD 1,636.89[462]** (the lowest value compared to Morocco and Mauritania).
Main economic activities	The economy in Senegal is driven by traditional sectors such as **agriculture and fisheries**[463], where major products are fish, nuts, black-eyed peas, and cassava. This sector employs about 30% of the workforce, however, agricultural productivity is low. In 2021, the **agriculture/fishery/forestry sector contributed 15.3% to GDP**[464]. Poor soil quality and irregular rainfall along with overgrazing and deforestation, all of which are leading to increasing desertification[465]. On the other hand, the industry (mining) and service sectors (including tourism) are key drivers of the economy as well. According to WDI-World Bank data, the contribution to GDP to other sectors in 2021 was **24.7% industry, 49.6% services and 14.8% manufacturing.**
Poverty	**The Multidimensional Poverty Rate (MPM)** in Senegal was 32.3%[466] in 2018 (higher than Morocco (5.8%) but lower than Mauritania (45.7%). In addition, **Senegal's Gini Index in 2018 was 38.1%**[467]. Following Morocco with 39.5 (2013), Senegal is the second country with high-unequal wealth distribution within the African countries targeted by the GMC2. Recent analysis[468] shows that poverty is more pronounced in rural areas (53.6% compared to 19.8% in urban areas). This same information indicates that in 2018/2019 the poverty level was reduced, however, the number of poor increased (5.8M in 2011 vs 6M in 2018) due to rapid population growth. The results also reveal that the extreme poverty rate fell from 12.2% to 6.8% in the same period. Total unemployment is estimated at

[458] https://www.isdb.org/senegal
[459] https://databank.worldbank.org/source/world-development-indicators
[460] http://www.ansd.sn/index.php?option=com_ansd&view=titrepublication&id=2
[461] https://www.afdb.org/en/countries/west-africa/senegal/senegal-economic-outlook
[462] https://databank.worldbank.org/source/world-development-indicators
[463] https://www.bmz.de/en/countries/senegal/economic-situation-48602
[464] https://databank.worldbank.org/source/world-development-indicators
[465] https://www.bmz.de/en/countries/senegal/economic-situation-48602
[466] https://www.worldbank.org/en/topic/poverty/brief/multidimensional-poverty-measure
[467] Most recent year available according WB: https://databank.worldbank.org/reports.aspx?source=2&series=SI.POV.GINI
[468] http://www.ansd.sn/index.php?option=com_ansd&view=titrepublication&id=40

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	15.7% and reaches 20% among 20- to 29-year-olds[469]. According to UNDP data[470], the participation of the labor force rate (over 15 years) is low, women are at a disadvantage with a representation of 33.5% in relation to men 56.7%.
Health	The World Health Statistic Data Set[471] of the World Health Organization (WHO), shows a ***Healthy Life Expectancy at Birth (years)*** **in Senegal of 59.4** in 2019 (the lowest of the African countries targeted by the GMC2). It also shows an ***Under-five Mortality Rate (per 1000 live births)*** **of 39** in 2021 and ***Maternal Mortality Ratio (per 100 000 live births)*** **of 261** in 2020, the second highest ratio within the 6 GMC2 countries. The causes of these deaths in Senegal are much the same as they are for other low resource countries in Africa: insufficient access to health care, lack of skilled health personnel, inefficient referral systems for women in obstetric emergencies, and the diminished socio-economic situation.
Malnutrition/ food insecurity	The 2022 Report of the *State of Food Security and Nutrition in the World*[472] indicates that **Senegal had 49.2% of *Prevalence of Moderate or Severe Food Insecurity in the Population* in the 2019-2021 period** and **7.5 % of *Prevalence of Undernourishment in Total Population (PoU)***. The country is frequently subjected to climate hazards, especially in the semiarid North. Insufficient food production, droughts, land degradation, high food prices and low resilience have further compounded food insecurity. It is expected that 881,275 people suffer from food insecurity during the 2022 lean season[473].
Education	The UNESCO Institute for Statistics[474] reported that in Senegal, **government expenditure on education represented 5.6% of the GDP in 2021**. It also reported an *Adult Literacy Rate of 51.9% in 2017* and a lower *Female Adult Literacy Rate of 39.8%* in the same year. *Youth Literacy Rate was 68.3%* in 2019 and *Female Youth Literacy Rate* was 64.7% in the same year.
Human Development Index	**In 2021, Senegal ranked 170[475] of 191 countries with an HDI (Human Development Index) of 0.511** and it was classified in the category *Low Human Development*, being the only one of the 3 GMC2 African countries in this category. This is associated to low expected and average schooling and lowest per capita income level in relation to the other two GMC2 target countries. In addition to this, the 2021 HDI value for Senegal is higher for men (0.543) than for women (0.475).

[469] https://webapps.ifad.org/members/eb/126/docs/EB-2019-126-R-18.pdf
[470] https://hdr.undp.org/data-center/documentation-and-downloads
[471] https://www.who.int/data/gho/publications/world-health-statistics
[472] FAO, IFAD, UNICEF, WFP and WHO. 2022. The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable. Rome, FAO. https://www.fao.org/documents/card/en/c/cc0639en
[473] https://docs.wfp.org/api/documents/WFP-0000140340/download/?_ga=2.102639880.884208179.1662980512-495170798.1662980512
[474] https://uis.unesco.org/en/country/sn
[475] https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf

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Gender Issues	**In 2021, Senegal ranked 131 of 170 countries with a GII (Gender Inequality Index) of 0.530[476].** In terms of maternal mortality, Senegal is among the highest ratios in this category of the 6 GMC2 countries (315 deaths per 100,000 live births) and a high adolescent birth rate of 66.4. The country also has the lowest percentage (within 6 countries) of women over 25 years with at least some secondary education (11.1%). However, it has the highest percentage of women in parliament (43%). In the same year of reference**, the country had a GDI (Gender Development Index) of 0.874[477],** corresponding to the second lowest value of the GMC2 target countries. This value is influenced by a gender gap in the *mean years of schooling* (women 1.6 years and men 4.5 years) and in the *estimated gross national income per capita (PPP $)*, women with $ 2,258 and men with $ 4,468). According to UNICEF[478], girls in Senegal have a lower rate of transition to secondary education due to gender and school-based violence and discrimination, including early marriage and pregnancy.
HHRR	Monitoring reports[479] issued by HHRR organizations in Senegal, indicate that the country faces situations that threaten human rights, regarding ***excessive use of force, freedom of expression and assembly, right to health, workers' rights, women, children and LGBTI people's rights, and violence against women***. ***Child labour*** is also a serious problem in Senegal. In 2014, 25.5% of children aged 5 to 17 were economically active, of which 10% worked in dangerous conditions[480].
Security	The World Bank data[481] indicate that the **Intentional Homicide Rate** (per 100,000 people) in Senegal was **0.3 in 2015**, the lowest rate of the African GMC2 target countries. The UNDP data[482] in **2019** shows that **Senegal is the fourth country** (of the 6 targeted by the GMC II) in **terms of refugees**, with approximately **17,200 Senegalese refugees** around the world for the reference year. According to the UN[483], thousands of Senegalese are forced to flee their country mainly due to an old conflict still active in the Senegalese region of Casamance.
Main social issues	**Poverty, unemployment, child labour, illiteracy, limited exercise of GW rights *(maternal health and education)*, GBV and relevant gender GAP in incomes.**

SOCIOECONOMIC PROFILE (MOROCCO)

Population	**36,313,000 inhabitants, 52% women/48% men. (2021)**
Ethnicity	**Arab-Berber 99.1%, other 0.7%, Jewish 0.2%**

[476] https://hdr.undp.org/data-center/documentation-and-downloads
[477] https://hdr.undp.org/gender-development-index#/indicies/GDI
[478] https://www.unicef.org/senegal/en/children-senegal
[479] https://www.amnesty.org/en/location/africa/west-and-central-africa/senegal/report-senegal/ ; https://www.hrw.org/world-report/2022/country-chapters/senegal; https://unesdoc.unesco.org/ark:/48223/pf0000372247; https://www.unicef.org/senegal/en/children-senegal
[480] https://www.humanium.org/en/senegal/
[481] https://databank.worldbank.org/reports.aspx?source=2&series=VC.IHR.PSRC.P5&country=MAR
[482] https://hdr.undp.org/data-center/documentation-and-downloads
[483] https://news.un.org/fr/story/2022/09/1126421

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Income level	**GDP per capita USD 3,795.40 (2021)** **GDP USD 142.87B (2021)**
Main economic activities	**12% agriculture, 26.1% industry, 15.3% manufacturing and 51.6% services (2021)**
Poverty	**MPM=5.8 %; Gini=39.5% (2013)**
Health	**Healthy life expectancy at birth(years) =63.7 years (2019)** **Maternal mortality ratio (per 100 000 live births) = 72 (2020)** **Under-five mortality rate (per 1000 live births) =18 (2021)**
Malnutrition/food insecurity	**PoU=5.6% (2019-2021)** **Food insecurity=31.6% (2019-2021)**
Education	**6.8% of GDP (2020)** **Adult Literacy Rate=73.8%/Female ALR=64.6% (2018)** **Youth Literacy Rate=97.7%/Female YLR 97.4% (2018)**
Human Development Index	**HDI=0.683/ Ranking 123 (2021)**
Gender issues	**GII=0.425 (2021)** **GDI=0.861 (2021)**
HHRR	**Pillars to be strengthened: Freedom of expression, freedom of assembly, women's rights and domestic workers**
Security	**Intentional Homicide Rate (per 100,000 people) = 2 (2021)** **Moroccan refuges= 4,600 (2019)**
Main Social Issues[484]	**Poverty, Income inequality, women exclusion, unemployment, illiteracy**

Population	According to the *latest Household and Population Census in Morocco[485] (RGPH)*, in 2014 the total population was 33,848,242 people. The Government of Morocco Open Data[486] includes projected population for the year 2021 (based on the 2014 RGPD) corresponding to **36,313,000 inhabitants, of which 52% are women.**
Ethnicity	The ethnic groups[487] in Morocco are **Arab-Berber 99.1%, other 0.7%, Jewish 0.2%.** The majority (99.1%[488]) of Moroccans are **Sunni Muslims**, primarily of Arab-Berber, Arabized Berber, Berber and Niger-Congo ethnic background.
Income level	The Gross Domestic Product **(GDP)** in Morocco was **USD 142.87 billion [489]** in 2021 (7.9% annual growth (the higher % in relation to Senegal and Mauritania) and represents 0.01 percent of the world economy. In 2020 (121.35 B) data showed a contraction in GDP compared to 2019 (128.92 B) due to the COVID pandemic, however, in 2021 the country had a significant recovery, with an increase of approx. 11% in

[484] Based on the result of the indicators above.
[485] https://www.hcp.ma/Recensement-General-de-la-Population-et-de-l-Habitat-RGPH-2014_a2945.html
[486] https://data.gov.ma/data/fr/
[487] https://www.cia.gov/the-world-factbook/countries/morocco/
[488] https://worldpopulationreview.com/countries/morocco-population
[489] https://databank.worldbank.org/source/world-development-indicators

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	relation to the pre-pandemic situation. T**he Gross Domestic Product (GDP) per capita was USD 3,795.40**[490] (the highest value comparing to Senegal and Mauritania) in 2021.
Main economic activities	**The economy is dominated by the agricultural sector**, which employs nearly 33.2% of the workforce and contributed in 2021 to 12% of GDP (WDI-World Bank data[491]). The same source indicates that the GDPcontribution in 2021 by sector was 12% agriculture/forestry/fishing, 26.1% industry, 15.3% manufacturing and 51.6% services. According to the World Factbook of the CIA[492], the Moroccan economy has been characterized by macro-economic stability and low levels of inflation, relying mostly on exports, a boom in private investment and tourism. However, the COVID-19 shock has pushed the Moroccan economy into its first recession since 1995. The country's economy rebounded in 2021 when it grew an **estimated 5.7% thanks to a base effect and an extraordinary performance of the agricultural sector**, rather than by a broad-based acceleration of economic activity.
Poverty	**The multidimensional poverty rate (MPM)** in Morocco, registered a very low value of 5.8%[493] in 2013 (far from Senegal (32.3%) and Mauritania (45.7%), although these rates do not correspond to the same reference year (latest available data). **However, Morocco's Gini Index was 39.5% in 2013**[494], therefore by this measure, **Morocco is the highest income-unequal country** (of the 3 African countries targeted by the GMC II) with the largest gap between the top and bottom of the socio-economic ladder. An OCDE[495] report issued in 2018 revealed that 45.7% of the income distribution is concentrated in the richest quintile. The analysis produced by the National Statistics Institute based on a panel collected following the new Household Budget Survey (2019) suggested that in 2020 poor households have been disproportionately affected by the pandemic, and that the most vulnerable operate in the urban, informal sector and are engaged in precarious jobs in services and art crafts sectors. The national unemployment rate currently stands at 12.9%[496], with unemployment rates especially high in rural areas. According to the Moroccan High Commission for Planning (HCP, Haut Commissariat au Plan)[497], unemployment particularly affects the youth (15-24 years of age – at 26%), women and recent graduates.
Health	The World Health Statistic Data Set[498] of the World Health Organization (WHO), shows a ***Healthy Life Expectancy at Birth (years)* in Morocco of 63.7** in 2019 (a little higher than info shown in the same year for the African countries targeted by the GMC2), a ***Maternal Mortality Ratio (per 100 000 live births)* of**

[490] https://databank.worldbank.org/source/world-development-indicators
[491] https://databank.worldbank.org/source/world-development-indicators
[492] https://www.cia.gov/the-world-factbook/countries/morocco/
[493] https://www.worldbank.org/en/topic/poverty/brief/multidimensional-poverty-measure
[494] Most recent year available.
[495] AUC/OECD (2018), Africa´s Development Dynamics 2018: Growth, Jobs and Inequalities, AUC, Addis, Adaba/ OECD Publishing Paris. https://read.oecd-ilibrary.org/development/africa-s-development-dynamics-2018_9789264302501-en#page180
[496] https://www.hcp.ma/
[497] https://www.hcp.ma/
[498] https://www.who.int/data/gho/publications/world-health-statistics

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	72 in 2020, and ***Under-five Mortality Rate (per 1000 live births)*** **of 18** in 2021 (the lower rate compared to Senegal and Mauritania).
Malnutrition/ food insecurity	According to the latest report on the *State of Food Security and Nutrition in the World 2022*[499]**, Morocco had a 31.6%** ***of Prevalence of Moderate or Severe Food Insecurity in the Population*** for **the 2019-2021 period** and **5.6 % of** P***revalence of Undernourishment in Total Population (PoU)***, lower than Mauritania (10.1%) and Senegal (7.5%) in the same period, but still relevant since it means more than 1.5 million Moroccans are suffering for malnutrition. According to this report, the state of food security was a combined effect of climate extremes and economic slowdowns and downturns in the period. According to the WB[500], a severe drought affecting domestic production and farmers revenues is threatening Moroccan food security in 2022, compounded by imported inflation and supply chains disruptions caused by the conflict in Ukraine.
Education	The World Bank data[501] reported **government expenditure on education as 6.8% of the GDP in 2020** (Morocco has the highest % of the GDP invested in education compared to other African countries targeted by the GMC II**)**. The same source reported an *Adult Literacy Rate of 75.9% in 2021* and a lower *Female Adult Literacy Rate of 67.4%* in the same year. *Youth Literacy Rate was 98.4%* in 2021 and *Female Youth Literacy Rate* was 98.2% in the same year. The available literature has pointed out that the pandemic has been disrupting education systems around the world, particularly affecting the most vulnerable learners (UNESCO, 2022[502]).
Human Development Index	**In 2021, Morocco ranked 123[503] of 191 countries with a HDI (Human Development Index) of 0.683**. Morocco is classified in the *Medium Human Development* category, its HDI value is above countries such as Mauritania and Senegal (whose rankings are within the *Low Human Development* classification). This is associated to higher life expectancy and higher per capita income levels. However, HDI value in 2019 is higher for men (0.734) than women (0.612) in Morocco.
Gender Issues	**In 2021 Morocco ranked 104 of 170 countries with a GII (Gender inequality index) of 0.425[504].** Although Morocco shows a positive scenario regarding the lowest adolescent birth rate (25.9 births per 1,000 women ages 15–19) of the 6 GMC2 target countries, it presents the most unequal scenario with the **lowest rate of participation of women in the labour force (22%) while men hold 66%.** In the same year of reference**, the country had a GDI (Gender Development Index) of 0.861[505],** corresponding to the lowest value of the GMC2 target countries. Although there are several indicators that make up this GDI,

[499] FAO, IFAD, UNICEF, WFP and WHO. 2022. The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable. Rome, FAO. https://www.fao.org/documents/card/en/c/cc0639en
[500] https://www.worldbank.org/en/topic/poverty/brief/multidimensional-poverty-measure
[501] https://databank.worldbank.org/reports.aspx?source=2&series=SE.ADT.1524.LT.MA.ZS&country=MRT
[502] https://www.unesco.org/en/covid-19/education-response
[503] https://hdr.undp.org/system/files/documents//hdr2020pdf.pdf
[504] https://hdr.undp.org/data-center/documentation-and-downloads
[505] https://hdr.undp.org/gender-development-index#/indicies/GDI

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	this value is highly influenced by a significant gender gap in the *estimated gross national income per capita (PPP $)* indicator (Women $ 3,194 and Men $ 11,356). This alarming gender gap represents a notable lack of socio-economic inclusion and representation for Moroccan girls and women. Women also remain underrepresented in elected office (women seats in parliament are 20.4%), leave school at younger ages than male classmates, and are untapped drivers for economic growth in Morocco.
HHRR	According to HHRR[506] monitoring reports issued by human rights organizations in Morocco, the country must be strengthened in several pillars of human rights, specially: **Freedom of expression, freedom of assembly, women's rights and domestic workers.**
Security	According to World Bank data[507], the **Intentional Homicide Rate** (per 100,000 people) in Morocco was **2 in 2021**, far below the homicide rates registered in the Latin American countries targeted by the GMC II. The same source updated to **2019** shows that **Morocco is the third country** (of the 6 targeted by the GMC) in **terms of refugees**, with approximately **4,600 Moroccan refugees** around the world for the reference year.
Main social issues	**Poverty, income inequality, women exclusion, un employment, adult illiteracy**

KEY DEFINITIONS[508]

Gender Development Index (GDI)	The GDI measures gender inequalities in achievement in three basic dimensions of human development: health, measured by female and male life expectancy at birth; education, measured by female and male expected years of schooling for children and female and male mean years of schooling for adults ages 25 years and older; and command over economic resources, measured by female and male estimated earned income.
Gender Inequality Index (GII)	The GII reflects gender-based disadvantage in three dimensions—reproductive health, empowerment and the labour market—for as many countries as data of reasonable quality allow. It shows the loss in potential human development due to inequality between female and male achievements in these dimensions. It ranges from 0, where women and men fare equally, to 1, where one gender fares as poorly as possible in all measured dimensions.
Gini index	Measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a

[506] https://borgenproject.org/human-rights-in-morocco and https://www.amnesty.org/en/location/middle-east-and-north-africa/morocco-and-western-sahara/report-morocco-and-western-sahara/
[507] https://data.worldbank.org/indicator/VC.IHR.PSRC.P5?locations=MA
[508] The sources used for these definitions correspond to the main sources used to measure each variable.

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	perfectly equal distribution. A Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.
Gross Domestic Product (GDP)	GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.
Gross national income (GNI) per capita ($PPP)	GNI per capita aggregate income of an economy generated by its production and its ownership of factors of production, less the incomes paid for the use of factors of production owned by the rest of the world, converted to international dollars using PPP rates, divided by midyear population.
Multidimensional Poverty Measure-Multidimensional poverty headcount ratio (%)	The Multidimensional Poverty Measure (MPM) seeks to understand poverty beyond monetary deprivations (which remain the focal point of the World Bank's monitoring of global poverty) by including access to education and basic infrastructure along with the monetary headcount ratio at the $2.15 international poverty line.
The Human Development Index (HDI)	Human Development Index (HDI): A composite index measuring average achievement in three basic dimensions of human development—a long and healthy life, knowledge and a decent standard of living.
The prevalence of undernourishment (PoU)	PoU is an estimate of the proportion of the population whose habitual food consumption is insufficient to provide the dietary energy levels that are required to maintain a normal active and healthy life. It is expressed as a percentage.

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BIBLIOGRAPHY

AfDB. (2022). Macroeconomic outlook- Senegal. African Development Bank (AfDB). Retrieved from: *https://www.afdb.org/en/countries/west-africa/senegal/senegal-economic-outlook*

Amnesty International. (2013). Panama Human Rights. Retrieved from: *https://www.amnestyusa.org/countries/panama/*

Amnesty International. (2022). Amnesty International Report 2021/22- The State of The World's Human Rights. Amnesty International.

ANSD. (2016). Recensement General de la Population et de L'habitat, de L'agriculture et de L'elevage (RGPHAE) 2013- Atlas Demographique du Senegal- Rapport Final 2016. Agence Nationale de la Statistique et de la Demographie (ANSD).

ANSD. (2021). Annuaire de la population du Sénégal. Année 2021. Agence Nationale de la Statistique et de la Demographie (ANSD).

ANSD. (2021). Comptes Nationaux Semi-Definitifs de 2020 et Definitifs de 2019 (Base 2014). Agence Nationale de la Statistique et de la Demographie (ANSD).

ANSD. (2021). Enquête harmonisée sur les Conditions de Vie des Ménages (EHCVM) au Sénégal, Rapport Final. Agence Nationale de la Statistique et de la Demographie (ANSD).

AUC/OECD (2018), Africa´s Development Dynamics 2018: Growth, Jobs and Inequalities, AUC, Addis, Adaba/ OECD Publishing Paris. https://read.oecd-ilibrary.org/development/africa-s-development-dynamics-2018_9789264302501-en#page180

BMZ. (s.f). Economic Situation- Senegal. Federal Ministry for Economic Cooperation and Development (BMZ). Retrieved from: *https://www.bmz.de/en/countries/senegal/economic-situation-48602*

Caria, S. (2019). Caracterización del perfil económico-productivo de Ecuador. Friedrich Ebert Stiftung (FES).

CIA. (2022). The World Factbook Ecuador. Central Intelligence Agency (CIA). Retrieved from *https://www.cia.gov/the-world-factbook/countries/ecuador/*

CIA. (2022). The World Factbook Mauritania. Central Intelligence Agency (CIA). Retrieved from https://www.cia.gov/the-world-factbook/countries/mauritania/

CIA. (2022). The World Factbook Morocco. Central Intelligence Agency (CIA). Retrieved from *https://www.cia.gov/the-world-factbook/countries/morocco/*

CIA. (2022). The World Factbook Senegal. Central Intelligence Agency (CIA). Retrieved from *https://www.cia.gov/the-world-factbook/countries/senegal/*

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

FAO, IFAD, UNICEF, WFP and WHO. 2021. The State of Food Security and Nutrition in the World 2021. Transforming food systems for food security, improved nutrition and affordable healthy diets for all. Rome, FAO. https://doi.org/10.4060/cb4474en

FAO. (2019). Fishery and Aquaculture Country Profiles- Guatemala. Food and Agriculture Organization (FAO). Retrieved from: *https://www.fao.org/fishery/en/facp/gtm?lang=es*

FAO. (2019). Panama- GLOBEFISH Market Profile – 2019. Food and Agriculture Organization (FAO).

GITOC. (2021). Global Organized Crime Index 2021. Global Initiative Against Transnational Organized Crime (GITOC).

HCP. (2014). Recensement Général de la Population et de l'Habitat - RGPH – 2014. Haut-Commissariat Au Plan (HCP).

HRW. (2021). Ecuador: Criminalizar el aborto vulnera derechos y afecta la salud. Human Rights Watch (HRW). Retrieved from: *https://www.hrw.org/es/news/2021/07/14/ecuador-criminalizar-el-aborto-vulnera-derechos-y-afecta-la-salud*

HRW. (2021). World Report 2021, Events of 2020. Human Rights Watch (HRW).

HRW. (2022). Ecuador's Recurrent Cycle of Violence over Indigenous Rights. Human Rights Watch (HRW). Retrieved from: *https://www.hrw.org/news/2022/08/13/ecuadors-recurrent-cycle-violence-over-indigenous-rights*

INEC. (2010). Censo de Población y Vivienda 2010 (base de datos). Instituto Nacional de Estadísticas y Censos (INEC).

Humanium. (2020). Children of Senegal- Realizing Children's Rights in Senegal. Retrieved from: *https://www.humanium.org/en/senegal/*

IFAD. (2019). Republic of Senegal Country Strategic Opportunities Programme 2019-2024. International Fund for Agricultural Development (IFAD).

IMF. (s.f). Guatemala. International Monetary Fund (IMF). Retrieved from: *https://www.imf.org/en/Countries/GTM*

INE. (2018). Resultados del Censo 2018. Instituto Nacional de Estadística Guatemala (INE)

INEC. (2010). Proyección de la población Ecuatoriana, por años calendario, según regiones, provincias y sexo, periodo 2010-2020 (base de datos). Instituto Nacional de Estadísticas y Censos (INEC).

INEC. (2022). Boletín Técnico N° 11-2022-ENEMDU- Encuesta Nacional de Empleo, Desempleo y Subempleo (ENEMDU). Instituto Nacional de Estadísticas y Censos (INEC).

IsDV. (s.f). Republic of Senegal. Islamic Development Bank. Retrieved from: *https://www.isdb.org/senegal*

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

ITA. (2022). Guatemala - Country Commercial Guide. International Trade Administration (ITA). Retrieve from: *https://www.trade.gov/country-commercial-guides/guatemala-market-overview*

OECD (2017), Multi-Dimensional Review of Panama: Volume 1: Initial Assessment, OECD Development Pathways, OECD Publishing, Paris, https://doi.org/10.1787/9789264278547-en

OECD. (2020). Making Development Happen Volume 5. Impacto macroeconómico del COVID-19 en Ecuador: desafíos y respuestas. Organisation for Economic Co-operation and Development (OECD).

OMS. (2018). Estrategia de Cooperación Panama- Resumen. Organización Mundial de la Salud (OMS).

ONS. (2015). Recensement Général de la Population et de l'Habitat (RGPH), 2013. Office National de la Statistique (ONS).

The Borgen Project. (2018). Global Poverty, Mauritania, Slavery- Achieving Liberty in Mauritania. Retrieved from: *https://borgenproject.org/tag/human-rights-in-mauritania/*

The Borgen Project. (2018). Human Rights in Morocco. Retrieved from: *https://borgenproject.org/human-rights-in-morocco*

U.S Department of State. (2021). Country Reports on Human Rights Practices: Panama. United States Department of State.

U.S Department of State. (2022). 2022 Investment Climate Statements: Ecuador. United States Department of State.

UNDP. Human Development Report 2021/2022- Uncertain times, unsettled lives, Shaping our future in a transforming world. United Nations Development Programme (UNDP).

UNESCO, UNICEF, UNGEI. (2019). Ending school-related gender-based violence: a series of thematic briefs. United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Children's Fund (UNICEF) and United Nations Girls' Education Initiative (UNGEI).

UNESCO. (s.f). Education: from school closure to recovery. United Nations Educational, Scientific and Cultural Organization (UNESCO). Retrieved from: *https://www.unesco.org/en/covid-19/education-response*

UNHCR. (2021). Global trends forced displacement in 2021. UN Refugee Agency (UNHCR).

UNHR. (2020). Country Reports- A/HRS/49/20: Situation of human rights in Guatemala - Report of the United Nations High Commissioner for Human Rights. United Nations Human Rights (UNHR).

UNICEF. (2018). Maternal and Newborn Health Disparities- Mauritania. United Nations Children's Fund (UNICEF).

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

UNICEF. (2021). Country programme document Panama. United Nations Children's Fund (UNICEF).

UNICEF. (s,f). Children in Senegal. United Nations Children's Fund (UNICEF). Retrieved from: https://www.unicef.org/senegal/en/children-senegal

WBG. (2021). Mauritania Economic Update: Why it is Essential to Enable Women to Participate Fully in Economic Activity?. The World Bank Group (WBG). Retrieved from: https://www.worldbank.org/en/country/mauritania/publication/mauritania-economic-update-why-it-is-essential-to-enable-women-to-participate-fully-in-economic-activity

WBG. (2021). Poverty & Equity Brief, Panama, Latin America & the Caribbean, April 2022. The World Bank Group (WBG).

WBG. (2022). Macro Poverty Outlook- Guatemala. The World Bank Group (WBG).

WBG. (2022). Poverty & Equity Brief, Ecuador, Latin America & the Caribbean, April 2022. The World Bank Group (WBG).

WBG. (2022). Poverty & Equity Brief, Guatemala, Latin America & the Caribbean, April 2022. The World Bank Group (WBG).

WBG. (2022). Poverty & Equity Brief, Senegal, Africa Western & Central, April 2022. The World Bank Group (WBG).

WBG. (2022). Poverty & Equity Brief, Senegal, Middle East & North Africa, April 2022. The World Bank Group (WBG).

WBG. (2022). Poverty & Equity Brief, Senegal, Sub-Saharan Africa, April 2022. The World Bank Group (WBG).

WBG. (2022). The World Bank in Guatemala. The World Bank Group (WBG). Retrieved from: *https://www.worldbank.org/en/country/guatemala/overview*

WBG. (2022). The World Bank in Panama. The World Bank Group (WBG). Retrieved from: *https://www.worldbank.org/en/country/panama/overview*

WFP. (2022). WFP Ecuador Country Brief July 2022. World Food Program (WFP).

WFP. (2022). WFP Senegal Country Brief April 2022. World Food Program (WFP).

WHO. (2022). World health statistics 2022. World Health Organization's (WHO).

WHO. (s.f). Violence info- Mauritania African Region. World Health Organization (WHO). Retrieved from: *https://apps.who.int/violence-info/country/MR/*

World Population. (s.f). Mauritania Population. Retrieved from: *https://worldpopulationreview.com/countries/mauritania-population*

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

World Population. (s.f). Morocco Population. Retrieved from: *https://worldpopulationreview.com/countries/morocco-population*

Websites consulted:

http://uis.unesco.org/en/home#tabs-0-uis_home_top_menus-3

https://data.gov.ma/

https://databank.worldbank.org/source/world-development-indicators

https://en.unesco.org/countries

https://hdr.undp.org/data-center/documentation-and-downloads

https://hdr.undp.org/gender-development-index#/indicies/GDI

https://ons.mr/index.php

https://www.ansd.sn/

https://www.cia.gov/the-world-factbook/countries

https://www.ecuadorencifras.gob.ec/estadisticas/

https://www.fao.org/fishery/en/facp/search

https://www.hcp.ma/

https://www.ine.gob.gt/

https://www.inec.gob.pa/publicaciones/

https://www.isdb.org/senegal

https://www.worldbank.org/en/topic/poverty/brief/multidimensional-poverty-measure

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Annex 18: List of project direct and indirect beneficiaries

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Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems (GMC2)

GEF Project ID 11011

Project Preparation Grant Phase (PPG)

List of project direct and indirect beneficiaries

August 19, 2023

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		Direct			Direct beneficiaries' description	Indirect	Indirect beneficiaries' description
Output	Item	Men	Women	Total		Total	
1.1.2	Number of persons that participate in the Guatemalan buyer engagement trial (e.g., training, meetings)	24	12	36	Buyers-enterprises, government (DIPESCA, MAGA, CONAP), fishers associated with the processing plants participating in the FIP, and buyers' representatives.	2.400	Fishers and their families. 100 fishing boats from Puerto San Jose and 50 fishing boats from Iztapa (4 fishers per boat) and 4 persons per family.
1.1.2	Number of persons that participate in the Senegalese buyer engagement trial (e.g., training, meetings)	20	20	40	Persons from hotels, restaurants, processing plants and supermarkets	38.315	CLPA population estimated to be 38.315 people (USAID/ Winrock 2016)
1.1.2	Number of persons that participate in the Ecuadorian buyer engagement trial (e.g., training, meetings)	80	120	200	Buyers' enterprises, government (SRP), fishers associated with the processing plants participating in the FIPs, and buyers' representatives.	6.272	Fishers and their families. Artisanal fleets (125) and industrial fleets (99) X 7 fishers per boat and 4 persons per family
1.1.2	Number of persons that participate in the Moroccan buyer engagement pilot (e.g., training, meetings)	20	20	40	Persons from the hotels, restaurants, processing plants and supermarkets	107.936	Fishers and processing plants workers and their families. Sardine fishers (coastal fleet 683, RSW fleet 21, artisanal fishery 792 X 4 persons per boat), sardine processing plants (47 processing plants full-time and seasonal jobs) and 4 persons per family.
1.2.2	Number of international buyers that receive support to integrate socially responsible requirements	80	10	90	Key international buyers related to the target supply chains	-	No indirect beneficiaries
1.2.3	Number of domestic buyers (by country) that receive support to integrate socially responsible requirements	200	50	250	Key buyers in each country related to the target supply chain	-	No indirect beneficiaries
1.3.1	Number of international buyers that receive support to integrate reduced by-catch and ecosystem impacts requirements	80	10	90	Key international buyers related to the target supply chains	-	No indirect beneficiaries
1.3.2	Number of domestic buyers (by country) that receive support to integrate reduced by-catch and ecosystem impacts requirements	200	50	250	Key buyers in each country related to the target supply chain	-	No indirect beneficiaries
2.1.1	Number of persons that participate in the Dialogue Roundtable and Technical Committee of the pomada fishery (Ecuador)	80	20	100	Representatives from the government (IPIAP, SRP), fishers from industrial and artisanal fishery, ship owners, processors, and exporters.	3.356	Fishers and their families. 37 industrial vessels (6 persons), 617 artisanal fishers and 4 persons per family.

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		Direct			Direct beneficiaries' description	Indirect	Indirect beneficiaries' description
Output	**Item**	**Men**	**Women**	**Total**		**Total**	
2.1.1	Number of persons that participate in the management platform for the longline large pelagic fish fishery (Ecuador)	150	50	200	Representatives from the government (IPIAP, SRP), fishers from industrial and artisanal fishery, ship owners, Industrial sector (Transmarina, ASOAMAN).	77.744	Fishers and their families. 4.600 Artisanal boats (4 persons per boat) and 148 nodrizas (7 persons per boat) and 4 persons per family.
2.1.1	Number of persons that participate in the management platform for the dorado and shark's fishery (Guatemala)	40	18	58	Participants in the chondrichthyan table, processing plants (2 persons), TUNART, Langosta Roja and Industria Samaritana, and shipowners (8 persons).	data posted before	Fishers and their families. 100 fishing boats from Puerto San Jose and 50 fishing boats from Iztapa (4 fishers per boat) and 4 persons per family.
2.1.1	Number of persons that participate in the management platform for the shrimp fishery (Panama)	10	1	11	Representatives from fishers (5 persons), industry chamber (2 persons), MiAmbiente (2 persons) and ARAP (2 persons).	3.000	Fishers and their families. 150 shrimp trawlers (5 person per boat) and 4 persons per family.
2.1.1	Number of persons that participate in the management platform for the longline fishery for large pelagic fish of the Pacific coast (Panama)	10	1	11	Representatives from fishers (5 persons), industry chamber (2 persons), MiAmbiente (2 persons) and ARAP (2 persons).	4.600	Fishers and their families. 230 fishing vessels (5 person per boat) and 4 persons per family
2.1.1	Number of persons that participate in the management platform for the small pelagic fish fishery (Senegal)	60	20	80	Representatives from the CLPA National Network (40 persons), CNPCM (10 persons), CONIPAS (10 persons), CNAPP (10 persons), GIE interprofessional (10 persons in Joal)	8.000	Representatives from CLPAs at national level (41 CLPA x 20 persons), CONIPAS (1000 persons), GIE Interprofesional (180 persons), and 4 persons per family.
2.1.1	Number of persons that participate in the management platform for the small pelagic fish fishery (Mauritania)	20	10	30	Representatives from CNC-PP (10 persons), CAAP (10 persons) and CCNADP (10 persons)	860	Fishers and processing plants workers and their families. Fishers 400 (artisanal 100 x 4 persons); (coastal fleet 40 x 4 persons); (processing plants 10 x 30 persons) and 4 persons per family.
2.1.1	Number of persons that participate in the collaborative actions for small pelagic fish management (Mauritania and Morocco)	10	10	20	10 persons per country	35.160	Fishers and processing plants and their families. In Mauritania, 735 boat (artisanal, coastal, industrial) x 4 persons (Gascoigne 2021), 35 processing plants (35 x 30 persons) (Thiao&Bunting 2022). In Morocco, 75 authorised to fish in Zone C x 4 persons (DPM 2021), processing plants generated some 21,000 full-time and seasonal jobs (Naji 2015) [the number of plants by 5: 47 /5: 9, and the number of employments 21.000 / 5: 4200 persons] and 4 persons per family.
2.1.2							

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		Direct			Direct beneficiaries' description	Indirect	Indirect beneficiaries' description
Output	Item	Men	Women	Total		Total	
2.3.2	Number of people that participate in the pomada FIP (Ecuador).	250	50	300	Representatives from the government (IPIAP, SRP), fishers from industrial fishery, ship owners and industrial sector.	data posted before	Fishers and their families. 37 industrial vessels (6 persons per boat) and 4 persons per family.
2.1.2 2.3.2	Number of people that participate in the ASOAMAN FIP (Ecuador).	350	50	400	Representatives from the government (IPIAP, SRP), fishers from industrial and artisanal fishery, ship owners, industrial sector (ASOAMAN).	20.680	Fishers and families. 110 nodrizas vessels (7 persons per boat), 10 boats (4 persons) and 4 persons per family.
2.1.2	Number of people that participate in the dorado and sharks FIP (Guatemala).	600	100	700	Fishers from Puerto San Jose (100 boats x 4 persons) and Iztapa (50 boats x 4 persons); Industrial sector (8 persons) and government DIPESCA (2 persons) and CONAP (2 persons)	data posted before	Fishers and their families. 100 fishing boats from Puerto San Jose and 50 fishing boats from Iztapa (4 fishers per boat) and 4 persons per family.
2.1.2	Number of people that participate in the shrimp FIP (Panama).	39	1	40	Representatives from Industrial sector (2 persons), industry chamber (2 persons), MiAmbiente (2 persons), ARAP (2 persons), Autoridad Marina de Panama (2 persons) and ship owners (30 persons)	data posted before	Fishers and their families. 150 shrimp trawlers (5 person per boat) and 4 persons per family.
2.1.2 2.3.2	Number of people that participate in the longline large pelagic fish FIP (Panama).	16	-	16	Representatives from Industry sector (10 persons), industry chamber (2 persons), MiAmbiente (2 persons) and ARAP (2 persons)	data posted before	Fishers and their families. 230 fishing vessels (5 person per boat) and 4 persons per family
2.1.2	Number of people that participate in the small pelagic fish supply chain improvement project in the Joal CLPA (Senegal).	7.500	200	7.700	Fishers, middlemen, women working with small pelagic fish.	data posted before	CLPA population estimated to be 38.315 people (USAID/Winrock 2016)
2.1.2	Number of people that participate in the octopus FIP (Senegal).	250	50	300	Fishers, middlemen, people working in the processing plants, and seasonal fishers	Figure not available at this moment	Fishers and processing plant workers and their families.
2.1.2	Number of people that participate in the small pelagic fish FIP (Mauritania).	15	5	20	Representatives from the government, NGO, companies, local buyers, middlemen (20 persons)	15.960	Fishers, processing plants workers and their families. Artisanal, coastal, industrial fishers (735 x 4 persons) (Gascoigne 2021), 35 companies (X 30persons) (Thiao and Bunting 2022), and 4 persons per family.
2.1.2	Number of people that participate in the octopus FIP (Mauritania).	15	5	20		26.732	Fishers and their families. Artisanal fishing fleet 6,600units (2016) and 78

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		Direct			Direct beneficiaries' description	Indirect	Indirect beneficiaries' description
Output	Item	Men	Women	Total		Total	
2.3.2					Representatives from the government, NGO, companies, local buyers, middlemen (20 persons)		Industrial fishing, 15 freezer boats (2021) and 4 persons per family.
2.1.3	Number of pomada bolso fishers that participate in the development of governance and fisheries co-management skills (Ecuador)	1.000	100	1.100	Representatives from the government (IPIAP, SRP), ship owners, industrial fishers, artisanal fishers, and industrial sector.	2.468	Fishers and their families. 617 pomada bolso fishers and 4 persons per family.
2.1.3	Number of women shrimp peelers that participate in capacity development and empowering actions (Ecuador).	-	1.500	1.500	Women peelers working in shrimp processing	6.000	Women peelers and their families. 1500 shrimp peelers and 4 persons per family
2.1.3	Number of dorado and sharks' fishers that participate in the development of governance and fisheries co-management skills (Guatemala)	-	-	data posted before	Fishers from Puerto San Jose (100 boats x 4persons) and Iztapa (50 boats x 4persons); industry sector and government (DIPESCA) and CONAP (2 persons)	data posted before	Fishers and their families. 100 fishing boats from Puerto San Jose and 50 fishing boats from Iztapa (4 fishers per boat) and 4 persons per family.
2.1.3	Number of shrimp fishers that participate in the development of governance and fisheries co-management skills (Panama)	-	-	data posted before	Representatives from government agencies, fishers, and processors	data posted before	Fishers and their families. 150 shrimp trawlers (5 person per boat) and 4 persons per family.
2.1.3	Number of persons that participate in strengthening of CLPA network (Senegal)	-	-	data posted before	Representatives from the CLPA Network.	data posted before	Representatives from CLPAs at national level (41 representatives from CLPA x 20 persons), CONIPAS (1000 persons), GIE Interprofesional (180 persons)
2.1.3	Number of persons that participate in strengthening of Joal CLPA (Senegal).	-	-	data posted before	Fishers, middlemen, women working with small pelagic fish.	data posted before	CLPA population estimated to be 38.315 people (USAID/Winrock 2016)
2.1.3	Number of women processors that participate in capacity development and empowering actions (Senegal).	-	50	50	Women processors	2.280	Women and their families. 2,279 people participating in artisanal processing activity (10% of actors of the Petite Cote (Winrock 2016) and there are 4 CLPA [2.279 by 4] and 4 persons per family.
2.2.1	Number of persons that receive support for integrating social responsibility in fisheries governance and supply chains.	100	20	120	Fisheries stakeholders and buyers		No indirect
2.2.2	Number of persons trained in Regulatory Impact Assessment in fisheries.	100	20	120	Government officers		No indirect beneficiaries
2.2.2	Number of persons that receive support to apply Regulatory Impact Assessment in fisheries.	250	50	300	Government officers		No indirect beneficiaries

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		Direct			Direct beneficiaries' description	Indirect	Indirect beneficiaries' description
Output	**Item**	**Men**	**Women**	**Total**		**Total**	
2.2.2	Number of persons that participate in South-South cooperation for the preparation and implementation of fisheries action plans (Guatemala, Panama, Ecuador).	50	10	60	Fisheries officers		No indirect beneficiaries
2.2.2	Number of persons that participate in the learning exchange on management plans for small pelagic fish and octopus (Morocco, Mauritania, Senegal).	50	10	60	Fisheries officers and fisheries stakeholders		No indirect beneficiaries
2.2.2	Number of persons that participate in the participatory process to update the PAN pomada (Ecuador)	-	-	data posted before	Artisanal and industrial fishers, IPIAP, SRP and processing plants	data posted before	Pomada fishers and workers of the processing plants.
2.2.2	Number of persons that participate in the participatory process to prepare the PAN large pelagic fish (Ecuador)	300	50	350	Artisanal and industrial fishers, IPIAP, SRP, and processing plans.	data posted before	Longline fishers and workers of the processing plants
2.2.2	Number of persons that participate in the participatory process to update of PAN sharks 2021 – 2026 (Guatemala)	-	-	data posted before	Participants from the chondrichtyan round table/ part of the PAN sharks	data posted before	Fishers and workers of the processing plants
2.2.2	Number of persons that participate in the participatory process to prepare the plan for the dorado and sharks' fishery (Guatemala)	-	-	data posted before	Participants from the chondrichtyan round table/ part of the PAN sharks	data posted before	Fishers and workers of the processing plants
2.2.2	Number of persons that participate in the participatory process to prepare the shrimp management plan (Panama)	-	-	data posted before	Representatives from government agencies, fishers, and processors	data posted before	Fishers and workers of the processing plants
2.2.2	Number of persons that participate in the participatory process to prepare the large pelagic fish management plan (Panama)	-	-	data posted before	Representatives from government agencies, fishers, and processors	data posted before	Fishers and workers of the processing plants
2.2.2 2.3.1	Number of persons that integrate COREMAHI	16	4	20	Representatives of COREMAHI associates	not available	Fishers and workers of the processing plants that belong to COREMAHI
2.2.2	Number of persons that participate in the participatory process to update the octopus management plan (Senegal)	40	20	60	Representatives from the ministry, researchers, presidents of CLPAs	12.000	Fishers, processing plant workers and their families. 651 octopus line canoes (CRODT 2014) x 4 persons, middlemen and people working in processing plants and 4 persons per family.

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		Direct			Direct beneficiaries' description	Indirect	Indirect beneficiaries' description
Output	**Item**	**Men**	**Women**	**Total**		**Total**	
2.2.2	Number of persons that participate in the preparation of a strategic plan to potentiate added value small pelagic fish products (Mauritania).	20	20	40	Persons that will participate in the preparation of the plan	60	Ministry of fisheries
2.2.2	Number of persons that participate in the design of a national programme to promote seafood consumption (mainly small pelagic fish) (Mauritania).	20	20	40	Persons that will design the plan.	60	Ministry of fisheries
2.3.1	Number of persons that participate in the process of integrating measures and targets on shark bycatch into PAT-Ec, PAN large pelagic fish and pertinent regulations (Ecuador).	-	-	data posted before	Representatives from the government (IPIAP, SRP), industrial and artisanal fishers, ship owners, industry sector.	data posted before	Fishers and their families. 4.600 Artisanal boats (4 persons per boat) and 148 nodrizas (7 persons per boat) and 4 persons per family.
2.3.1	Number of persons that participate in the process to prepare and adopt measures to reduce bycatch of sharks in longline fisheries (Guatemala)	-	-	data posted before	Buyers-enterprises, government (DIPESCA, MAGA, CONAP), fishers associated with the processing plants, ship owners	data posted before	Fishers and their families. 100 fishing boats from Puerto San Jose and 50 fishing boats from Iztapa (4 fishers per boat) and 4 persons per family.
2.3.1	Number of persons that participate in the process to prepare and adopt measures to reduce bycatch in longline fisheries (Panama)	-	-	data posted before	Representatives from Industry sector (5), industry chamber (2 persons), MiAmbiente (2 persons) and ARAP (2 persons)	data posted before	Fishers and their families. 230 fishing vessels (5 person per boat) and 4 persons per family
2.3.1	Number of persons that participate in the process to strengthen capacities to prepare Non-Detriment Finding Reports for shark species (Guatemala, Panama, Ecuador).	40	5	45	Government agencies, NGOs, academia.		No indirect beneficiaries
3.1.1	Number of persons that access the FishSource profiles of the target fisheries	1.000	200	1.200	Buyers and traders of seafood products		No indirect beneficiaries
3.1.2	Number of persons that access the FishSource profiles of the target FIPs	1.000	200	1.200	Buyers and traders of seafood products		No indirect beneficiaries
	Total	**14.105**	**3.162**	**17.267**		**373.883**	

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Total number of men direct beneficiaries	14.105
Total number of women direct beneficiaries	3.162
Total direct beneficiaries	17.267
Total indirect beneficiaries	373.883
Total project beneficiaries	391.150

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Annex 19: Participation and engagement strategy of the project preparation phase of the GMC2 Project

See separate file.

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Annex 20: Climate Risk Screening.

Project Information	
Project Title	Mainstreaming Sustainable Marine Fisheries Value Chains into the Blue Economy of the Canary Current and the Pacific Central American Coastal Large Marine Ecosystems
Project Number	UNDP PIMS ID number: 6591 GEF Project ID number: 11011
Location	Ecuador, Guatemala, Mauritania, Morocco, Panama, Senegal.

Identifying and Managing Climate Risks

The IPCC defines the risk of climate-change impacts as the interaction of vulnerability, exposure, and hazard (IPCC, 2014). The revised definition of risk is: "the potential for adverse consequences for human or ecological systems, recognising the diversity of values and objectives associated with such systems. In the context of climate change, risks can arise from potential impacts of climate change as well as human responses to climate change. Relevant adverse consequences include those on lives, livelihoods, health and wellbeing, economic, social and cultural assets and investments, infrastructure, services (including ecosystem services), ecosystems and species. In the context of climate change impacts, risks result from dynamic interactions between climate-related hazards with the exposure and vulnerability of the affected human or ecological system to the hazards. Hazards, exposure and vulnerability may each be subject to uncertainty in terms of magnitude and likelihood of occurrence, and each may change over time and space due to socio-economic changes and human decision-making" (Reisinger et al., 2020).

Hazard refers to the potential occurrence of climate-related physical events or trends that may cause damage and loss. **Exposure** indicates the presence of assets, services, resources, and infrastructure that could be adversely affected. **Vulnerability** is the propensity or predisposition to be adversely affected.

Climate related hazards	Exposure and Vulnerability Assessment (Low, Medium, High)	Risk Rating (Low, Medium, High)	Project measures to manage risk
	PACA	High	1. Include projected climate change impacts in the agenda of the co-

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Climate related hazards	Exposure and Vulnerability Assessment (Low, Medium, High)	Risk Rating (Low, Medium, High)	Project measures to manage risk
Increase in ocean temperature.	Sea surface temperature is projected to increase 0.96°C by 2050 under the RCP8.5 model. Large pelagic fish and shrimps. Exposure. **High**. Vulnerability. **High**. Increased temperature produces displacement of cold-water species like tunas and billfishes (i.e., decrease availability to fishing fleets) and increased abundance of warm-water species like dorado and shrimps. As seen during El Niño events, the sudden increased abundance in dorado and shrimps generates a collapse of the prices of these species. Clarke et al., (2020) estimated a strong reduction of the large pelagic fish fishery in Guatemala, a medium reduction in Panama, and small reduction in Ecuador. For shrimps, it was estimated an increase in the three countries.		management platforms and the development of fisheries management plans and instruments. 2. Foster that pertinent research institutions present information and forecasts to the co-management platforms. 3. Motivate key stakeholders to develop and implement adaptation measures in their operations. 4. Mainstream information about climate change impacts on the target supply chains in the project communication strategy.
	CCLME Small pelagic fish and octopus. Exposure. **High**. Vulnerability. **High**. The abundance, distribution and species composition of small pelagic fish are very sensitive to temperature fluctuations and climate variability (Zeeberg et al., 2008<, Braham & Corten, 2015). Increase ocean temperature may result in a reduction of the upwelling rate (Syla et	High	

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Climate related hazards	Exposure and Vulnerability Assessment (Low, Medium, High)	Risk Rating (Low, Medium, High)	Project measures to manage risk
	al., 2019) and will probably change the abundance and distribution of sardines, sardinellas and other species of this assemblage (Aristegui et al., 2009). Faleiro et al., (2016) found that ocean warming negatively affect the development and survival of Sardina pilchardus larvae. Increased ocean temperature might reduce the population size of the common octopus, since they prefer cool waters. In addition, Borges et al., (2023) found that ocean warming might have deleterious effects on cephalopods and Repolho et al., (2014) found that increased water temperature increases the mortality of octopus larvae. Borges et al., (2022) estimated a contraction of the southern distribution of octopus under the RCP6.0 and RCP8.5 scenarios.		
Changes in ocean circulation	Surface warming accelerates the upper ocean currents and increases vertical stratification (Peng et al., 2022). This will alter the upwelling patterns in both PACA and the CCLME.		
	PACA Large pelagic fish and shrimps. Exposure. **High**. Vulnerability. **Uncertain**. There is uncertainty about the probable changes in ocean circulation in the tropical Eastern Pacific Ocean (Lee et al., 2023). However, changes in the patterns	Uncertain	

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Climate related hazards	Exposure and Vulnerability Assessment (Low, Medium, High)	Risk Rating (Low, Medium, High)	Project measures to manage risk
	of the three wind-driven upwellings (i.e., Gulfs of Tehuantepec, Papagayo, and Panama) could alter the abundance and distribution of small pelagic fish and in turn affect the abundance of the large pelagic fish that feed on them. There is no information about the probable effects on the shrimp populations.		
	CCLME Small pelagic fish and octopus. Exposure. **High**. Vulnerability. **Uncertain.** In the CCLME, global warming will increase upwelling-favourable winds in the northern part, whereas there might be a weaking of wind forcing in the southernmost part, therefore decreasing the intensity of the upwelling system (Sylla et al., 2019; Varela et al., 2022). In the areas with increased upwelling, the increased primary production will increase food availability for small pelagic fish. In contrast, in the areas where the upwelling decreases there will be less food availability for small pelagic fish and will result in changes in their abundance and distribution. There is no information about the probable effects on octopus. Though, it can be speculated that a decreased upwelling may affect the survival of octopus paralarvae (Roura et al., 2023).	Uncertain	

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Climate related hazards	Exposure and Vulnerability Assessment (Low, Medium, High)	Risk Rating (Low, Medium, High)	Project measures to manage risk
Increased ocean acidification	Ocean acidification is assumed to (i) affect organisms that rely on carbonate-based shells and skeletons (e.g., phytoplankton, bivalves, shrimps) (Dutkiewicz et al., 2015; Mustafa et al., 2015; Taylor et al., 2015; Maia et al., 2022), (2) harm organism sensitive to acidity, and (3) decrease food availability to the predators that feed on acidification sensitive organisms.		
	PACA Large pelagic fish and shrimps. Exposure. **High**. Vulnerability. **High**. Large pelagic fish abundance and availability might be affected by a reduction of food sources as the composition of the plankton assemblage and the food chain changes. Though, there will be plankton species that will flourish under acidic conditions (Schlüter et al., 2014; Dutkiewicz et al., 2015) as well as plankton feeders and predators that will take advantage of the new conditions. In addition, ocean acidification seems to affect the survival of some species like the yellowfin tuna (Frommel et al., 2016). Though, Bignami et al., (2014) found that the larvae of *Coryphaena hippurus* are not vulnerable to ocean acidification. Also, ocean acidification negatively affects sharks by reducing growth, body condition and	High	

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Climate related hazards	Exposure and Vulnerability Assessment (Low, Medium, High)	Risk Rating (Low, Medium, High)	Project measures to manage risk
	their ability to locate food (Pistevos et al., 2015; Rosa et al., 2017). It has been found that ocean acidification alters the physiology and survival of *Litopenaus vannamei* (Mustafa et al., 2015; Muralisankar et al., 2021).		
	CCLME Small pelagic fish and octopus. Exposure. **High**. Vulnerability. **High**. In the Canary current surface seawater pH naturally tends to decrease in the upwelling areas (Santana-Casiano & González-Dávila, 2015). Ocean acidification may change the composition of plankton communities (Hernández, 2021), therefore affecting the present assemblage of small pelagic fish. Though, the plankton species that will prosper will support those species that can take advantage of the new plankton communities. Octopus seem to adapt to changes in ocean acidity levels (Onthank et al., 2021), though Culler-Juarez & Onthank (2021) found that octopus show stress signs and an increased immune response under acidic conditions. It is uncertain how this will affect the survival and population dynamics of *Octopus vulgaris* in the CCLME.	High	

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Climate related hazards	Exposure and Vulnerability Assessment (Low, Medium, High)	Risk Rating (Low, Medium, High)	Project measures to manage risk
Increased sea level rise	The NASA Sea Level Projection Tool provides the following projections of sea level rise under the SSP5-8.5 scenario for 2050: 0.21 m in La Libertad (Ecuador), 0.27 m in Balboa (Panama city), 0.25 m in Puerto Armuelles (Panama) and 0.25 m in Acajutla (El Salvador) (no projection for a Guatemalan port on the Pacific coast). The NASA Sea Level Projection Tool only has a projection for Dakar (0.69 m in 2050, SSP5-8.5 scenario). There is no information for sites in Mauritania and Morocco. In all cases the increase sea level will affect coastal habitats (e.g., mangroves, coastal lagoons, rocky reefs) that are key for small pelagic fish, octopus, and shrimps.		
	PACA Large pelagic fish and shrimps. Exposure. **High**. Vulnerability. **Medium**. In Central America and Ecuador mangroves are copying with current sea level rise rates. But an accelerated sea level rise is expected to result in landward mangrove forest migration which might be limited by human occupation of coastal areas (Ward et al., 2016). It can be speculated that a reduction in mangrove cover could alter the production and export of nutrients,	Medium	

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Climate related hazards	Exposure and Vulnerability Assessment (Low, Medium, High)	Risk Rating (Low, Medium, High)	Project measures to manage risk
	which in turn could negatively affect the populations of shrimps (whose life cycle depend on estuaries) and the trophic chain in coastal areas.		
	CCLME Small pelagic fish and octopus. Exposure. **High**. Vulnerability. **High**. In Senegal, sea level rise could inundate coastal wetlands and mangroves (Dennis et al., 1995; Sakho et al., 2022). Saintilan et al., (2020) found that, worldwide, mangroves will not be able to cope with an acceleration of sea level rise. Sea level rise will also affect coastal infrastructure of the fishing ports and coastal villages. The impact might be more intense in West Africa. For example, Dennis et al., (1995) estimated that a one-meter rise in sea level could inundate about 6,000 km^2 of coastal areas. West Africa is already being affected by sea level rise. Senegal currently has a severe problem of coastal erosion. Enríquez-de-Salamanca (2020) found an acceleration of shoreline retreat rates that reached 3.05 m/year in 2014-2018. Sarr et al., (20s1) calculated increases of sea level of 1.52 mm/year (1993-2019) in Dakar and 20.08 mm/year (2001-2018) in Nouakchott.	HIgh	
	PACA Large pelagic fish and shrimps.	High	

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Climate related hazards	Exposure and Vulnerability Assessment (Low, Medium, High)	Risk Rating (Low, Medium, High)	Project measures to manage risk
Increased extreme weather events	Exposure. **High**. Vulnerability. **High**. The PACA LME is periodically affected by El Nino Southern Oscillation conditions. It is foreseen that climate change will make ENSO events stronger and more frequent (Cai et al., 2014; Wang et al., 2019; Cai et al., 2021; Ying et al., 2022). During El Niño conditions the populations of dorado and shrimps expand and predominate, while cold-water species migrate to other areas (e.g., tunas and billfishes). The opposite occurs during La Niña conditions, when the abundance and availability of dorado and shrimp decreases, while cold water species become more abundant. These fluctuations in abundance affect the market price of these species. The abundance of different shark species is also affected by ENSO conditions (Lennert-Cody et al., 2019; Arnés-Urgellés et al., 2021; Osgood et al., 2021). El Niño generates heavy rain and floods in coastal Ecuador, this can damage port facilities and infrastructure.		
	CCLME Small pelagic fish and octopus. Exposure. **High**. Vulnerability. **High**. The Atlantic Multidecadal Oscillation (AMO) is a natural occurring fluctuation of the sea surface temperature of the	High	

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Climate related hazards	Exposure and Vulnerability Assessment (Low, Medium, High)	Risk Rating (Low, Medium, High)	Project measures to manage risk
	North Atlantic Ocean caused by volcanic pulses (Mann et al., 2021). The AMO modulates the abundance of small pelagic fish and habitat switching in Northwest Africa (Edwards et al., 2013; Alheit et al., 2014). It has been proposed that AMO influence on global warming will increase during the second half of the twenty-first century (Chylek et al., 2016). In Mauritania and Senegal climate change is expected to generate more extreme events related to intense temperatures, prolonged heat waves and heightened rainfall variability (extreme precipitation) (World Bank Climate Change Knowledge Portal). In Senegal, coastal storms and extreme wave event produce coastal flooding which might increase as a result of sea level rise (Cisse et al., 2022a; Cisse et al., 2022a).		

Definitions

Climate related hazard: A physical process or event (hydro-meteorological or oceanographic variables or phenomena) that can harm human health, livelihoods, or natural resources. A hazard is not simply the potential for adverse effects.

Exposure: The presence of people, livelihoods, species or ecosystems, environmental services and resources, infrastructure, or economic, social, or cultural assets in places that could be adversely affected by a hazard.

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Vulnerability: The degree to which a system, asset, or species may be affected, either adversely or beneficially, when exposed to climate variability or change or geophysical hazards.

Potential impact: The potential effects of hazards on human or natural assets and systems. These potential effects, which are determined by both exposure and sensitivity, may be beneficial or harmful.

Bibliography

Alheit, J., Licandro, P., Coombs, S., & Garcia, A. Girá ldez, A., Santamarıa, MTG, Slotte, A., et al. 2014. Atlantic Multidecadal Oscillation (AMO) modulates dynamics of small pelagic fishes and ecosystem regime shifts in the eastern North and Central Atlantic. Journal of Marine Systems, 131, 21-35.

Arístegui, J., Barton, E. D., Álvarez-Salgado, X. A., Santos, A. M. P., Figueiras, F. G., Kifani, S., ... & Demarcq, H. (2009). Sub-regional ecosystem variability in the Canary Current upwelling. Progress in Oceanography, 83(1-4), 33-48.

Arnés-Urgellés, C., Salinas-de-León, P., Rastoin-Laplane, E., Vaca-Pita, L., Suárez-Moncada, J., & Páez-Rosas, D. (2021). The effects of climatic variability on the feeding ecology of the scalloped hammerhead shark (Sphyrna lewini) in the tropical eastern pacific. Frontiers in Marine Science, 8, 625748.

Bignami, S., Sponaugle, S., & Cowen, R. K. (2014). Effects of ocean acidification on the larvae of a high-value pelagic fisheries species, mahi-mahi Coryphaena hippurus. Aquatic Biology, 21(3), 249-260.

Borges, F. O., Guerreiro, M., Santos, C. P., Paula, J. R., & Rosa, R. (2022). Projecting future climate change impacts on the distribution of the 'Octopus vulgaris species complex'. Frontiers in Marine Science, 9, 1018766.

Borges, F. O., Sampaio, E., Santos, C. P., & Rosa, R. (2023). Climate-change impacts on Cephalopods: a meta-analysis. Integrative and Comparative Biology, icad102.

Braham, C.B. & Corten, A. (2015). Pelagic fish stocks and their response to fisheries and environmental variation in the Canary Current Large Marine Ecosystem. In: Oceanographic and biological features in the

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Canary Current Large Marine Ecosystem. Valdés, L. & Déniz-González, I. (eds). IOC-UNESCO, Paris. IOC Technical Series 115, pp. 197-213.

Cai, W., Borlace, S., Lengaigne, M., Van Rensch, P., Collins, M., Vecchi, G., ... & Jin, F. F. (2014). Increasing frequency of extreme El Niño events due to greenhouse warming. Nature climate change, 4(2), 111-116.

Cai, W., Santoso, A., Collins, M., Dewitte, B., Karamperidou, C., Kug, J. S., ... & Zhong, W. (2021). Changing El Niño–Southern oscillation in a warming climate. Nature Reviews Earth & Environment, 2(9), 628-644.

Chylek, P., Klett, J. D., Dubey, M. K., & Hengartner, N. (2016). The role of Atlantic Multi-decadal Oscillation in the global mean temperature variability. Climate Dynamics, 47, 3271-3279.

Cisse, C.O.T., Almar, R., Youm, J. P. M., Jolicoeur, S., Taveneau, A., Sy, B. A., ... & Dieng, H. (2022a). Extreme coastal water levels evolution at Dakar (Senegal, West Africa). Climate, 11(1), 6.

Cisse, C.O.T., Brempong, E. K., Taveneau, A., Almar, R., Sy, B. A., & Angnuureng, D. B. (2022b). Extreme coastal water levels with potential flooding risk at the low-lying Saint Louis historic city, Senegal (West Africa). Frontiers in Marine Science, 9, 993644.

Clarke, T. M., Reygondeau, G., Wabnitz, C., Robertson, R., Ixquiac-Cabrera, M., López, M., ... & Cheung, W. W. (2021). Climate change impacts on living marine resources in the Eastern Tropical Pacific. Diversity and Distributions, 27(1), 65-81.

Culler-Juarez, M. E., & Onthank, K. L. (2021). Elevated immune response in Octopus rubescens under ocean acidification and warming conditions. Marine Biology, 168(9), 137.

Dennis, K. C., Niang-Diop, I., & Nicholls, R. J. (1995). Sea-level rise and Senegal: Potential impacts and consequences. Journal of Coastal Research, 243-261.

Dutkiewicz, S., Morris, J. J., Follows, M. J., Scott, J., Levitan, O., Dyhrman, S. T., & Berman-Frank, I. (2015). Impact of ocean acidification on the structure of future phytoplankton communities. Nature Climate Change, 5(11), 1002-1006.

Dutkiewicz, S., Morris, J. J., Follows, M. J., Scott, J., Levitan, O., Dyhrman, S. T., & Berman-Frank, I. (2015). Impact of ocean acidification on the structure of future phytoplankton communities. Nature Climate Change, 5(11), 1002-1006.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Edwards, M., Beaugrand, G., Helaouët, P., Alheit, J., & Coombs, S. (2013). Marine ecosystem response to the Atlantic Multidecadal Oscillation. PloS one, 8(2), e57212.

Enríquez-de-Salamanca, Á. (2020). Evolution of coastal erosion in Palmarin (Senegal). Journal of Coastal Conservation, 24(2), 25.

Faleiro, F., Pimentel, M., Pegado, M. R., Bispo, R., Lopes, A. R., Diniz, M. S., & Rosa, R. (2016). Small pelagics in a changing ocean: biological responses of sardine early stages to warming. Conservation Physiology, 4(1), cow017.

Frommel, A. Y., Margulies, D., Wexler, J. B., Stein, M. S., Scholey, V. P., Williamson, J. E., ... & Havenhand, J. (2016). Ocean acidification has lethal and sub-lethal effects on larval development of yellowfin tuna, Thunnus albacares. Journal of Experimental Marine Biology and Ecology, 482, 18-24.

Hernández, N.H. (2021). Short-Term Drivers of Phytoplankton Community Structure and Primary Production in The Canary Current Region. Doctoral dissertation. Universidad de Las Palmas de Gran Canaria, Las Palmas de Gran Canaria, España, 236 pp.

IPCC. (2014). AR5 Climate change 2014: Impacts, adaptation and vulnerability. Intergovernmental Panel on Climate Change (IPCC), Cambridge University Press,

Lee, S., Karnauskas, K., Heede, U. & L´Heureux, M. (2023). How the pattern of trends across the tropical Pacific Ocean is critical for understanding the future climate. ENSO Blog, 26 January 2023. Online: https://www.climate.gov/news-features/blogs/enso/how-pattern-trends-across-tropical-pacific-ocean-critical-understanding

Lennert-Cody, C. E., Clarke, S. C., Aires-da-Silva, A., Maunder, M. N., Franks, P. J., Román, M., ... & Minami, M. (2019). The importance of environment and life stage on interpretation of silky shark relative abundance indices for the equatorial Pacific Ocean. Fisheries Oceanography, 28(1), 43-53.

Maia, S., Marques, S. C., Dupont, S., Neves, M., Pinto, H. J., Reis, J., & Leandro, S. M. (2022). Effects of ocean acidification and warming on the development and biochemical responses of juvenile shrimp Palaemon elegans (Rathke, 1837). Marine Environmental Research, 176, 105580.

Mann, M. E., Steinman, B. A., Brouillette, D. J., & Miller, S. K. (2021). Multidecadal climate oscillations during the past millennium driven by volcanic forcing. Science, 371(6533), 1014-1019.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Muralisankar, T., Kalaivani, P., Thangal, S. H., & Santhanam, P. (2021). Growth, biochemical, antioxidants, metabolic enzymes and hemocytes population of the shrimp Litopenaeus vannamei exposed to acidified seawater. Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology, 239, 108843.

Mustafa, S., Kharudin, S. N., & Kian, A. Y. S. (2015). Effect of simulated ocean acidification on chitin content in the shell of white shrimp, Litopenaeus vannamei. Journal of FisheriesSciences. com, 9(2),06-09.

Onthank, K. L., Trueblood, L. A., Schrock-Duff, T., & Kore, L. G. (2021). Impact of short-and long-term exposure to elevated seawater Pco2 on metabolic rate and hypoxia tolerance in Octopus rubescens. Physiological and Biochemical Zoology, 94(1), 1-11.

Osgood, G. J., White, E. R., & Baum, J. K. (2021). Effects of climate-change-driven gradual and acute temperature changes on shark and ray species. Journal of Animal Ecology, 90(11), 2547-2559.

Peng, Q., Xie, S. P., Wang, D., Huang, R. X., Chen, G., Shu, Y., ... & Liu, W. (2022). Surface warming–induced global acceleration of upper ocean currents. Science Advances, 8(16), eabj8394.

Pistevos, J. C., Nagelkerken, I., Rossi, T., Olmos, M., & Connell, S. D. (2015). Ocean acidification and global warming impair shark hunting behaviour and growth. Scientific reports, 5(1), 16293.

Reisinger, A., Howden, M., Vera, C., Garschage, M., ... & Ranasinghe, R. (2020) The Concept of Risk in the IPCC Sixth Assessment Report: A Summary of Cross-Working Group Discussions. Intergovernmental Panel on Climate Change (IPCC), Geneva, Switzerland, 15pp.

Repolho, T., Baptista, M., Pimentel, M. S., Dionísio, G., Trübenbach, K., Lopes, V. M., ... & Rosa, R. (2014). Developmental and physiological challenges of octopus (Octopus vulgaris) early life stages under ocean warming. Journal of Comparative Physiology B, 184, 55-64.

Rosa, R., Rummer, J. L., & Munday, P. L. (2017). Biological responses of sharks to ocean acidification. Biology letters, 13(3), 20160796.

Roura, Á., Doyle, S. R., Castro-Bugallo, A., Hall, N. E., Gonzalez, Á. F., & Strugnell, J. M. (2023). Trophic ecology of Octopus vulgaris paralarvae along the Iberian Canary current eastern boundary upwelling system. Scientific Reports, 13(1), 8744.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Saintilan, N., Khan, N. S., Ashe, E., Kelleway, J. J., Rogers, K., Woodroffe, C. D., & Horton, B. P. (2020). Thresholds of mangrove survival under rapid sea level rise. Science, 368(6495), 1118-1121.

Sakho, I., Sadio, M., Camara, I., Noblet, M., Seck, A., Saengsupavanich, C., ... & Diouf, M. B. (2022). Sea level rise and future shoreline changes along the sandy coast of Saloum Delta, Senegal. Arabian Journal of Geosciences, 15(19), 1547.

Santana-Casiano, J.M. & González-Dávila, M. (2015).

Ocean acidification in the Canary Current Large Marine

Ecosystem. In: Oceanographic and biological features in the Canary Current Large Marine Ecosystem. Valdés, L. & Déniz-González, I. (eds). IOC-UNESCO, Paris. IOC Technical Series 115, pp. 343-349.

Sarr, C.A.T., Ndour, M.M.M., Haddad, M., & Sakho, I. (2021). Estimation of Sea Level Rise on the West African Coasts: Case of Senegal, Mauritania and Cape Verde. International Journal of Geosciences, 12, 121-137.

Schlüter, L., Lohbeck, K. T., Gutowska, M. A., Gröger, J. P., Riebesell, U., & Reusch, T. B. (2014). Adaptation of a globally important coccolithophore to ocean warming and acidification. Nature Climate Change, 4(11), 1024-1030.

Sylla, A., Mignot, J., Capet, X., & Gaye, A. T. (2019). Weakening of the Senegalo–Mauritanian upwelling system under climate change. Climate Dynamics, 53, 4447-4473.

Taylor, J. R., Gilleard, J. M., Allen, M. C., & Deheyn, D. D. (2015). Effects of CO2-induced pH reduction on the exoskeleton structure and biophotonic properties of the shrimp Lysmata californica. Scientific reports, 5(1), 10608.

Varela, R., Rodríguez-Díaz, L., de Castro, M., & Gómez-Gesteira, M. (2022). Influence of Canary upwelling system on coastal SST warming along the 21st century using CMIP6 GCMs. Global and Planetary Change, 208, 103692.

Wang, B., Luo, X., Yang, Y. M., Sun, W., Cane, M. A., Cai, W., ... & Liu, J. (2019). Historical change of El Niño properties sheds light on future changes of extreme El Niño. Proceedings of the National Academy of Sciences, 116(45), 22512-22517.

Docusign Envelope ID: 56EE2B34-70C9-4E3A-90A3-F381B99A222F

Ward, R. D., Friess, D. A., Day, R. H., & Mackenzie, R. A. (2016). Impacts of climate change on mangrove ecosystems: a region by region overview. Ecosystem Health and sustainability, 2(4), e01211.

Ying, J., Collins, M., Cai, W., Timmermann, A., Huang, P., Chen, D., & Stein, K. (2022). Emergence of climate change in the tropical Pacific. Nature Climate Change, 12(4), 356-364.

Zeeberg, J., Corten, A., Tjoe-Awie, P., Coca, J., & Hamady, B. (2008). Climate modulates the effects of Sardinella aurita fisheries off Northwest Africa. Fisheries Research, 89(1), 65-75.