United Nations Development Programme
Project Document

Project title: Global Sustainable Supply Chains for Marine Commodities		
Country: Indonesia	**Implementing Partner:** Deputy for Maritime Affairs and Natural Resources, National Development Planning Agency (BAPPENAS)	**Management Arrangement:** National Implementation Modality
UN Partnership for Development Framework (UNPDF)/Country Programme Outcome: Outcome 3. By 2020, Indonesia is sustainably managing its natural resources, on land and at sea, with an increased resilience to the effects of climate change, disasters and other shocks. Output 3.3: National/local governments have improved policies, systems, and partnerships with non-state actors to protect biodiversity and endangered species.		
UNDP Strategic Plan Output: Output 1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste. Output 2.5: Legal and regulatory frameworks, policies and institutions enabled to ensure the conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity and ecosystems, in line with international conventions and national legislation.		
UNDP Social and Environmental Screening Category: Moderate	**UNDP Gender Marker: 2**	
Atlas Proposal/Award ID (also known as 'project'): 00083791	**Atlas output Project ID (also known as 'output'):** 00092095	
UNDP-GEF PIMS ID: 4754	**GEF ID:** 5271	
Planned start date: February 2018	**Planned end date:** 31 December 2021 (operational closed date, based on GEF Endorsement Letter) 31 December 2022 (financial closed date, to be registered to the Ministry of Finance)	
LPAC date: 5 October 2017		
Brief project description: Overexploitation of marine fisheries is a major global issue and a key driver of changes in the marine environment. Excessive fishing is caused by a variety of inter-acting factors, including the growing global demand for seafood. This project contributes to address key aspects of the market forces that drive overfishing. The project will add to the transformation of the seafood market by mainstreaming sustainability in the value chain of important commodities from developing countries, improving emerging tools such as corporate sustainable purchase policies, sustainable marine commodities platforms, and fisheries improvement projects (FIP), developing national capacities, and generating learning to be shared worldwide. The project will allocate GEF resources strategically to (1) engage major seafood buyers in the main world markets (EU, Japan, US) into responsible sourcing, providing tools to prepare and implement sustainable seafood sourcing policies, (2) adapt the concept of green commodities platforms (currently used in agriculture) to the seafood value chain, implement public-private sustainable marine commodities platforms in Costa Rica, Ecuador, Indonesia and Philippines to generate experience that could be used in other countries, (3) support the stakeholders of these platforms to develop practical experience with fisheries improvement projects and upgrade existing tools for FIP		

implementation and monitoring, and (4) upgrade existing information platforms to facilitate access to reliable material to value chain stakeholders in support of sound decision making, and capturing, documenting and disseminating the learnings of the project. The project target fisheries include tuna fisheries in the Pacific Ocean, mahi mahi and large pelagic fish in the Eastern Pacific Ocean, Filipino octopus, and blue swimming crab fisheries in Indonesia and The Philippines. The project is an inter-regional intervention. Market engagement and knowledge management are global components. The sustainable marine commodities platforms and FIPs will be implemented, using a participatory approach, in Indonesia, Costa Rica, Ecuador, and Philippines.

FINANCING PLAN	
GEF	**$1,002,880**
(1) Total Budget administered by UNDP ***(To be recorded as grants to the Government of Indonesia)***	**$1,002,880**[1]
PARALLEL CO-FINANCING	
UNDP	USD 40,000
Government of Indonesia	USD 1,806,000
(2) Total co-financing	**USD 1,846,000**
(3) Grand-Total Project Financing (1)+(2)	**USD 1,846,000**

SIGNATURES

Agreed by UNDP:

Christophe Bahuet
Country Director,
UNDP Indonesia

Agreed by Implementing Partner:

Dr. Ir. Gellwyn Daniel Hamzah Jusuf, M.Sc
Secretary of Minister/ General Secretary,
Ministry of National Development Planning/
National Development Planning Agency (BAPPENAS)

Acknowledged by:

Dr. Luky Alfirman, S.T., M.A 26 March 2018
Director General of Budget Financing & Risk Management,
Ministry of Finance

[1] The amount of grants to be registered by the Ministry of Finance of the Republic of Indonesia.

TABLE OF CONTENTS

LIST OF ACRONYMS

AA	Artisanal-advance vessel in Costa Rica
AIDCP	Agreement on the International Dolphin Conservation Program
AM	Artisanal-medium vessel in Costa Rica
APR	Annual Project Review
ASOEXPEBLA	Association of Whitefish Exporters of Ecuador
ATUNEC	Association of Tuna Boat Owners[2] of Ecuador
BAPPENAS	Ministry of National Development Planning/National Development Planning Agency, Republic of Indonesia
BET	Big Eye Tuna
BFAR	Bureau of Fisheries and Aquatic Resources of Philippines
BSC	Blue Swimming Crab
BSCMP	Philippine Blue Swimming Crab Management Plan
BTOR	Back to Office Report
CCA	Common Country Assessment
CEIPA	Chamber of Tuna Processors[3] of Ecuador
CMMs	Conservation and Management Measures
CNP	National Chamber of Fisheries of Ecuador
CO	UNDP Country Office
CPD	Country Programme Document
CRI	Costa Rica
DPS	Direct Project Services
ECU	Ecuador
EEZ	Exclusive Economic Zone
ENSO	El Niño Southern Oscillation

[2] Asociación de Atuneros del Ecuador.
[3] Cámara Ecuatoriana de Industriales y Procesadores Atuneros.

EPO	Eastern Pacific Ocean
ERC	UNDP Evaluation Office Evaluation Resource Centre
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FECOP	Costa Rican Fisheries Federation
FIP	Fishery Improvement Project
GCP	UNDP's Green Commodities Programme
GDP	Gross Domestic Product
GEF	Global Environment Facility
GEF-ID	Project Identification Number of the GEF Secretary
GNI	Gross National Income per capita
HDI	Human Development Index
IA	GEF Implementing Agency
IATTC	Inter-American Tropical Tuna Commission
IDN	Indonesia
INCOPESCA	Costa Rican Institute for Fisheries and Aquaculture
INP	National Fisheries Institute of Ecuador
IP	Implementing Partner of the project
IPC	International Project Coordinator
IPCU	International Project Coordination Unit
IPNLF	International Pole & Line Foundation
ITF	Industrial Tuna Fisheries
IUU	Illegal, Unregulated and Unreported Fishing
IW	GEF International Waters focal area
IW:LEARN	Global Environment Facility's International Waters Learning Exchange and Resource Network
IWC	International Waters Conference

LGUs	Local Government Units of Philippines
LME	Large Marine Ecosystem
LOA	Letter of Agreement
LPF	Large Pelagic Fish[4]
M&E	Monitoring and Evaluation
M&E-O	Monitoring and Evaluation Officer
MAE	Ministry of Environment of Ecuador
MAG	Ministry of Agriculture and Livestock of Costa Rica
MAGAP	Ministry of Agriculture, Livestock, Aquaculture and Fisheries of Ecuador
MBAq	Monterey Bay Aquarium
MDG	Millennium Development Goals
MINAE	Ministry of Environment and Energy of Costa Rica
MMAF	Ministry of Marine Affairs and Fisheries of Indonesia
MPA	Marine Protected Area
MSC	Marine Stewardship Council
MTE	Mid-Term Evaluation
NA	Not available
NFA	National Fisheries Authority
NFI-CC	National Fisheries Institute Crab Council
NFRDI	National Fisheries Research and Development Institute of Philippines
NGO	Non-Governmental Organization
NIM	National Implementation Modality
NM	Nautical mile
NPC	National Platform Coordinator
NSC	National Steering Committee

[4] Excludes tuna. Includes mahi mahi, wahoo, swordfish, marlins.

PACPI	Philippine Association of Crabs Processors
PAN-Dorado	National Action Plan for the conservation and management of Dorado in Ecuador
PAT-EC	National Action Plan for the conservation and management of sharks in Ecuador
PHL	Philippines
PIMS	UNDP-GEF Project Information Management System
PIR	Project Implementation Report
PIW	Project Inception Workshop
PSC	Project Steering Committee
PST	Purse Seine Tuna Fishery
RBM	Rights-Based Management
RCU	Regional Coordinating Unit
RFMO	Regional Fisheries Management Organisation
RSC-LAC	UNDP Regional Centre in Panama
SBAA	Standard Basic Assistance Agreement
SEA	Best Practice Code for Ecuadorian Tuna Sustainability
SFAP	Sustainable Fisheries Action Plan
SFP	Sustainable Fisheries Partnership Foundation
SGMC	Undersecretary of Marine and Coastal Management of Ecuador
SINAC	National System of Conservation Areas of Costa Rica
SMCP	Sustainable Marine Commodities Platform
SNAP	National System of Protected Areas of Ecuador
SOFIA	State of World Fisheries and Aquaculture
TAG	Technical Advisory Group
TOR	Terms of Reference
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme

UNFSA	United Nations Fish Stocks Agreement
US	United States of America
VAP	Viceministry of Aquaculture and Fisheries of Ecuador
WCPFC	Western and Central Pacific Fisheries Commission
WHO	World Health Organization
WWF	World Wide Fund for Nature

GLOSSARY

ATLAS	The Enterprise Resource Planning system used by UNDP and other UN agencies. UNDP uses ATLAS to manage projects, finances, human resources, inventory and procurement. Atlas also forms the basis for UNDP's internal control and accountability framework.
Billfish	Fish belonging to the family Istiophoridae which includes marlins, sailfishes, and spearfishes.
Certification	Procedure by which a third party gives written or equivalent assurance that a product, process or service conforms to specified requirements. Certification may be, as appropriate, based on a range of inspection activities which may include continuous inspection in the production chain[5].
Chain of custody	The set of measures which is designed to guarantee that the product put on the market and bearing the ecolabel logo is really a product coming from the certified fishery concerned. These measures should thus cover both the tracking/traceability of the product all along the processing, distribution and marketing chain, as well as the proper tracking of the documentation (and control of the quantity concerned)[6].
Co-financing	Resources that are additional to the GEF grant and that are provided by the GEF Partner Agency itself and/or by other non-GEF sources that support the implementation of the GEF-financed project and the achievement of its objectives[7].
Commodity	A reasonably homogeneous good or material, bought and sold freely as an article of commerce.
Conservation and management measures	Measures to conserve or manage one or more species of living marine resources that are adopted and applied in accordance with the relevant rules of national and international law. Such measures may be adopted either by national authorities or by global, regional or subregional fisheries organizations, subject to the rights and obligations of their members, or by treaties or other international agreements[8].
Ecolabel	A market-based tool to promote the sustainable use of natural resources. Ecolabels are seals of approval given to products that are deemed to have fewer impacts on the

[5] FAO (2009).
[6] FAO (2009).
[7] GEF Policy FI/PL/01 issued on 30 June 2014.
[8] Adopted from the "Agreement to promote compliance with international conservation and management measures by fishing vessels on the high seas", approved on 24 November 1993 by Resolution 15/93 of the Twenty-Seventh Session of the FAO Conference.

	environment than functionally or competitively similar products[9]. The goal of ecolabelling programmes is to create market-based incentives for better management of fisheries and aquaculture by creating consumer demand for seafood products from well-managed stocks and aquaculture farms[10].
Ecolabelling scheme	Ecolabelling schemes entitle a fishery product to bear a distinctive logo or statement which certifies that the seafood has been harvested in compliance with conservation and sustainability standards. The logo or statement is intended to make provision for informed decisions of purchasers whose choice can be relied upon to promote and stimulate the sustainable use of fishery resources[11].
FAO Fish Price Index	An aggregate of fish prices, based on trade statistics, with a base of the 2002–2004 average set to 100[12].
Fish trader	A person or company that buy and sell seafood. This group includes exporters and importers of seafood, as well as wholesalers and retailers.
Fisheries Improvement Project	It is a collaboration between relevant stakeholders to influence policies and management practices and to improve the sustainability of fishing operations.
Fishmonger	A person that sell seafood to the public in a shop or fish market and has special skills for handling, displaying, merchandising and selling seafood products.
Food security	Food security exists when all people, at all times, have physical, social and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (Committee on World Food Security).
Full assessment	The process by which a fishery undergoes a detailed assessment against the principles and criteria of a particular standard. A full assessment will result in a decision whether or not to award a compliance certificate. Some schemes allow time-bound conditions to be attached to the award of the certificate[13].
Human Development Index	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.
Pre-assessment	The process by which a fishery undergoes a broad

[9] Wessells, et al., (2001) and Washington & Ababouch (2011).
[10] Wessells, et al., (2001).
[11] Adapted from FAO (2009).
[12] See Tveteras et al., (2012) for an explanation of the index.
[13] UNEP (2009).

	assessment against the principles and criteria of a particular standard. The purpose of the pre-assessment is to identify the weaknesses of a fishery in order to judge whether to invest in a full assessment[14].
Primary processing	Primary processing prepares the seafood for secondary processing by cleaning it, and cutting it to suit the purpose of the secondary process. Primary processes include: bleeding, gutting, heading, gilling, washing, cleaning, chilling, peeling, picking, cutting and filleting.
Processing	Processing is materially changing the seafood. To prepare seafood for eating, marketing, storage, packaging or further processing, or to add value to the seafood product.
Project target fisheries or target fisheries	Refer to tuna fisheries in the Pacific Ocean, mahi mahi fisheries in the EPO, large pelagic fish in the EPO, Ecuadorian hake, Filipino octopus, and blue swimming crab fisheries in Indonesia and The Philippines. The specific target fisheries are: (1) artisanal mahi mahi fishery in Costa Rica, (2) large pelagic fish fishery in Costa Rica, (3) industrial purse seine tuna fishery in Ecuador, (4) artisanal mahi mahi fishery in Ecuador, (5) artisanal bigeye tuna fishery in Ecuador, (6) artisanal tuna fishery in Indonesia, (7) artisanal blue swimming crab in Indonesia, (8) artisanal blue swimming crab in Philippines, and (9) artisanal octopus fishery in Philippines.
Retail	Selling seafood to members of the public.
Seafood	Any form of sea life regarded as food by humans.
Seafood commodity	Any product derived from seafood, including parts, products or by-products that traded in the market.
Secondary processing	Secondary processing changes the nature of the flesh itself in order to reduce spoilage, extend shelf life, change flavour or add value to the product. Secondary processes include: filleting, salting, brining, smoking, freezing, canning, cooking, breading, battering, packaging, production of ready meals.
Standard for certification	Document approved by a recognized organization or arrangement, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory under international trade rules. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method[15].

[14] UNEP (2009).
[15] FAO (2009).

Sustainable Marine Commodities Platform	A forum formed by multi-stakeholder groups, conducted at national level and led and chaired by government. A platform develops concrete actions to mitigate the negative impacts of production of marine commodities at the systemic level. It offers coordination, analysis and advisory services regarding the priority areas of the targeted sector[16].
Traceability	The ability to follow the movement of a food through specified stage(s) of production, processing and distribution[17].
Value addition	To add value in products through some type of processing methods, essentially converting raw seafood to a resulting finished or semi-finished product that has more value in the market place.
Value chain	A network of product-related business enterprises through which products move from the point of production to consumption, value-chains add incremental value to the product in the nodes of a chain either by value addition or value creation.
Value creation	To obtain incremental value in the marketplace by differentiating the products from similar goods based on product attributes (e.g., geographical location, eco-labelling, fair trade, food safety).
Wholesale	Buying and selling seafood in large quantities to be retailed by others.

[16] Adapted from UNDP (2012).
[17] Codex Alimentarius Commission Procedural Manual (Joint FAO/WHO Food Standards Programme, 2013).

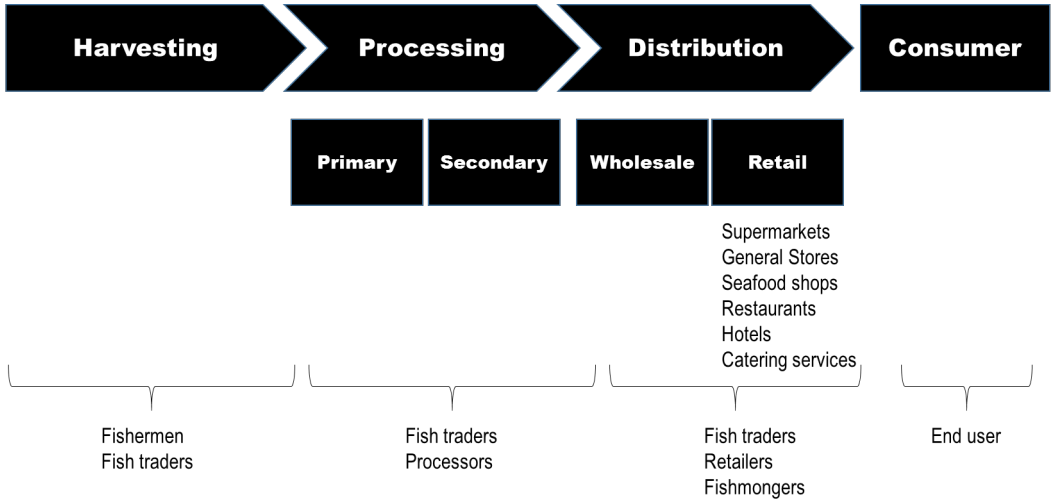
PART I. DEVELOPMENT CHALLENGE

PART IA. SITUATION ANALYSIS

1. Seafood is a nutritious and healthy aliment that has been consumed by mankind since ancient times. The first records of seafood gathering and consumption by early humans date back to ca., 150,000 years BC (Jerardino & Marean, 2010; Marean, 2010; Cortés-Sánchez et al., 2011). Seafood is both the core of traditional culture and gastronomy of coastal communities, and the basis of international avant-garde cuisine.
2. Seafood consumption is recommended for a healthy diet. Increased seafood intake is associated with a decreased risk of cardiovascular events, also maternal seafood consumption have beneficial effects on child development (Kris-Etherton et al., 2002; Hibbeln et al., 2007; Nesheim & Yaktine, 2007; Brouwer, 2008; Thorsdottir & Ramel, 2008; FAO/WHO, 2011). The American Heart Association recommends to include at least two servings of fish per week to reduce the incidence of cardiovascular disease (Kris-Etherton et al., 2002). An increased intake of seafood is recommended in the US, it is also suggested that seafood must constitute about 20% of the ingestion of protein foods (USDA & HHS, 2010). Accordingly, many countries are implementing campaigns to increase seafood consumption (e.g., US, Australia, EU´s SEAFOODplus Integrated Programme, Fast Fish campaign in Japan).
3. Global human consumption of seafood has increased steadily in the past decades. World per capita apparent seafood consumption was on average 9.9 kg per year in the 1960s, it increased to an average of 17.1 kg in the period 2008-2010, further increased to an average of 19.2 kg in the period 2011-2013, and it is projected to reach 20.9 kg in 2023 (OECD/FAO, 2011; FAO, 2014; OECD/FAO, 2014). The growing demand for seafood is driven by complex interactions of several factors, including population growth, diet diversification in industrialized countries, growing emphasis on seafood as a healthy and nutritious food, rising income and a related change in diet preferences in developing countries, rapid urbanisation and the associated increase in demand of more processed and higher value added products, increased trade, improved distribution channels, and transformations in the food distribution and retail sectors (OECD/FAO, 2011; M&A International, 2013; OECD/FAO, 2014). Developed countries have higher levels of consumption but the gap is being reduced. OECD/FAO (2014) estimate that future growth patterns of apparent per capita seafood consumption will be uneven, with major increases in Brazil, Saudi Arabia, Eastern European countries and China.
4. Seafood is a highly perishable commodity that requires processing and proper handling to ensure it arrives in optimum condition to the end user. The seafood value chain has three primary activities: harvesting, processing and distribution (Figure 1.1). Seafood is heavily traded internationally, the entire value chain can develop within a single country or across a number of countries. Tuna is a good example, most of the yellowfin tuna (*Thunnus albacares*) that is caught in the Eastern Pacific Ocean (EPO) by the Mexican purse-seine fleet is processed and consumed in Mexico, which is the fourth largest canned tuna market. On the other hand, the tuna captured by the purse seine Ecuadorian fleet can be processed up to frozen pre-cooked tuna loins that are exported to the European Union for final processing and distribution, or processed to canned tuna that is exported to several international markets or distributed into the Ecuadorian market. FAO (2014) indicates that the major driving forces behind the more globalized seafood value chain are: (i) a dramatic decrease in transport and communication costs, (ii) outsourcing of processing to countries

with lower production costs, (iii) increasing consumption of seafood commodities, (iv) favourable trade liberalization policies, (v) more efficient distribution and marketing, (v) and continuing technological innovations, including improvements in processing, packaging and transportation.

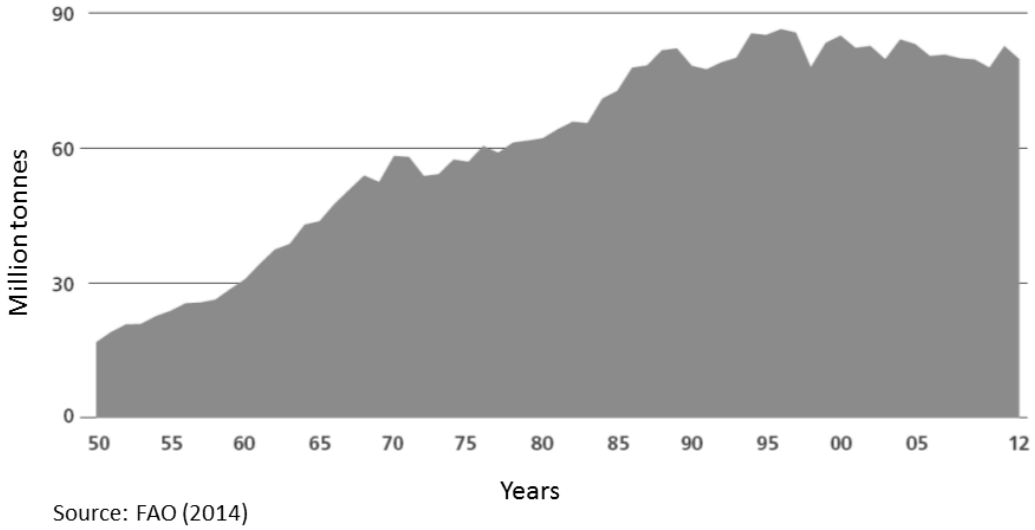
5. Some sectors of the seafood industry are highly vertically integrated (e.g., tuna). However, in recent years more sectors have moved into vertical integration to have better control over production cost and supply, as well as more control over the value chain to address the increasing need for seafood traceability (M&A International, 2013). FAO (2014) highlights that supermarket chains and large retailers are emerging as important players in setting requirements for the products they buy and influencing the growth of international distribution channels.



Adopted from: Gudmundsson et al., (2006) and M&A International (2013).

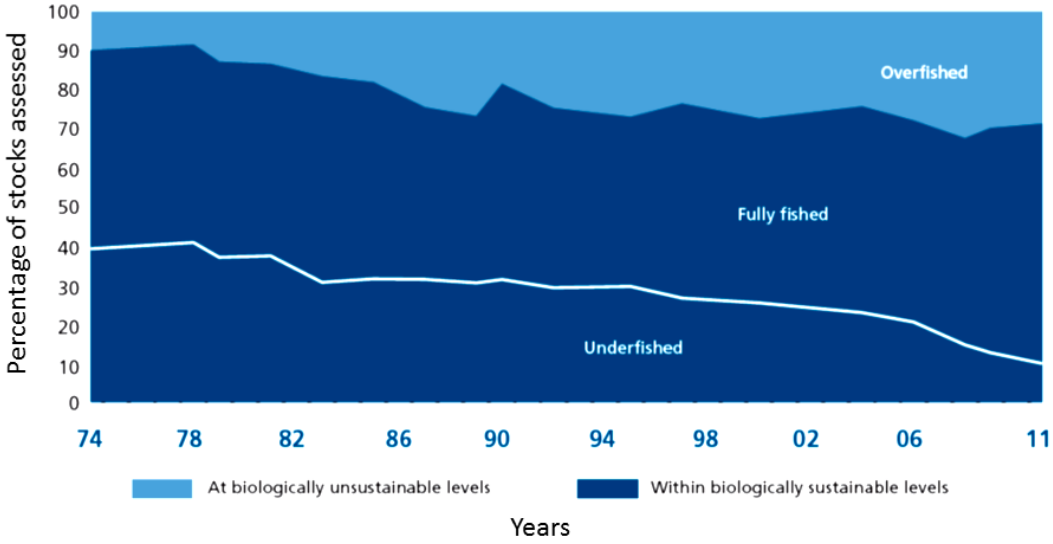
Figure 1.1. Simplified seafood value chain scheme.

6. Seafood is supplied by commercial fishing and aquaculture. World production from marine capture has remained stable at around 80 million tonnes per year since the mid-1980s (Figure 1.2) because most stocks are overfished or at the limit of production (Figure 1.3) (Garcia & Rosenberg, 2010; FAO, 2014). Global capture from marine fisheries was 82.6 million tonnes in 2011 and 79.7 million tonnes in 2012 (FAO, 2014).



Source: FAO (2014)

Figure 1.2. World capture from marine waters.



Notes: Dark shading = within biologically sustainable levels; light shading = at biologically unsustainable levels. The light line divides the stocks within biologically sustainable levels into two subcategories: fully shed (above the line) and undershed (below the line).

Source: FAO (2014)

Figure 1.3. Global trends in the state of world marine fish stocks (1974–2011).

7. Aquaculture has developed to bridge the gap between supply and demand. Farmed food production increased from 13.4% of the production by capture fisheries in 1990 to 25.7% in 2000, and to 42.2% in 2012 (FAO, 2014). Food production from aquaculture was 66.6 million tonnes in 2012, of which 24.7 million tonnes were seafood (Table 1.1). It is foreseen that aquaculture production will continue to increase but at a lower rate due to higher production costs and other barriers (Bostock et al., 2010; OECD/FAO, 2014). However, there is a marked preference for coastal and marine wild caught species and current aquaculture technology cannot produce a number of important seafood commodities (e.g., tuna).

Table 1.1. World fisheries and aquaculture production and utilization. Source: FAO (2014).

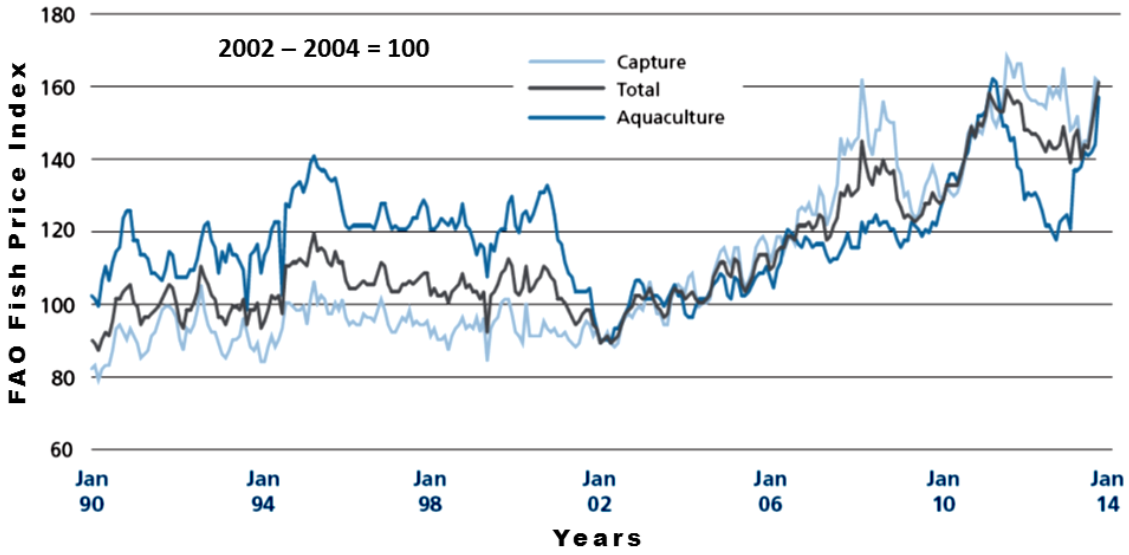
	2007	2008	2009	2010	2011	2012
	(Million tonnes)					
PRODUCTION						
Capture						
Inland	10.1	10.3	10.5	11.3	11.1	11.6
Marine	80.7	79.9	79.6	77.8	82.6	79.7
Total capture	**90.8**	**90.1**	**90.1**	**89.1**	**93.7**	**91.3**
Aquaculture						
Inland	29.9	32.4	34.3	36.8	38.7	41.9
Marine	20.0	20.5	21.4	22.3	23.3	24.7
Total aquaculture	**49.9**	**52.9**	**55.7**	**59.0**	**62.0**	**66.6**
TOTAL WORLD FISHERIES	**140.7**	**143.1**	**145.8**	**148.1**	**155.7**	**158.0**
UTILIZATION[1]						
Human consumption	117.3	120.9	123.7	128.2	131.2	136.2
Non-food uses	23.4	22.2	22.1	19.9	24.5	21.7
Population (*billions*)	6.7	6.8	6.8	6.9	7.0	7.1
Per capita food fish supply (*kg*)	17.6	17.9	18.1	18.5	18.7	19.2

Note: Excluding aquatic plants. Totals may not match due to rounding.
[1] Data in this section for 2012 are provisional estimates.

8. The supply limitation from finite fishery resources and other factors (e.g., higher energy costs) has motivated rising prices of seafood (real value). The FAO Fish Price Index shows a continuous increase for capture products (Figure 1.4) (Tveteras et al., 2012; FAO, 2014). In turn, the higher prices (i) increase the pressure on the fishery resources (in particular of highly demanded commodities such as tuna or sea cucumbers), (ii) incentive poaching from protected areas and illegal fishing, and (iii) limit the access to affordable protein in developing countries (Peterson & Fronc, 2007; Garcia & Rosenberg, 2010).
9. There are a number of examples of how the market forces have been a major driver of overfishing and fisheries collapse when natural resources management is deficient (Hennessey & Healey, 2000; Toral-Granda et al., 2008; Schwerdtner Mañez & Ferse, 2010; Rhodes et al., 2011). However, the same market forces can promote sustainable fisheries if the demand focuses on seafood from sustainable sources and therefore pull improvement along the value chain. Therefore, a number of market tools have been explored, from consumer education and awareness, to ecolabelling.
10. The first seafood ecolabel was used to identify dolphin-safe tuna (Teisla et al., 2002). Key developments were the creation of the Marine Stewardship Council (MSC) in 1997 and the adoption of the FAO guidelines for the ecolabelling of fish and fishery products from marine capture fisheries[18] in 2005 (FAO, 2009). Currently there are a number of ecolabels for wild-

[18] The guideline were adopted by the 26th session of the Committee on Fisheries (COFI) in 2005 and amended in the 28th session of the COFI in 2009.

caught seafood and their products such as the AIDCP dolphin safe, Friend of the Sea, KRAV, MSC and Naturland. WWF (2009) presents a comparative analysis of the ecolabelling schemes.



Data source: Norwegian Seafood Council.
Source: FAO (2014).

Figure 1.4. FAO Fish Price Index between January 1990 and January 2014.

11. At the moment, MSC is the largest fisheries certification scheme. By the end of 2012, 188 fisheries had been certified, representing about 7% of the global wild capture (MSC, 2013). MSC was created as a joint project of the World Wildlife Fund (WWF) and UNILEVER. Afterwards, the founding partners withdrew from the organization and in 1999 MSC became an independent NGO. MSC developed a certification and ecolabelling scheme for sustainable fisheries and their products. The Alaska salmon fishery was the first to receive the MSC certification in September 2000. Currently MSC has two standards[19] that are in line with the FAO guidelines. Agnew et al., (2014) summarise and review the experience of the MSC. A core element of the MSC theory of change is to incentive fisheries improvement (MSC, 2011; Agnew et al., 2014). In the case of fisheries that are certified with a conditional pass they prepare and implement actions to address the gaps and improve their score. Similarly, fisheries interested in MSC certification implement improvement actions before entering the assessment process. The MSC certification has been praised (Gutierrez et al., 2012; Martin et al., 2012; Wiedenfeld, 2012; Agnew et al., 2014), but also criticized (Jacquet et al., 2010; Froese & Proelß, 2012; Christian et al., 2013).
12. Despite the value of certification and ecolabelling a number of fisheries, mainly from developing countries, cannot enter this scheme for a number of reasons such as:
    a. The costs of entry and maintaining the certification (re-certification) are beyond the financial means of certain fisheries, particularly small scale fisheries from developing countries that are data deficient and have minimal management schemes, and fisheries

[19] (i) MSC environmental standard for sustainable fishing and (ii) MSC chain of custody standard for seafood traceability.

that supply local markets where certification is not rewarded by consumers. This may be reflected in the fact that in 2012 fisheries from developing countries were about 8% of the total MSC certified fisheries (MSC, 2013).

b. The MSC standard entail that a sound fisheries management scheme is in place. For fisheries in developing countries, this might be beyond their technical and political means, because it requires direct intervention and investment of national fisheries authorities (NFA), and in the case of shared resources of Regional Fisheries Management Organizations (RFMO), to improve fisheries management. This can be a barrier if the NFAs and RFMOs do not perceive benefits from the certification and public – private dialogue and collaboration is weak.

c. In general, fishermen do not obtain a price premium. Washington (2008) found that producers assume most of the costs of ecolabelling but retailers appear to obtain most of the rewards.

13. To bridge this gap Sustainable Fisheries Partnership (SFP) and WWF initiated the concept of fisheries improvement projects (FIPs). A FIP is a collaborative effort of the value chain stakeholders (from fishermen to retailers) to improve the sustainability of the fishery. FIPs give an opportunity to fisheries that cannot be certified or do not wish to be certified to benefit from their efforts. SFP describe FIPs as a pragmatic, stepwise approach to enhancing the sustainability of a fishery, encouraging harvesting to continue, while continual improvements are achieved (SFP, 2014). FIPs can be complementary to MSC certification by supporting fisheries improvement before entering the assessment process.

14. The FIP is a novel concept and tool that is advancing. In 2012 SFP launched guidelines to form, implement and evaluate FIP progress (SFP, 2012), it also has an online toolkit[20] and provide public information in two websites FishSource[21] and FIP directory[22]. In 2013, the Conservation Alliance for Seafood Solutions convened guidelines for supporting FIPs (CASS, 2013). Also in 2013, WWF issued guidelines for developing FIPs aimed at MSC certification[23] (WWF, 2013), and in 2014 MSC launched a benchmarking and tracking tool (BMT) to evaluate FIP progress with respect to the MSC standard (MSC, 2014).

15. The FIP concept has been well received by the stakeholders of the seafood value chain. A number of FIPs are being implemented around the world[24] and the Food Marketing Institute[25] has recently launched guidance for FIP involvement of retailers (Bartholomew, 2014). However, there are three key elements that need to be addressed:

- First, FIPs require strong collaboration among stakeholders. Major buyers, through their sourcing policies and purchasing decisions, can pull the value chain and motivate fishermen, fish traders and processors to engage in fisheries improvement. But, support from fisheries authorities (e.g., fisheries monitoring, advance in regulations and policies, fisheries control and enforcement) and public – private dialogue are essential to seriously advance in fisheries improvement.

[20] http://www.sustainablefish.org/fisheries-improvement/fip-toolkit/fip-toolkit-overview

[21] www.fishsource.org. FishSource present information about specific fisheries. Among other information, it includes a set of five scores (measured on a 1 to 10 scale, 10 being the maximum) to indicate the level of sustainability of the fishery, and the level of advance of the FIP (in case there is one).

[22] fisheryimprovementprojects.org.

[23] WWF present the information of the FIPs they support in the following web site: https://sites.google.com/site/fisheryimprovementprojects/home

[24] FIP information can be found at http://fisheryimprovementprojects.org/view-fips/

[25] The Food Marketing Institute is an organization of the food retail industry. See the following website for more information: www.fmi.org.

- Second, FIPs have to be credible and produce tangible results. FIPs could be seen as a dubious intent to obtain market access by producers and processors or green-washing of major buyers. Therefore, it is fundamental that there are strong tracking / rating and reporting tools and transparent information sharing.
- Third, the first generation of FIPs focus on the sustainability of fishery resources. However, the livelihood of fishermen has not yet been integrated. Responsible seafood trade is fundamental for fishermen in developing countries that often face low living conditions and receive a limited share of the distributional benefits of the value chain (Kurien, 2005; Doddema, 2012; Lem, 2013). It has been highlighted the need to strongly link seafood trade with fisheries management and development opportunities (FAO, 2007; FAO, 2009a).

16. Finally, information on the status of fish stocks and fisheries is crucial to support sustainable seafood purchasing decisions by major buyers. SFP collates and facilitates actionable information to seafood businesses by means of FishSource and Metrics. FishSource is a freely available site with information about the status of fish stocks and fisheries in the form of fishery profiles. The fishery profiles include, among other information, sustainability scores (Cannon, 2007) and ongoing FIPs. The Seafood Metrics System (in short Metrics) is a software tool to advise corporate partners about the sustainability status of the seafood they are buying and to measure their progress in sustainable sourcing.

17. The present project will contribute to mainstream the engagement of the value chain stakeholders to promote sustainable fisheries in developing countries and to increase both the demand and the supply of seafood from sustainable sources. Practical experience will be developed in Costa Rica, Ecuador, Indonesia[26] and Philippines (Figure 1.5), and the lessons learned will be disseminated for the benefit of other countries. At the regional level the project will work with the tuna fisheries of Pacific Ocean and the fisheries for mahi mahi (*Coryphaena hippurus*) in the Eastern Pacific Ocean (EPO) and for blue swimming crab (*Portunus pelagicus*) in Asia.

Figure 1.5. Participating countries.

[26] While in the case of Ecuador, Costa Rica and the Philippines, FIPs will be developed and managed by one of the initiators of this concept, SFP; however, in Indonesia the project, will scale-up and/or adjust existing two FIPs to meet targeted market requirements.

I.1. Environmental context

18. The present project includes fisheries in both the Pacific and Indian oceans. Costa Rica and Ecuador are located on the Eastern Pacific Ocean, Philippines is located on the Western Pacific Ocean, and Indonesia is located between the Pacific and Indian Oceans. The four countries have exceptional marine biodiversity.

The Pacific Ocean

19. The Pacific is the largest world ocean (i.e., 169.2 million km^2). It contains a high diversity of coastal and marine habitats such as shallow corals, mangroves, kelp forests and hydrothermal vents. The southeast Pacific is a very rich area because of the presence of a strong upwelling generated by the Humboldt Current.
20. El Niño Southern Oscillation (ENSO) is a world climate event that develops in the Pacific. The usual pattern is prevailing trade winds that push the warm surface water from South America westward towards Australia and Indonesia. During El Niño the westward trade winds decline and therefore the current direction of the water changes, therefore warm nutrient-poor surface water flow from the western Pacific towards the South American coast. El Niño has strong effects in the world climate, marine biodiversity and fisheries.
21. The Pacific Ocean produces most of the world wild capture. The harvest in 2003 was 46.7 million tonnes (58.6% of the world marine capture), in 2011 and 2012 the capture was 50.8 (61.5%) and 47.3 (59.3%) million tonnes, respectively (FAO, 2014). The most productive area is the Pacific Northwest (FAO fishing area 61), which produced 26.9% of the marine capture in 2012. The Pacific Ocean also produces most of the world tuna. In the early 1950s the catch of tuna in this ocean was approximately 80% of the global tuna catch, declining afterwards to fluctuate around 65% for several decades. In 2011, about 68% of the total tuna capture was from the Pacific (FAO, 2014). Eastern and western fisheries of the Pacific Ocean are roughly separated by the longitude 150°W. About 3/4 of the tuna is harvested in the western and central Pacific.

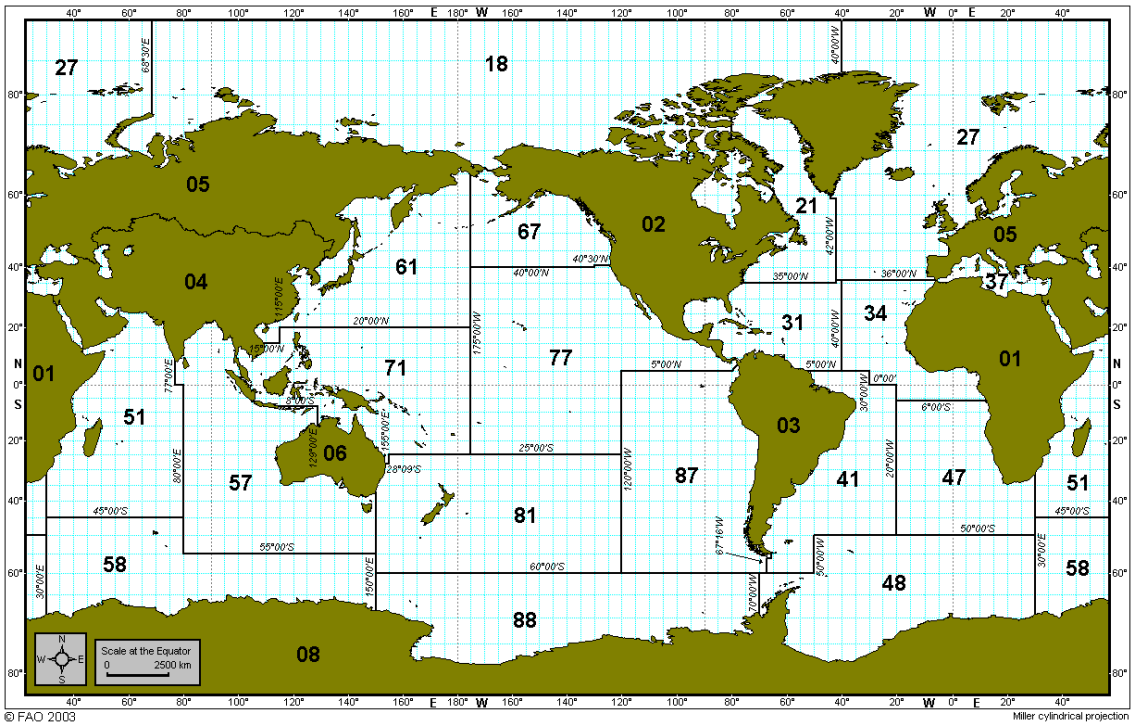


Figure 1.6. FAO fishing areas.

The Indian Ocean

22. The Indian Ocean is the third largest ocean of the world, covering 73.5 million km^2. It contains 30% of the global coral reef cover, 40,000 km^2 of mangroves, some of the world's largest estuaries, and nine large marine ecosystems (Wafar et al., 2011). The ocean is landlocked to the north, the resultant differential heating of the landmass and the sea gives rise to a wind circulation that reverses direction, and entrains a corresponding reversal in surface circulation, twice a year (Wafar et al., 2011).

23. The Indian Ocean produced 9.7 million tonnes of marine capture in 2003, the harvest increased to 11.3 million tonnes in 2011 and 11.9 million tonnes in 2012 (14.9% of the world marine capture) (FAO, 2014). The capture in the eastern Indian Ocean had an increase of 17% from 2007 to 2011, but the increase in harvest may be based on expansion to new fishing areas or new species (FAO, 2014).

Table 1.2. MPAs in Costa Rica, Ecuador, Indonesia and Philippines.

Country	Number of MPAs	Total Surface under MPAs (km^2)	Marine territory in MPAs (%)	Authority responsible for MPAs	Other forms of conservation of marine areas
Costa Rica	21	14,291	2.4	National System of Conservation Areas[27] (SINAC)	9 Marine Areas for Responsible Fisheries[28]
Ecuador	16	142,359	12.94	Ministry of Environment	Mangrove concessions
Indonesia[29]	154	179,800	3.10	Ministry of Environment & Forestry; Ministry of Marine Affairs and Fisheries (MMAF); Provincial Government	Village-managed marine conservation area
Philippines[30]	985	14,943	0.5% of the marine municipal waters of Philippines 3.4% of the total coral reef area	Local Government Units Bureau of Fisheries and Aquatic Resources Department of Environment and Natural Resources	There is a goal to have 15% of artisanal waters under protection

Costa Rica

24. The Republic of Costa Rica has coastal and marine areas in both the Pacific Ocean and the Caribbean Sea, the marine area of the country is about 10 times the total landmass (i.e., 589,683 km^2). The Pacific coast has 1,254 km of irregular coastline with a number of coastal islands, peninsulas, bays, and a tropical fjord (Golfo Dulce). An important feature is the Cocos Island located about 480 km from the mainland. It is an area of very rich marine biodiversity, including 45 endemic species (Cortés, 2012). Cocos Island is a national park and a UNESCO World Heritage site. Also, Cocos Island is among the world areas that have a high percentage of endemism and high concentration of endemics per unit area of coral reef fish (Allen, 2008). There are 21 MPAs and nine Marine Areas for Responsible Fisheries (AMPR) (Table 1.2).

[27] Under MINAE
[28] See Salas et al., (2012) for a review of AMPRs.
[29] See Table 1.4 for details.
[30] Source: Weeks et al., (2009).

25. AMPRs are areas with important biological, fishery or sociocultural features, in which fishery activity is regulated to ensure the long term use of fisheries and for which INCOPESCA is able to count with the support of coastal communities and/or other institutions and stakeholders for their conservation, use and management. AMPRs were created by Decree 35502 of the Ministry of Agriculture (1 October 2009) to comply with the principles and guidelines of the FAO Code of Conduct for Responsible Fisheries. The first AMPR was created in 2009 in the Gulf of Nicoya. Today, there are nine AMPRs covering ca., 1,000 km^2, all of them on the Pacific coast. Each AMPR has a fishery management plan whose implementation is the responsibility of an inter-institutional committee with fishermen participation. The National Coast Guard Service is responsible for the control and surveillance of the area, but fishermen also contribute to this activity with local committees. AMPRs do not provide right-based fishing access.

26. Costa Rica contains about 3.5% of the world marine biodiversity (Wehrtmann & Cortés, 2009) as is part of the Pacific Central-American Coastal Large Marine Ecosystem. Also, Costa Rica is part of the eastern tropical Pacific seascape. This seascape covers about two million square kilometres, and integrate the marine areas of Costa Rica, Panamá, Colombia and Ecuador. Marine biota, like sharks, large pelagic fish and sea turtles migrate along this area (Seminoff, et al., 2008; Bessudo et al., 2011).

27. The coast is an important nesting area of marine turtles, the leatherback (*Dermochelys coriacea*) nest mainly on small beaches in Las Baulas National Park and olive ridleys (*Lepidochelys olivacea*) nest in arribada beaches. The main natural event that affects the Costa Rican marine biodiversity is the ENSO. It has been documented massive death of marine invertebrates during strong ENSO events (Glynn, 1990; JIménez & Cortés, 2001; Jiménez & Cortés, 2003).

Ecuador

28. The Republic of Ecuador has 2,859 km of continental coastline formed by cliffs, tide pools and beaches. The most notable coastal geographical feature is the Gulf of Guayaquil, an estuarine system, which houses the largest concentration of mangroves in the country and numerous islands and islets. The Galapagos Islands are located about 972 km from the mainland. It is a volcanic archipelago composed by 128 islands, including 13 large islands, six small islands and 42 islets; it has 1,688 km of coastline. The marine area of the country is ca., 1,100,000 km^2, about four times the total landmass. Ecuador is also part of the eastern tropical Pacific seascape.

29. Both the continental and archipelagic areas are rich in coastal and marine biodiversity. Until 2003, a total of 1,859 marine species had been identified in Ecuador (Cruz et al., 2003). About 20% of the marine biota in Galapagos is endemic, including 51% of isopods (Brusca, 1987), the Galapagos barnacle blenny (*Acanthemblemaria castroi*), the marine iguana (*Amblyrhynchus cristatus*), the Galapagos penguin (*Spheniscus mendiculus*), the flightless cormorant (*Phalacrocorax harrisi*) and the waved albatross (*Phoebastria irrorata*).

30. The Ecuadorian mainland has 21 of the 27 marine and coastal ecosystems globally recognized (10 of the 14 marine and 11 of the 13 coastal ecosystems) (Salm et al., 2000). In part, the diversity is due to the fact that the Ecuadorian mainland is at the confluence of two large marine ecosystems (i.e., Pacific Central-American Coastal and Humboldt Current). Here the cold waters of the Humboldt Current meet the warm waters of the Panama Bight, forming the equatorial front, which moves seasonally depending on the strength of the currents. The multiplicity of environments is used by diverse biota, including globally significant biodiversity.

Table 1.3. Marine Protected Areas in Ecuador.

Marine Protected Areas	Land Area (km^2)	Marine Area ($km^{2)}$
MARINE RESERVES		
Reserva Marina Galera San Francisco	546.00	
Reserva Marina El Pelado	0.966	130
Reserva Marina Galápagos		141,100
NATIONAL PARKS		
Parque Nacional Machalilla	417.54	144.3
Wildlife Refuges		
Refugio de Vida Silvestre Manglares Estuario Rio Muisne	31.73	
Refugio de Vida Silvestre Manglares Estuario Rio Esmeraldas	2.42	
Refugio de Vida Silvestre Isla Corazón Islas Fragatas	7.00	
Refugio de Vida Silvestre y Marino Costera Pacoche	50.44	85.86
Refugio de Vida Silvestre Manglares del Morro	100.30	
Refugio de Vida Silvestre Isla Santa Clara	0.05	
ECOLOGICAL RESERVES		
Reserva Ecológica Manglares Cayapas Mataje	513.00	
Reserva Ecológica Manglares Churute	500.68	
OTHER CATEGORIES		
Reserva de Producción de Fauna Manglares el Salado	52.17	
Área Nacional de Recreación Isla Santay	22.14	
Área Nacional de Recreación Playas de Villamil		24.78
Reserva de Producción de Fauna Marino Costera Puntilla de Santa Elena	1.77	472.78
TOTAL		142,359

31. The Galapagos has a particular oceanographic pattern, the archipelago is located at a point where major ocean currents converge, merging nutrient rich cool waters from the Humboldt current with warm water from the north, and a deep cold subsurface current from the west (i.e., Cromwell Current) (Christensen, 1971; Banks, 2002). This create atypical conditions for a tropical archipelago, there are five marine bioregions. The islands of the extreme north have marine species characteristic of the indo-pacific biota. Whereas the western part has species characteristic of cold water, including endemic species not found in other parts of the archipelago (Danulat & Edgar, 2002). Galapagos is among the world areas with high percentage of endemism of coral reef fish (Allen, 2008). The Galapagos National Park (established in 1959) and the Galapagos Marine Reserve (established in 1998) are protected areas and UNESCO World Heritage site. The marine reserve convers 133,000 km^2.

32. Ecuador has 16 MPAs with a total marine surface of 142,359 km^2. The largest MPA is the Galapagos Marine Reserve (Table 1.3). Most of the MPAs are coastal with important land area which includes beaches, mangroves and other coastal habitats. Since 2000 the Ministry of Environment (MAE) has issued 10-year mangrove concessions[31] to organised traditional user groups. These areas are not considered part of the national system of protected areas. At the beginning of 2014 there were 49 concessions (590 km^2). The main use of mangrove concessions is to secure areas to harvest mangrove crabs (*Ucides* occidentalis) and cockles (*Anadara tuberculosa* and *A. similis*), they have functioned as an instrument for rights-based management.
33. The main natural event that affect the Ecuadorian marine biodiversity is the ENSO. There are positive effects for some marine biota like increased recruitment of mahi mahi and shrimps, but there major detrimental impacts in the coastal and marine ecosystems. During El Niño the biological productivity of the euphotic zone decline causing negative impacts on the survival of higher trophic levels. For example, strong El Niño (e.g., 1982/1983, 1997/1998) reduced food availability produce mortality of the marine iguanas (Cooper & Laurie, 1987; Laurie, 1990; Wikelski & Thom, 2000), and severe decline of the populations of the Galapagos penguin and the flightless cormorant (Valle et al., 1987; Valle & Coulter, 1987). El Niño also has caused severe decline of the abundance of subtidal fish in Galapagos like *Acanthemblemaria castroi, Azurina eupalama* and *Cottoclinus canops* (McCosker et al., 2003).

Indonesia

34. The Republic of Indonesia is an archipelago comprising 17,504 islands and a total coastline of 95,181 km. Indonesia is part of the Coral Triangle[32] recognized as a global centre of marine biodiversity and a top priority for marine conservation (Allen, 2007; Hoeksema, 2007). The Coral Triangle contain ca., 76% of the world´s coral species and ca., 37% of the world´s coral reef fish species. Indonesia has the highest coral reef fish diversity of the world (Allen & Adrim, 2003; Allen, 2008) and is one of the 20 global priorities for marine biodiversity conservation (Selig et al., 2014).
35. Indonesia is part of several LMEs: the Bay of Bengal LME, the Indonesian Sea LME, the South China Sea LME, and the Sulu-Celebes Sea LME (Sherman & Hempel, 2009). However the majority of the country marine area is part of the Indonesian Sea LME and the Sulu Celebes Sea LME. The Indonesian Sea Large Marine Ecosystem, is an area of ca., 400,000 km^2 located at the confluence of the Pacific and Indian Oceans. This LME has complex ocean-atmospheric dynamics (Wyrtki, 1958). The Indonesian Throughflow is an important current that allows the passage of warm shallow water from the Pacific Ocean into the Indian Ocean and is part of the Great Ocean Conveyor Belt; it has a pivotal role in climate regulation (Schneider, 1998; Lee et al., 2002; Gordon, 2005; Wyrtki, 2005; Sprintall & Révelard, 2014). The Indonesian Throughflow is related to the development of the ENSO (Lee et al., 2002; Sprintall, 2014). Almost all of Indonesia is drier than usual during most El Niño event.
36. Wafar et al., (2011) report 10,855 marine species, including 3,215 species of fish, 2,500 species of molluscs, 1,512 species of crustacean and 1,150 species of cnidarian. To

[31] The proper name is “acuerdos de conservación y uso sustentable del manglar” (agreements for the conservation and sustainable use of mangroves).
[32] The Coral Triangle cover about 5.7 million square kilometres of tropical marine waters of Indonesia, Malaysia, Papua New Guinea, Philippines, Solomon Islands and Timor-Leste.

conserve this vast marine biodiversity there are 154 MPAs, the majority are managed by the MMAF and Ministry Environment and Forestry (Table 1.4).

Table 1.4. Marine protected areas in Indonesia in 2016.

	Type of MPA	**Number**	**Size (km^2)**
A	Managed by Ministry of Environment & Forestry (Directorate General of Natural Resources Conservation and Ecosystem)	32	46,949.48
1	Marine National Park	7	40,435.41
2	Marine Ecotourism Park	14	4,912.48
3	Marine Sanctuary	5	56.78
4	Marine Natural Preservation	6	1,544.80
B	Ministry of Marine Affairs and Fisheries and Provincial Government	122	132,857.04
1	Marine National Park	1	35,553.52
2	Marine Sanctuary	3	4,456.30
3	Marine Tourism Park	6	15,410.40
4	Local Marine Conservation Area	112	79,436.81
	TOTAL	154	179,806.51
	Jurisdiction waters		5.8 million km^2
	Percentage included in protected areas		3.10%

Source: Ministry of Marine Affairs and Fisheries.

Philippines

37. The Republic of Philippines is an archipelago comprising 7,107 islands and a total coastline of 36,289 km. The country is also part of the megadiverse Coral Triangle. Carpenter & Springer (2005) found a peak of marine biodiversity in the central Philippine Islands and a secondary peak between peninsular Malaysia and Sumatra. The highest concentration of coral reef fish species extends from south-eastern Indonesia to the central Philippines (Allen, 2008).

38. The country has a large marine biodiversity. There are about 5,000 species of molluscs (Springsteen & Leobrera, 1986), 488 species of corals (Nemenzo, 1982) and 2,824 marine fish species. The Philippines is one of the 20 global priorities for marine biodiversity conservation (Selig et al., 2014). The country has 985 MPAs, the main strategy used has been community-based MPAs. No-take areas cover 0.5% of municipal waters and about 2.7 - 3.4% of the coral reef area (Weeks et al., 2009).

39. Philippines is part of the South China Sea LME, the Sulu-Celebes LME and the Indonesian Sea LME. The Sulu-Celebes LME cover ca., one million square kilometres. It contains, respectively, 6.17% and 0.22% of the world´s coral reefs and sea mounts (Sherman & Hempel, 2009). This area has a complex oceanography caused by strong currents, deep sea trenches, seamounts and active volcanic islands.

40. Seasonal rainfall in the Philippines is known to be modulated by the ENSO. During the warm event almost all the country is drier than usual during and curing the cold event excessive rainfall occur (Harger, 1995; Lyon et al., 2006; Lyon & Camargo, 2008).

I.2. Socio-economic context

41. Fisheries are an important component of the culture, economy and food security of the four countries.

Costa Rica

42. The country had 4,301,712 people in 2011[33]. Costa Rica has a high human development level, the Human Development Index (HDI) has continuously increased from 0.605 in 1980 to 0.763 in 2013 (rank 68) (UNDP, 2014). In 2013, the Gross National Income per capita (GNI) was US$13,012 (UNDP, 2014).

43. Costa Rica has a high per capita consumption of seafood. NMFS (2012) reports 10.0 kg (2007-2009 average) and FAO (2014a) report 12.62 kg (2000-2010 average). However, fisheries and aquaculture are a small element of the Gross Domestic Product (GDP) (i.e., 1.4%) (FAO, 2014a), the commercial fisheries sector has contracted in the last decades[34]. The percentage of people employed in agriculture and fisheries has steadily declined since the 1970s (Salazar, 2013), and the marine capture dropped from 44,908 t in 2000 to 27,797 in 2009[35] (FAO, 2014a). Most of the marine fisheries are artisanal and operate along the Pacific region, mainly beyond the territorial sea. About 95% of the fleet operate in the Pacific Ocean and 97% of the capture is landed on the Pacific coast. The main fisheries port is Puntarenas.

44. Costa Rica has no certified fisheries and is not implementing fisheries improvement projects (Annex 1).

45. The main fisheries are tuna (60.5% of the 2009 capture) and whitefish[36] (37.8% of the 2009 capture) (FAO, 2014a). Employment in the value chain has been estimated in 72,817 posts in 2012, of this 23% concentrate on harvesting, 72% concentrate in processing, and 6% concentrate in distribution (FAO, 2014a).

46. Tuna is captured by industrial and artisanal fleets. Most of the industrial capture comes from foreign purse-seiners that operate in Costa Rica´s Pacific Exclusive Economic Zone (EEZ) under licenses issued by INCOPESCA[37]. The capture of large pelagic fish (LPF) is also important, and the Costa Rican Fisheries Federation (FECOP) has proposed to exclude tuna purse-seiners from the EEZ to allow (i) local longline fishers to benefit from the tuna and large pelagic fish resources, and (ii) recreational fishing to benefit from the use of billfish (FECOP, 2013).

47. Longline fishing is executed by vessels of various sizes that operate beyond the territorial sea. The Pacific fleet has 515 vessels, mainly based in Puntarenas (314), Guanacaste (79), Quepos (75) and Golfito (47). Until 2013 there was a foreign longline fleet of 27 vessels (>20

[33] X Censo Nacional de Población y VI Censo Nacional de Vivienda de Costa Rica.
[34] In contrast to sport fishing that represent ca., 2.3% of the GDP (FAO, 2014a).
[35] Reconstructed data indicate that the catch increased from 1,480 t in 1950 to a maximum of 66,509 t in 1986 and afterwards steadily declined to 31,171 t in 2004 and finally increased to 34,207 t in 2008 (Trujillo et al., 2012).
[36] This is “pesca de escama” a general term used to refer to bony fish.
[37] Costa Rica does not have tuna vessels, but is a founding member of the Inter-American Tropical Tuna Commission (IATTC).

m length) based in Puntarenas that targeted sharks and billfish. Most of the fleet has left Costa Rica, about four vessels remain in the country.

48. The vessels are classified, accordingly to the Law on Fisheries and Aquaculture, into artisanal-medium (AM) and artisanal-advanced (AA). AM vessels can operate up to 40 NM offshore, and AA can operate beyond the 40 NM limit. Their operation has many similarities: (i) they target tuna, sharks, mahi mahi and swordfish (*Xiphias gladius*), (ii) the incidental catch include billfish and wahoo, and (iii) the bycatch include rays, manta rays, and marine turtles. The main difference is the gear and its use. AM vessels mainly use surface longline that capture mainly mahi mahi, AA vessels use both surface and mid-water longlines.

49. Recent landing statistics are not available. However it is known that the annual landings of the longline fleet are about 6,500 t of LPF, 2,000 t of sharks and 4,000 t of mahi mahi. About 58% of the mahi mahi, LPF and sharks are processed for export. The main export market for Mahi mahi[38] and tuna is the US. Tuna is also exported to Guatemala, El Salvador, Honduras, Nicaragua, and Panamá. Frozen sharks are exported mainly to Mexico and Taiwan, and shark fins are exported to Hong Kong. Shark finning is banned in Costa Rica, but there are implementation problems.

50. The present project will support the improvement of longline fishing and the related value chain. A Sustainable Marine Commodities Platform will be initiated and FIPs will be organised and launched for the mahi mahi and tuna fisheries. There might be interest to initiate the process leading to MSC certification.

Ecuador

51. The country had 14,483,499 people in 2010, the growth rate has steadily declined from a maximum of 3.10% in 1974 to 1.95 in 2010. Ecuador has a high human development, the HDI has continuously increased from 0.605 in 1980 to 0.711 in 2013 (rank 98) (UNDP, 2014). In 2013, the GNI was US$ 9,998 (UNDP, 2014).

52. Fisheries are an important element of the country´s culture and economy. However Ecuador has a low per capita consumption of seafood. NMFS (2012) reports 7.5 kg (2007-2009 average), similar to the 7.0 kg reported by FLACSO & MIPRO (2011).

53. There are very old fisheries, archaeological studies have found (i) fishing activities dating back about 5,000 years, (ii) the use of fishing gear such as shell fish-hooks (Holm, 1989), (iii) consumption of croakers and catfish (Bearez, 1994), (iv) harvesting of mangrove cockles and other bivalves (Idrovo, 1994), and (v) fabrication of beads from *Spondylus* and *Pinctada mazatlanica* (Mester, 1985; Blower, 2001; Guinea, 2006; Castro, 2009).

54. The marine capture fisheries are quite diverse and range from manual collection of mangrove cockles (*Anadara tuberculosa* and *A. similis*), to artisanal oceanic fisheries for mahi mahi and LPF using mother ships (i.e., nodrizas), and industrial purse-seine tuna fisheries using fish aggregating devices (FADs). Some species are sold fresh without processing – for example mangrove cockles, mangrove crab (*Ucides occidentalis*), and blue crab (*Cardisoma crassum*) --, but most of the landings are processed and enter the value chain. Processing can be artisanal, mainly for the national market (e.g., frozen crab meat, iced fish fillets), or industrial for both the national and international markets (e.g., canned tuna, breaded fish fillets, tuna burgers).

[38] Costa Rica account for ca., 3.5% of US imports of mahi mahi (Hunter, 2013).

55. Marine capture[39] increased from an average 56,106 t/year in the 1960s (average 1961-1970) to 328,724 t/year in the 1970s (average 1971-1980), then jumped to 661,720 t/year in the 1980s and declined to 434,044 t/year in the 1990s and 440,740 t/year in the 2000s. The peak capture was 1,055,809 t in 1985, mostly based on small pelagic fish. Between 2000 and 2012 the capture has fluctuated between a minimum of 318,854 t in 2002 and a maximum of 596,114 t in 2000. The capture in 2012 was 513,264.

56. The main Ecuadorian fisheries operate in the EEZ and international waters. The fisheries of the Galapagos are small, and because they develop within a marine protected area (MPA), are subject to special regulation under the jurisdiction of the Ministry of Environment (MAE).

57. In terms of volume and value, the main capture fisheries are tuna and LPF. Ecuador is a major world player in the tuna industry. In the EPO, Ecuador has the largest purse seine fleet[40], the main capture[41] and the biggest processing capacity[42]. The main fishing method of the Ecuadorian fleet is setting on FADs[43], therefore the main species captured is skipjack tuna (*Katsuwonus pelamis*). Most of the tuna is exported processed (i.e., cans and pouches) or as pre-cooked tuna loins for secondary processing (mainly for Spain and Italy). In value of exports, tuna is the second seafood commodity after shrimp that is mainly produced by aquaculture. The main tuna markets are the EU and the US. The tuna industry is a major employer, direct employment is estimated in ca., 30,000 posts (Prieto, 2010), a major component are women that work in the processing plants. Indirect employment is estimated in ca., 100,000 posts.

58. The tuna fishery in the EPO is managed by the IATTC. A major concern for the Ecuadorian industry has been the impact of fishing on FADs and the consequent impact on other tuna and marine species (Bromhead et al., 2000; Marsac et al., 2000; Hallier & Gaertner, 2008; Gilman & Lundin, 2009; Morgan, 2011; Baske et al., 2012; Dagorn et al., 2012; Dagorn et al., 2012a; Gerrodette et al., 2012). The industry has been proactive and has supported research on an excluding device and FAD improvement. Also, the Ecuadorian tuna industry has explored in the past the possibility of MSC certification, but had discouraging results mainly because regional fisheries management does not establish target and limit reference points and well-defined harvest control rules[44] and the growing market interest in FAD-free fishing. The Chamber of Tuna Processors (CEIPA) has led the development of a national ecolabel (called SEA[45]) that, in addition to conservation of stocks and marine biodiversity, incorporate social and production considerations along the entire value chain. The present project will collaborate with the Ecuadorian tuna industry to advance in the development and

[39] Source: FAO fisheries global information system (FIGIS).

[40] Ecuador has the largest tuna fleet with 106 active purse seiners, followed by Mexico with 57 vessels (source: IATTC regional vessel register).

[41] The estimated retained catch in 2010 and 2011 was 152,627 t and 212,096 t, respectively (IATTC, 2012).

[42] Ecuador has 14 tuna processors with a total processing capacity of 1,510 t/day. Mexico has the second place with 12 processors and a combined processing capacity of 775 t/day. In comparison, Thailand has the largest world processing capacity with 2,770 t/day. Philippines and Indonesia are also major players with processing capacities of 640 t/day and 500 t/day, respectively (McGowan & McClain, 2010).

[43] A vestigial pole and line fishery exist in Ecuador. The remaining seven vessels operate from Manta, capture less than 1,000 t / year, capture yellowfin tuna and skipjack tuna (rough ratio 3:1) and sell the capture to the local market. The fishermen (associated in the Cooperativa Cañeros de Manta) are interested in a MSC certification due to the growing demand for pole and line tuna. A pre-assessment was conducted in 2013 and a FIP will start implementation in 2014 with support of Conservation International and IPNLF (IPNLG, 2014). The present project will not work directly with this FIP, however pole and line fishermen will participate in the Sustainable Marine Commodities Platform (SMCP).

[44] For a recent overall assessment see Powers & Medley (2013).

[45] Código de Buenas Prácticas de la Sustentabilidad Ecuatoriana Atunera (SEA) = Best Practice Code for Ecuadorian Tuna Sustainability.

implementation of SEA and to engage market leverage for sustainable tuna purchasing by major buyers.

59. There is also an industrial longline fishery aimed at tuna and LPF. Ecuador has 25 large longline vessels (>24 m length) listed in the IATTC Regional Vessel Register. Friend of the Sea has in the list of fisheries approved (i.e., products originating from those fisheries are certified) tuna from the vessel Altar 21 (IATTC Vessel Number 4823).

60. The artisanal fishery for LPF is very diverse, there are vessels that operate individually mainly within 100 NM and groups of boats that operate with a wooden mother ship[46] within the EEZ and in international waters (Herrera et al., 2009). They use longlines[47], gillnets and handline[48]. There are two main fishing seasons, during the warm months (December to April) the main target is mahi mahi, and during the cold months (May to November) the main target are tuna and LPF. There is a specific hand-line fishery aimed at bigeye tuna to be exported fresh and frozen mainly to the US. These fisheries interact with important marine biodiversity such as sharks, sea turtles and seabirds. There is important advance in preventing bycatch, mainly with the use of circular hooks and gear modifications, and the regulation of shark capture and landings[49]. The use of circular hooks has been well accepted in the longline fisheries for tuna and LPF, however they have not been convenient in the fishery for mahi mahi. The project will contribute to improve the artisanal fisheries for bigeye tuna and LPF. A Sustainable Marine Commodities Platform will be established, to integrate the stakeholders of this value chain and to promote responsible sourcing. In addition, the project will support the preparation and start-up of a FIP for these fisheries.

61. Mahi mahi (called dorado in Ecuador) is an important food fish. The world capture is about 104,000 t/year, of which the harvest in the EPO range between 47% and 70% (Aires-da-Silva et al., 2014). The major players are Peru (ca., 73% of the EPO capture) and Ecuador (ca., 12% of the EPO capture). Other countries of the region jointly capture ca., 13% and the bycatch of the purse seine tuna fleet is about 3% (Aires-da-Silva et al., 2014). In Ecuador, mahi mahi account for ca., 65% of the landings of LPF and is the main export of whitefish[50] (ca., 40%). The core market for fresh and frozen mahi mahi is the US[51]. At the regional level the IATTC is advancing in establishing a common management framework. A starting point was a joint review of existing information (Aires-da-Silva et al., 2014) and the initiation of a regional collaborative effort (expected to take about three years) to execute a stock assessment and the development of conservation and management rules. The first meeting will be held in Manta (Ecuador) on 14-16 October 2014. At the national level, the Ecuadorian fisheries authority (1) has a monitoring and research programme (Martínez-Ortíz & Zúñiga-Flores, 2012), (2) has adopted a fisheries management plan[52] (SRP, 2011), (3) has

[46] The use of a mother ship (called balandra) initiated around 1992 – 1993. The mother ship has a stationary engine and pull between four and nine boats with outboard engines to the fishing grounds. There the boats fish and use the balandra to store the capture. The trip usually last between 15 and 18 days.

[47] Surface longline (called espinel fino) when aiming mahi mahi and mid-water longline (called espinel grueso) when aiming for tuna and LPF (Castro, 2012).

[48] Handline is used to capture bigeye tuna (*Thunnus obesus*) for high quality fresh and frozen fish.

[49] The VAP maintain landing controls and a monitoring and research programme. The National Action Plan for the conservation and management of sharks in Ecuador (PAT-EC) was adopted in 2006 (MICIP, 2006) and is currently in its second generation.

[50] In Ecuador the term “pesca blanca” is used to refer to sea fish used for human consumption. This include all kind of fish, like bony fish, sharks, demersal fish and pelagic fish.

[51] Hunter (2013) reports that Ecuadorian mahi mahi account for 26% of total imports into the US. Peru account for 24% of US imports. Most of the Peruvian mahi mahi is consumed in the local market.

[52] Plan de Acción Nacional para la Conservación y el Manejo del Recurso Dorado en Ecuador (PAN-Dorado).

established a public-private committee with the key stakeholders[53], and (4) is implementing a FIP with technical support from WWF but mainly funded by VAP. An MSC pre-assessment was executed in 2009 and FIP implementation started on January 2010. The FIP is very advanced, aiming for a full MSC assessment between 2015 and 2016. A major limitation for certification is that knowledge of the status of the stock is limited and there are no regional CMMs. The project will contribute to (i) the further development of the *Consejo Consultivo del Dorado* to strengthen public-private dialogue and integrate international stakeholders of the value chain, and (ii) support the regional process for the development of conservation and management measures (CMMs).

62. Finally, it is worth mentioning that a component of the shrimp trawl fishery, which initiated in 1952 and was an important component of the Ecuadorian fisheries, was closed on 01 October 2012[54]. The fishery had two components, a fleet that fished Pacific white shrimp (*Litopenaeus vannamei*) and other shrimps[55], and a fleet aimed at pomada (*Protrachypene precipua*) and similar shrimps[56].

63. To compensate the closure of the trawl fishery for Pacific white shrimp the NFA offered the option of two new industrial fisheries: hake (*Merluccius gayi*) and punctuated snake-eel (*Ophichthus remiger*). The fisheries were initiated in 2013 with CMMs that include limited fishing effort, quota and minimum capture size. The stakeholders of the hake fishery are interested in further develop it as a sustainable source of fishery products. In 2013 the hake capture was 13,024 t (51% of the total allowable catch) and was mainly exported as frozen fillets to Russia (42%), Venezuela (32%), Ukraine (17%), Brazil (8%) and Holland (1%). The project will contribute to establish, as part of the Sustainable Marine Commodities Platform, a working group to engage the hake value chain stakeholders.

64. The pomada fishery remains under new regulation[57]. This fishery continue to operate from a single port (i.e., Posorja) with ca., 30 vessels that trawl in the marine area of the Gulf of Guayaquil. Landings range from about 5,000 t/year to 7,500 t/year. Most of the capture (ca., 80%) is exported to the US and the EU. These fishermen have initiated a FIP and aim to obtain an MSC certification (Annex 1). The project will not contribute to this FIP.

65. The ENSO strongly affect Ecuadorian fisheries. The El Niño, on the one hand, reduces the availability of tuna, but on the other hand it generates strong recruitment of mahi mahi. This, however, produces a collapse of the price of mahi mahi and negatively affects the economic viability of the fishery.

Indonesia

66. In 2010, Indonesia had 237,641,326 million people, being the fourth most populated country of the world. The population has doubled with respect of 1971 (i.e., 119.2 million), however the growth rate has steadily declined from 2.39% in 1980 to 1.43 in 2010. Indonesia has a medium human development, the HDI has continuously increased from 0.471 in 1980 to

[53] The Consejo Consultivo del Dorado (i.e., Dorado Advisory Council) was established in 2011 (Acuerdo 055 signed on 15 April 2011). The objective is to provide advice to the Minister on strategies and policies to strengthen the management and sustainability of the mahi mahi value chain.
[54] Acuerdo 020 published in Registro Oficial 660 of 13 March 2012.
[55] *Litopenaeus stylirostris, L. occidentalis, Farfantepenaeus californiensis, F. brevirostris, Solenocera agazzissi* and *S. mutador.*
[56] *Trachypenaeus byrdi, T. faoea, T. similis pacificus.*
[57] Acuerdo 426/A published in Registro Oficial 863 Suplemento of 5 January 2013, and Acuerdo 019 signed on 6 February 2013.

0.684 in 2013 (rank 108) (UNDP, 2014). In 2013, the Gross National Income per capita (GNI) was US$ 8,970 (UNDP, 2014).

67. Fisheries are an important element of the country´s culture, food intake, employment and economy. Indonesia has a high per capita seafood consumption. The 2007-2009 average was 24.7 kg (NMFS, 2012), but in 2016 the consumption was 43.88 kg per capita per year (MMAF, 2017). About 55% of Indonesia's animal protein supply comes from fish and seafood.

68. Indonesia is a major player of world fisheries. Marine capture[58] has steadily increased from an average 662,915 t/year in the 1960s (average 1961-1970) to 1,055,930 t/year in the 1970s (average 1971-1980), to 1,813,187 t/year in the 1980s, to 3,120,626 t/year in the 1990s and 4,373,934 t/year in the 2000s. Between 2005 and 2015 the capture increased from 4,408,499 to 6,204,668 (MMAF,2016). The majority of the capture is fish (90% in 2010), skipjack tuna is the main species. The second component of the 2010 capture were crustaceans (6%), the three main species were mangrove mud crab (15.5%), blue swimming crab (14.3%), and spiny lobster (13.6%) (ADB, 2014).

69. Most of the marine capture is marketed fresh (ca., 58%), there is also capture of live reef food fish to supply the demand in Hong Kong and southern China (Dirhamsyah, 2012; ADB, 2014). A small part (ca., 3.5%) is processed (e.g., canning, freezing, fish meal) mainly for export, the rest is processed using traditional methods (e.g., salting, drying, fermentation, smoking) for the domestic market (ADB, 2014).

70. Fishing and trading of fish have been an integral part of many coastal communities in Indonesia. The total number of fishers in Indonesia is 2,702,664 in 2015 (MMAF 2016). There is no indicative number of fishers involved in Tuna and BSC fisheries. However, there are women fishers also in coastal areas in Eastern Indonesia (Fitriana and Stacey 2012). At the processing Stage, the number of women involved at the processing stage was 6,781,990 women, who contributed to 68% of labour at processing stage in 2011 (P2HP). Women also act as local traders. In the case of the BSC industry, more women worked at miniplant.

71. About 95% of the country's fishery production comes from artisanal fishers that use a variety of fishing gears. The marine fishing fleet has ca., 570 thousand vessels. Women are vital in fisheries, apart from helping their siblings to prepare for the fishing trip, mend nets, process and sell the seafood (Siason et al., 2001), women are also involved in capturing fish in the intertidal waters especially in eastern part of Indonesia (Fitriana & Stacey, 2012). Therefore, this Project implements an equal opportunity policy to ensure positive impacts on both men and women and will ensure the project will not result in negative impacts to women.

72. To administer the fisheries, the government has established 11 Fisheries Management Areas (FMA) – called Wilayah Pengelolaan Perikanan (WPP) -- covering Indonesia’s territorial sea and EEZ.

73. Indonesia has no MSC certified fisheries, but there are 10 ongoing FIPs (many focused on MSC certification) (Annex 1). Friend of the Sea has in the list of fisheries approved (i.e., products originating from those fisheries are certified) shrimp captured with trammel nets from the company PT Panca Mitra Multi Perdana.

74. The project will support the implementation of a Sustainable Marine Commodities Platform to facilitate public – private collaboration for the transformation of the seafood value chain. In

[58] Source: FAO fisheries global information system (FIGIS).

direct connection, the project will support the advance of the ongoing fisheries improvement projects that work on artisanal fisheries for tuna and blue swimming crab (BSC).

75. There are two ongoing tuna FIPs. The "Indonesia longline tuna FIP"[59] (PT Intimas Surya) operates in the Indian Ocean and target yellowfin tuna, bigeye tuna and albacore (*Thunnus alalunga*). The other tuna FIP target bigeye tuna, skipjack tuna, and yellowfin tuna with a variety of gears in the Indian Ocean and the Western Central Pacific[60]. The project will foster collaboration and synergy between these FIPs.

76. BSC is an important fishery and export commodity in Asia (e.g., Philippines, Vietnam, Thailand, India) that covers the US demand for swimming crabs after the collapse of the Chesapeake Bay fishery (Paolisso, 2007). About 50% of the Indonesian harvest of BSC is exported to the US. The ongoing blue swimming crab FIP[61] focuses on the artisanal fisheries for *Portunus pelagicus*.

Philippines

77. The country had 92,337,852 people in 2010, it is the twelfth most populated country of the world. Philippines has a medium human development, the HDI has continuously increased from 0.566 in 1980 to 0.660 in 2013 (rank 117) (UNDP, 2014). In 2013, the Gross National Income per capita (GNI) was US$ 6,381 (UNDP, 2014).

78. Fisheries are an important element of the country´s culture, food intake, employment and economy. Fish is the primary source of protein in the Filipino diet, it accounts for 70% of total animal protein intake and 30% of total protein intake (ADB, 2014a). Philippines has a high per capita seafood consumption of 35.9 kg (NMFS, 2012).

79. Philippines is a major player of world fisheries. Marine capture[62] has steadily increased from an average 647,671 t/year in the 1960s (average 1961-1970) to 1,198,737 t/year in the 1970s (average 1971-1980), to 1,536,121 t/year in the 1980s, to 1,788,999 t/year in the 1990s and 2,231,733 t/year in the 2000s. Between 2000 and 2012 the capture increased from 1,835,216 t to 2,199,363 t. There was a peak of 2,493,881 t in 2010, followed by a slight decline afterwards.

80. The capture fisheries are classified in (i) commercial fisheries (i.e., use boats >3 gross tonnage) and (ii) small-scale (municipal) fisheries that use smaller boats. Small-scale fisheries harvest ca., 54% of the total capture, the rest is harvested by commercial fisheries. It is estimated that about one million people work in the seafood value chain (ADB, 2014a).

81. The main fisheries are tuna, small pelagic fish and demersal species. Tuna accounts for about 12% of the total fisheries harvest (ADB, 2014a). About half of the tuna capture is harvested by small-scale fisheries. The three main species are skipjack tuna, yellowfin tuna and bigeye tuna. Small pelagic fish is the most affordable source of animal protein for lower-income Filipinos. Sardines comprise the major commercial group of small pelagic fish, the main species are *Sardinella fimbriata* and *S. lemuru*. Demersal coastal fish are an important resource, but their abundance has declined. Stobutzki et al., (2006) estimated that current biomass, in different bays and fishing grounds, ranged between 12% and 64% of the original estimates.

[59] http://www.sustainablefish.org/fisheries-improvement/tuna/indonesia-yellowfin-tuna
[60] https://sites.google.com/site/fisheryimprovementprojects/home/indonesia-tuna-fip
[61] http://www.apri.or.id/
http://fisheryimprovementprojects.org/fip/indonesian-blue-swimming-crab-fishery-improvement-project/
[62] Source: FAO fisheries global information system (FIGIS).

82. BSC (locally known as kasag, lambay, masag, and alimasag) is a commodity with high demand. Before the 1970s it was a subsistence fishery, afterwards it expanded because of increased demand, including the US demand after the collapse of the Chesapeake fishery in the 1990s (Ingles, 2004). This is a fishery that uses a variety of gears, operates along the entire archipelago, and has an important and valuable export component. However, about 70% of the harvest is consumed in the local market. Processing employ mostly women, but they have low salaries and poor working conditions. The fisheries management of BSC is limited. Key issues include (i) current status of the stocks is unknown, (ii) excessive fishing effort, (iii) capture of undersized individuals, (iv) illegal fishing and (v) high bycatch (e.g., sponges, other crab species, molluscs, juvenile fish). The administration of the blue swimming crab resources is under the responsibility of the local government. There is a "Philippine blue swimming crab management plan" (adopted in 2013), however, governance and management are weak. There is an ongoing FIP since 2009[63].

83. The project will support the development and implementation of a Sustainable Marine Commodities Platform with two working groups focused on the BSC and the octopus fisheries. In direct connection the project will support the advance of the ongoing BSC FIP and the preparation and initial implementation of a FIP for the octopus fishery.

84. *Octopus cyanea* is harvested from coral reefs along the country. It is assumed that this is the main export species, but there are at least 13 different species of shallow-water octopuses in the Philippines. Octopus has been harvested in local and subsistence fisheries throughout the country, and sold as both fresh and dried. The fishery is not managed and there is very scarce information. BFAR classifies the octopus as a "municipal fishery", which includes fishing done in coastal and inland waters with or without the use of boats of three gross tons or less. Octopus is exported, about 6,000 t were exported in 1991, then increased to a plateau of about 12,000 t, and later decreased to about 6,000 t in 2010 (Yau, 2011). The Philippines is the single most important source of imported octopus in the US market. In 2010, the US imported 3,410 t of octopus from the Philippines (about 28% of total imports of octopus into the US) (Yau, 2011). The Monterey Bay Aquarium (MBAq) recommends to avoid consumption of octopus from the Philippines mainly because there is no fisheries management.

I.3. Institutional context

Regional Fisheries Management Organisations

85. Tuna fisheries in the Pacific Ocean are administered by the Inter-American Tropical Tuna Commission (IATTC) and Western and Central Pacific Fisheries Commission (WCPFC). Northern albacore (*Thunnus alalunga*) and pacific bluefin (*T. orientalis*), which are found in both Convention areas, are assessed by the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC). Conservation and management recommendations by the ISC are reviewed by both IATTC and WCPFC, and efforts are made to harmonize management measures for these common stocks if adopted.

Inter-American Tropical Tuna Commission

86. The IATTC is the oldest tuna RFMO and has a long history of fisheries research and management. The IATTC was created by the Convention for the Establishment of an Inter-

[63] http://www.committedtocrab.org/projects/phillippine-blue-swimming-crab-fishery-improvement-project/ http://fisheryimprovementprojects.org/fip/philippines-blue-swimming-crab-fishery-improvement-project/

American Tropical Tuna Commission, signed between the United States of America and Costa Rica on 31 May 1949. The convention came into force in 1950 and was open to adherence by other governments whose nationals fish for tropical tunas and tuna-like species in the EPO. Under this provision Panama adhered in 1953, Ecuador in 1961, Mexico in 1964, Canada in 1968[64], Japan in 1970, France and Nicaragua in 1973, Vanuatu in 1990, Venezuela in 1992, El Salvador in 1997, Guatemala in 2000, Peru in 2002, Spain in 2003, the Republic of Korea in 2005, and Colombia in 2007 (IATTC, 2013).

87. In 2003 the parties adopted[65] the Convention for the Strengthening of the Inter-American Tropical Tuna Commission Established by the 1949 Convention between the United States of America and the Republic of Costa Rica (known as the Antigua Convention). The Antigua Convention entered into force on 27 august 2010.

88. The members of the IATTC are: Belize, Canada, China, Colombia, Costa Rica, Ecuador, El Salvador, European Union, France, Guatemala, Japan, Kiribati, Korea, Mexico, Nicaragua, Panama, Peru, Chinese Taipei, United States of America, Vanuatu and Venezuela. The cooperating non-members are: Bolivia, Honduras, Indonesia and the Cook Islands.

89. The IATTC provides the Secretariat for the Agreement on the International Dolphin Conservation Program (AIDCP) and, among other functions, manages the international on-board observer of the fleet of purse-seine vessels that operates in the EPO. The following parties have ratified or acceded to the AIDCP: Belize, Colombia, Costa Rica, Ecuador, El Salvador, European Union, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, United States, and Venezuela. Bolivia and Vanuatu are applying the AIDCP provisionally.

Western and Central Pacific Fisheries Commission

90. The Commission was established by the Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPF Convention) which entered into force on 19 June 2004. The WCPFC initiated operations in 2005.

91. The objective of the Convention is to ensure, through effective management, the long-term conservation and sustainable use of highly migratory fish stocks in the western and central Pacific Ocean in accordance with the 1982 United Nations Convention on the Law of the Sea (UNCLOS) and the 1995 UN Fish Stocks Agreement. The highly migratory fish are the species listed in Annex I of UNCLOS.

92. The members of WCPFC are Australia, China, Canada, Cook Islands, European Union, Federated States of Micronesia, Fiji, France, Indonesia, Japan, Kiribati, Republic of Korea, Republic of Marshall Islands, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Chinese Taipei, Tonga, Tuvalu, United States of America, and Vanuatu.

93. Participating Territories are American Samoa, Commonwealth of the Northern Mariana Islands, French Polynesia, Guam, New Caledonia, Tokelau, Wallis and Futuna.

94. WCPFC Cooperating Non-members are Belize, Democratic People's Republic of Korea, Ecuador, El Salvador, Mexico, Panama, Thailand, and Vietnam,

[64] Canada withdrew from the IATTC in 1984.

[65] Resolution C-03-02, resolution on the adoption of the Convention for the Strengthening of the Inter-American Tropical Tuna Commission Established by the 1949 Convention between the United States of America and the Republic of Costa Rica. Complementary, resolution C-03-09 invited Chinese Taipei to express its commitment to abide by the terms of the Convention.

Costa Rica

95. The Ministry of Agriculture and Livestock of Costa Rica (MAG) is the national authority responsible for agricultural and rural development. Two government institutions are responsible for Costa Rica's fishery sector: (1) the Ministry of Environment and Energy (MINAE) which manages inland fishery resources restricting their use to sport and subsistence fishing, and (2) the Costa Rican Institute for Fisheries and Aquaculture (INCOPESCA) which manages marine fisheries and aquaculture.

96. INCOPESCA[66] is the national authority responsible for implementing the Fisheries and Aquaculture Law[67], the sectorial policy of MAG, and the Fisheries and Aquaculture Development Plan. INCOPESCA coordinates the fisheries and aquaculture sector, administers fisheries and aquaculture, and regulates fisheries and their use[68].

97. MINAE is the national environment authority. In the near future this ministry will adopt responsibility on water and seas[69]. MINAE administers the national system of conservation areas (SINAC), including marine protected areas.

Ecuador

98. The Ministry of Agriculture, Livestock, Aquaculture and Fisheries of Ecuador (MAGAP) is the national authority responsible for the agriculture and fishery sectors. The Vice ministry of Aquaculture and Fisheries is the line authority that implements the fisheries policy. VAP has two undersecretaries that administer inland and marine fisheries and aquaculture. The National Fisheries Authority establishes, through ministerial agreements, exploitation conditions to regulate fisheries (e.g., tuna, mahi mahi, sharks) and protective measures for sensitive specifies (such as whales, rays, whale sharks, sea turtles), and adopts plans for the conservation and management of specific species (i.e., sharks and mahi mahi). The National Council for Fisheries Development was created under the fisheries law[70] (article 11) and integrates public and private stakeholders; the chair of the council is the Viceminister of Aquaculture and Fisheries. The council adopts and guides the fisheries policy and reviews the proposed fisheries regulations. The National Fisheries Institute (INP) is responsible for fisheries research and food safety in the seafood value chain.

99. The Ministry of Environment (MAE) is the National Environmental Authority and is the State´s agency responsible for designing environmental policies and coordinating strategies, projects and programs for the protection of ecosystems and the sustainable use of natural resources. The MAE administers the National System of Protected Areas (SNAP), the Undersecretary of Marine and Coastal Management (SGMC) administers the network of marine protected areas, mangroves areas and coastal and marine biodiversity. Fisheries within MPAs are administered by MAE under the forestry and wildlife law[71].

Indonesia

100. The Ministry of National Development Planning (BAPPENAS) is the principal agency responsible for planning of national development as stipulated by The Presidential

[66] INCOPESCA was created by Law 7384 published in La Gaceta 62 of 29 March 1994.
[67] Law 8436 published on 25 April 2005
[68] Article 14 of the Fisheries and Aquaculture Law.
[69] MINAE has created the Viceministry of Water and Seas
[70] Ley de Pesca y Desarrollo Pesquero. Codificación 2005-007 published in Registro Oficial 15 of 11 May 2005.
[71] Codificación a la ley forestal y de conservación de áreas naturales y vida silvestre (Ley 2004-017 published in Registro Oficial S-418 of 10 September 2004).

Regulation No 66/2015. Directorate of Marine and Fisheries is supervised by Deputy of Maritime and Natural Resources of BAPPENAS, which responsible for coordinating, formulating, and implementing policy, as well as monitoring, evaluating, and controlling planning of national development in the marine and fisheries sector . This directorate closely work with Ministry of Marine Affairs and Fisheries (MMAF)

101. Ministry of Marine Affairs and Fisheries is the technical ministry that responsible for marine and fisheries sector planning, management and administration. The MMAF mission, functions, organizational structures and its position in the cabinet are determined by Presidential Regulation No 63/2015. which stipulated that the main mission of MMAF is “To Assist the President (of the Republic of Indonesia) in holding the process of governance in the Marine and Fisheries sector”. MMAF formulates and implements the national policy in the marine and fisheries sector, and implements governance affairs in this sector.

102. Responsibility for local-level marine management rests with Provincial government. According to Law No. 23/2014 on Local Government, Provincial government is responsible for the management, use, controlling and conservation of marine resources in their own territory, within territorial waters up to 12 nautical miles. The Provincial Government is also authorized to regulate fishing vessels between 5 and 30 gross tonnages.

103. The authority and responsibility of the Province Government include the management, conservation, development, protection and utilization of fish resources in the area of management within their own authority. To carry out its authority, the Province can formulate fishery management policy and develop a local legislation as necessary to realize the goal of fisheries management. Local laws shall comply with the policies, laws and regulations stipulated by the Central Government.

Philippines

104. Fisheries management rests jointly on two authorities: the Bureau of Fisheries and Aquatic Resources (BFAR) that has regional offices in each of the 16 Philippine regions, and the local government units (LGUs) that operate under the Local Government Code of 1991. Perez et al., (2012) explain the institutional arrangements for fisheries management in small-scale fisheries.

105. BFAR is the government agency responsible for the development, improvement, management and conservation of the country's fisheries and aquatic resources. It was reconstituted as a line bureau by virtue of Republic Act 8550 (Philippine Fisheries Code of 1998). The bureau is under the Department of Agriculture. BFAR has overall jurisdiction over fisheries and aquatic resources management, except those within municipal waters. The National Fisheries Research and Development Institute (NFRDI) is the research branch of BFAR. NFRDI execute a national stock assessment programme.

106. Small-scale fisheries are managed by LGUs through three types of entities: (1) village (barangay), (2) municipal / city and (3) provincial. The municipal (and city) governments have the mandate to manage the resources within their territories.

I.4. Policy and legal context

107. At the international level the project will address the 2013 United Nations General Assembly Resolution A/RES/68/71 that recalls the commitment to ensure access to fisheries and the importance of access to markets by subsistence, small-scale and artisanal fisherfolk and women fish workers, as well as indigenous peoples and their communities, particularly in developing countries. The resolution also urges countries to adopt and implement

internationally agreed market-related measures to prevent, deter and eliminate IUU. In addition, the resolution requests to develop more effective measures to trace fish and fishery products to enable importing States to identify fish or fishery products caught in a manner that undermines international conservation and management measures. Finally, the resolution urged the identification and mainstreaming of strategies that further assist developing countries in developing their national capacity to conserve, sustainably manage and realize the benefits of sustainable fisheries, including through improved market access for fish products from developing countries.

Regional Fisheries Management Organisations

108. Conventions for both IATTC and WCPFC mandate the two commissions to conserve associated and dependent species (Gilman et al., 2014). Thus, both organizations have modern mandates that are consistent with the new responsibilities assigned to RFMOs under the United Nations Fish Stocks Agreement (UNFSA) (United Nations, 1995). WCPFC is the youngest tuna RFMO, established after UNFSA and the third Law of the Sea Convention. The commissions are treaty-based organizations. Their resolutions are mandatory to its members.

109. Limit reference points have been adopted for most of the main tuna stocks under IATTC and WCPFC, which is set above the level at which there is appreciable risk of impairing reproductive capacity. However, target reference points have not been adopted for these stocks and limit and target reference points have not been defined or adopted for elasmobranch species. Target reference points should be adopted that are designed to maintain the stock at a level consistent with B_{MSY} or similar and accounts for precautionary issues such as ecological role.

110. In general, the two tuna RFMOs have not adopted harvest strategies for the covered tuna stocks that are responsive to the state of the stock and achieve management objectives reflected in biological reference points. There is also a lack of systems in place to assess efficacy of harvest strategies, and there is a lack of evidence that harvest strategies are achieving objectives. Harvest control rules (through binding conservation and management measures) and associated tools are largely not consistent with a harvest strategy, and do not call for reducing the fishing mortality rate as a limit reference point is approached. There is a lack of evidence that the harvest control tools are effectively achieving exploitation levels required by the harvest control rule.

111. There has been some progress at IATTC and WCPFC in adopting bycatch control measures for vulnerable taxa. Many of the measures, unfortunately, fall short of best practices, including in the areas where they are required, allowing relatively ineffective gear technology measures as options, and allowing exclusions for certain vessel classes (Gilman, 2011; Gilman et al., 2014).

112. Over the years the IATTC has taken a number of fisheries management measures, most of them have concentrated on limiting the total catch of the purse seine fishery. Key issues to be addressed are adopt harvest strategies, reduce excess fishing capacity, regulate the use of FADs, improve management of bycatch, and develop management strategies for other pelagic fish that are exploited in the EPO (e.g., mahi mahi, billfish).

Costa Rica

113. The project is in line with the Costa Rican legal framework including:

a. The Fisheries and Aquaculture Law[72] of 2005 (published in La Gaceta 78 of 25 April 2005).
b. Regulation of the Fisheries and Aquaculture Law issued by Decreto Ejecutivo 36782-MINAET-MAG-MOPT-TUR-SP-S-MTSS, published in La Gaceta 188 of 30 September 2011.
c. Specific agreements of INCOPESCA Board[73].
d. National Fisheries and Aquaculture Development Plan issued by Decreto Ejecutivo 37587-MAG of 25 January 2013.
e. National Ocean Policy issued by Decreto Ejecutivo 38014-MINAE-MAG-SP-MOPT-RE-MIVAH-TUR, published in La Gaceta 41 of 27 February 2014.

Ecuador

114. The Project is in line with the Ecuadorian legal framework including:
a. The fisheries law[74].
b. The forestry and wildlife law[75].
c. The National Action Plan for the conservation and management of sharks in Ecuador and the corresponding regulations regarding shark conservation and management.
d. National Action Plan for the conservation and management of Dorado in Ecuador and the corresponding regulations regarding mahi mahi conservation and management.
e. The regulations for tuna, LPF and hake.

Indonesia

115. The Project is in line with the Indonesian legal framework including:
a. The Fisheries Law No. 31/2004 which regulate fisheries and aquaculture at the national level and underscores the importance of sustainable use of aquatic resources in the development of fisheries. This law was amended by Act No. 45/2009 on fisheries.
b. The law No. 27/2007 amended by Law No. 1/2014 on the management of coastal zones and small islands which regulates the use of marine and coastal zones and underscores the role of district and national governments in encouraging the community to benefit the marine and coastal resources on an environmentally friendly manner.
c. Law No. 23/2014 on Local Government by which Provincial Governments is held responsible for the management, use and conservation of marine resources in their own territory, within territorial waters below 12 miles.
d. Law No. 21/2009 on the ratification of Agreement for the implementation of the provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks.

[72] This law specifically prohibit the capture of cetacean, pinniped and chelonid, as well as shark finning.
[73] The Fisheries and Aquaculture Law of 2005 Board of INCOPESCA
[74] Ley de Pesca y Desarrollo Pesquero. Codificación 2005-007 published in Registro Oficial 15 of 11 May 2005.
[75] Codificación a la ley forestal y de conservación de áreas naturales y vida silvestre (Ley 2004-017 published in Registro Oficial S-418 of 10 September 2004).

e. Presidential Regulation No.2/2015 on Medium Term Development Planning 2015-2019 which also focus on development of maritime-based economy

f. Presidential Regulation No 3/2017 on Action Plan to Accelerate Development of National Fisheries Industry

g. Ministrial Regulation of Minister of Marine and Fisheries No 30/2016 on National Commission of Fisheries Stock Analysis to use best scientific evidence available to ensure responsile fisheries in Indonesia's waters

h. The Minister of Marine Affairs and Fisheries Regulation No. 18/2014 on Fisheries Management Area Republic of Indonesia.

Philippines

116. The Project is in line with the Filipino legal framework including:

a. Acts of Parliament like the Philippine Fisheries Code of 1998 (R.A. 8550) for fisheries, and the Local Government Code of 1991.

b. Presidential Decrees – no longer in use, but until the 1998 Fisheries Code was enacted, PD 704 was the primary fisheries legislation.

c. Executive Orders like the EO 240, establishing Fisheries and Aquatic Resource Management Councils (FARMCs).

d. Administrative Orders

e. Fisheries Administrative Orders (FAOs) issued by BFAR pursuant to the Fisheries Code.

Part IB: Baseline Analysis

I.5. Threats to biodiversity

117. Overexploitation of marine fisheries is a major global issue and a key driver of changes in the marine environment. 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. 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). In 2011, 28.8% of world fish stocks were overfished and 61.3% of stocks were fully fished (FAO, 2014). 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.

118. Overfishing 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 fishermen and consumers, inappropriate subsidies, and insufficient enforcement (UNEP, 2006; MARIBUS, 2010).

119. 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 of about 80 million tonnes, but the demand continues to increase. The underlying

causes of the increase in seafood demand are many, among them the expansion of the world population, increased income in developing countries, increased urbanization and the associated demand of value-added nutritious products, and larger international trade.

120. The growing demand for seafood puts pressure on the entire value chain and therefore fishermen increase the harvest of valuable resources (Figure 1.7). Most of the demand comes from developed countries, but also from some developing countries (e.g., China), that have high purchasing power and cannot supply their demand with local sources. Export commodities are attractive because they command a higher price, but there are products with high value and demand in the local markets. The access to the fishery resources is regulated by national fisheries authorities, and by RMFOs in the case of shared stocks or highly migratory species. 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.

121. 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, industry engagement, certification and ecolabelling have shown promising results. 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 are the 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).

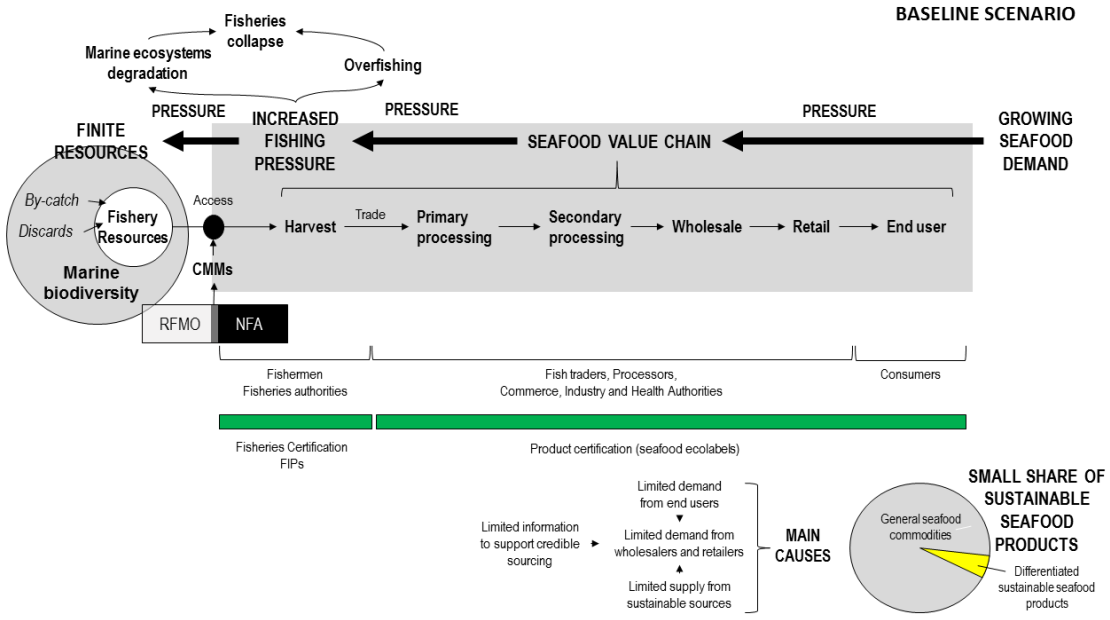


Figure 1.7. Effect of growing seafood demand on marine fisheries and biodiversity.

I.6. Long-term solution

122. The market forces are strong and can pull the seafood value chain to motivate sourcing from sustainable sources and, therefore, an improved management of the fishery resources. The long-term solution is a transformation of the market in which sustainable seafood is

adequately valued[76] by consumers, there are public policies and instruments to support sustainable fisheries, and the stakeholders of the value chain, public and private, contribute to this end.

I.7. Barrier Analysis

123. The main barriers that limit achieving the long term solution are:

Barrier 1. Limited demand from end users.

124. There are a number of 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, Seafood Choices Alliance, Marine Conservation Society, and Monterey Bay Aquarium. These guides orient consumers and businesses (e.g., restaurants, catering services, fishmongers) to choose seafood from sustainable sources. These efforts are mainly focused in developed countries (e.g., US, UK, Germany, Spain, and Australia).

125. 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.

126. The main limitations that have been identified are[77]:

a. Consumer confusion because of the range of information, often contradictory, about seafood products (e.g., different forms of evaluation, differing ranking systems).

b. Lack of evidence of improved conservation status of the resources that are protected.

c. Environmental concerns are secondary to quality and price as a purchase criteria.

d. In some markets, there is a strong concentration on a few species, offer and demand for less common fish species are weak

e. Consumers are not willing to pay an increase of more than 10% for sustainable seafood.

f. Consumer awareness and education has concentrated on developed countries. Consumers from producing countries and emerging markets (e.g., Latin America) are not included in the existing initiatives.

127. Despite the importance of this barrier, the present project will not contribute to consumer education and awareness. The project will concentrate on the relationship among the other members of the value chain, from fishermen to retailers.

Barrier 2. Limited demand from wholesalers and retailers.

128. Because of the limited demand from end users, many retailers and wholesalers do not see market opportunities in sustainable seafood. 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).

[76] This should not imply more costly seafood products. It entail that consumers, and society at large, give appreciate sustainability and incorporate the concept and practice in daily live.
[77] See Schmitt (2011), Jacquet et al., (2010a), Seafood Choice Alliance (2007), Seafood Choice Alliance (2008).

129. In 2008, the Seafood Choice Alliance (2008) found that US restaurants, retailers, and wholesalers consider overfishing as a top threat to seafood sustainability. However, for these groups, like for consumers, environmental concerns are secondary to quality and price. The same study found that (i) retailers were uncertain about the percentage of sustainable seafood that they managed, and (ii) the misperception of wholesalers that the majority of their seafood was already sustainable.

130. The main limitations to further increase the engagement of mayor buyers are:

a. Insufficient availability of accurate and up-to-date information of the seafood stocks and sources, in a form that is meaningful to support decision making for sustainable sourcing. SFP has advanced on this matter with FishSource[78] and Metrics, but maintaining this type of system is complex and costly.

b. Limited information and practical tools to prepare and implement corporate policies and procedures for responsible sourcing of seafood.

c. Lack of traceability systems that guarantee that the providers are actually delivering sustainable seafood and do not incur in seafood fraud.

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

131. The project will contribute to address this barrier by (i) developing tools to assist retailers, wholesalers and processors to prepare and implement sustainable seafood sourcing policies and to better capture sourcing information, (ii) direct work to increase the number of major buyers that demand sustainable seafood from the Pacific Ocean -- mainly tuna, mahi mahi, large pelagic fish and blue swimming crab --, and (iii) mobilize market leverage to request CMMs for tuna in the WCPFC and the IATTC.

Barrier 3. Limited supply from sustainable sources.

132. As mentioned before the supply of certified seafood is ca., 8% of the total world production. There are a number of important seafood commodities that are not certified (e.g., mahi mahi) or have serious limitations to be certified (e.g., blue swimming crab). Therefore, if more wholesalers and retailers want to buy sustainable seafood they will not have sufficient supply.

133. In general, certification of sustainable fisheries and fishery products seem overwhelming to fishermen in developing countries. On the one hand, fishermen 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 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[79]. In addition, certified seafood do not necessarily command a price premium for the fishermen. Existing information indicate that

[78] FishSource provide scores about five aspects of fishery sustainability:
Score 1: Is the management strategy precautionary?
Score 2: Do managers follow scientific advice?
Score 3: Do fishers comply with managers decisions?
Score 4: Is the fish stock healthy?
Score 5: Will the fish stock be healthy in future?
Cannon (2007) explain the FishSource scores and how they are calculated.

[79] This is why the certification of this kind of fishery has depended on contributions from NGOs and other donors.

producers benefit from improved market access and 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. FIPs have been used to bridge this gap, and SFP promote industry-driven FIPs that finance improvement with the revenues of the fishery. However, there are doubts about the actual sustainability of the fisheries involved and the level of genuine advance in improving the management of the fishery. Often the national policies and instruments for fisheries management are insufficient. For example, the Philippines BSC FIP was initiated in 2008, and is rated as "exceptional progress" in FishSource. However, in these years the status of the stocks has not been assessed, CMMs have not been adopted and the agreed annual improvements have not been met. The Monterey Bay Aquarium Seafood Watch recommend to "avoid" BSC from Philippines (Taylor, 2013).

134. None of the four participating countries have MSC certified fisheries. Ecuador, Indonesia and Philippines have FIPs in different stages of development. Costa Rica does not have ongoing FIPs, but both the national fisheries authority and the fishermen have interest in exploring this tool.

135. The main limitations to further increase the supply of sustainable seafood are:

a. Limited understanding on the actual market benefits from fisheries certification and ecolabelling for fisheries from developing countries.

b. The cost of certification and sustaining it afterwards could be beyond the means of artisanal fishermen in developing countries.

c. Uncertainty about the quality of FIPs, the actual progress in fisheries improvement, and the traceability of the products.

d. Lack of strong tools to measure progress of fisheries improvement projects.

e. Limited capacities for sustainable fisheries management (e.g., legal, technical, financial).

f. Limited governmental support for fisheries improvement.

g. Limited dialogue and collaboration among public and private stakeholders of the value chain.

h. Scarce pressure from major buyers to national fisheries authorities and RFMOs to promote sound fisheries management and stricter CMMs.

136. The project will address this barrier by developing practical experience with Sustainable Marine Commodities Platforms in the four participating countries. The platforms will be based on the experience of the UNDP Green Commodities Programme in agriculture products. The purpose of the platforms will be to facilitate coordination and collaboration among the stakeholders of the value chain of selected fisheries and to promote the development of national capacities for sound fisheries management, as well as to increase understanding of current trends in sustainable seafood sourcing and demand, fisheries improvement processes, certification of fisheries and fishery products, and ecolabelling. Each SMCP will have working groups to focus on specific value chains.

137. The SMCPs will be complemented with corresponding FIPs to facilitate practical learning on fisheries improvement and the change of inadequate fishing practices. The project FIPs will test the improved guidelines and tracking tools.

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

138. Information is crucial to facilitate changes along the value chain. But different stakeholders have different interests and specific requests of information. There is a major need for reliable information about the status of seafood stocks and the availability of supply from certified sources or credible FIPs. Information is currently dispersed, in a range of formats and not readily available to all stakeholders. In the case of FIPs, an important advance has been the information in FishSource[80], the recent launch of FIP Directory[81] and a website that congregate information of WWF supported FIPs[82]. However, information is mostly colloquial, progress is presented in different formats and it is not necessarily reliable. Also, knowledge and learnings of current FIPs is not being captured and shared for the benefit of interested parties.

Table 1.5. Working groups of the Sustainable Marine Commodities Platforms and Fisheries Improvement Projects to be implemented in the participating countries.

Country	Value chain working groups	Fisheries Improvement Projects
Costa Rica	1. Mahi mahi[83] 2. Large pelagic fish[84]	1. Longline mahi mahi fishery 2. Longline LPF fishery
Ecuador	3. Industrial purse seine tuna fishery[85] (PST) 4. Artisanal LPF fisheries[86] 5. Hake fishery	3. Industrial purse seine tuna 4. Handline and longline bigeye tuna fishery 5. Mahi mahi[87] (supported by WWF)
Indonesia	6. Tuna[88] 7. Blue swimming crab	6. Indonesia longline tuna FIP (Indian Ocean) (supported by SFP)

[80] FishSource include information about the level of advance of FIP with relation to a six-stages process:
Stage 0: Scoping and Early Engagement
Stage 1: The FIP is being launched
Stage 2: The FIP has formed
Stage 3: The FIP is encouraging improvements
Stage 4: The FIP is delivering improvements in policies and/or fishing practices
Stage 5: The FIP is delivering improvements in the water
Stage 6: MSC Certification (Optional)
There are specific indicators to identify the level of advance of each FIP. The following link has more information about this tool to track the advance of FIPs:
http://www.fishsource.com/faqs?group=Fishery+Improvement+Projects
[81] http://fisheryimprovementprojects.org/
[82] https://sites.google.com/site/fisheryimprovementprojects/
[83] The Costa Rican platform will concentrate on the longline fishery for mahi mahi and LPF.
[84] Includes tuna, mahi mahi, billfish, sharks and other LPF.
[85] Includes skipjack tuna, yellowfin tuna and bigeye tuna.
[86] Includes longline, gillnet and handline.
[87] Implement strategic action in support of the ongoing FIP.
[88] Annex 2 has details of the proposed working groups.

Country	Value chain working groups	Fisheries Improvement Projects
		7. Indonesia Skipjack Tuna – Western Central Pacific FIP (supported by WWF) 8. Indonesia Yelllowfin Tuna – Indian Ocean FIP (supported by WWF) 9. Indonesia Blue Swimming Crab FIP (supported by SFP)
Philippines	8. Blue swimming crab 9. Octopus	10. Blue swimming crab FIP (supported by SFP) 11. Octopus

139. The project will address this barrier by improving existing information systems and tailor them to the needs of the stakeholders (e.g., fishermen, national fisheries authorities, processors, buyers). The novel experience with seafood platforms will be documented and disseminated for the benefit of a worldwide audience. In addition, based on the practical experience with project FIPs, tools will be developed to systematically capture lessons from improvement projects and certification processes (i.e., Ecuador mahi mahi) to serve worldwide audiences.

Project concept to address key barriers

140. The project cannot address all existing barriers. Therefore, it will focus on a multi-level intervention in the seafood chain to generate learnings to be shared globally. The project will concentrate on the development of enabling conditions for the engagement of major buyers in key markets (i.e., EU, Japan, US) by facilitating practical tools, information, and opportunities to exchange knowledge and experience among peers. It will also explore, in the four participating countries, the use of public-private platforms to facilitate dialogue and collaboration among stakeholders to address sustainability issues and to motivate policy changes to sustain fisheries improvement. Complementarily, practical experience in measuring and reporting progress as well as capturing lessons will be developed in FIPs that range from industrial (i.e., tuna purse seine in Ecuador) to very small-scale fisheries (e.g., blue swimming crab in Indonesia and Philippines). In addition, information needs will be addressed by developing guidelines and protocols, and fostering synergy among existing platforms and websites. Finally, the learnings and lessons of the project will be captured and widely disseminated worldwide.

I.8. Stakeholder Analysis

141. The project involves a wide range of interested parties that integrate the value chain (Figure 1.1). The project will support fishermen in four developing countries to develop capacities and practical experience to improve fisheries management and participate in sustainable seafood value chains. The management strategies, the Sustainable Fisheries Action Plans (SFAP) and the FIPs to be developed with project support may in the short

term imply some cost to the fishermen. However, in the mid-term, the same groups will benefit from improved harvest and better market access. The project will make specific provisions to ensure that fishermen are adequately represented and actively participate in the sustainable marine commodities platforms.

142. Four NGOs will contribute to the project. Two international NGOs will directly collaborate in project execution. Sustainable Fisheries Partnership, will be an Implementing Partner in charge of component 1 project side and components 3 and 4 in Costa Rica, Ecuador and the Philippines; and will collaborate with Indonesian counterparts to support implementation of components all components. SFP will (i) engage major buyers in key markets, (ii) provide technical advice, training and support to the sustainable marine commodities platforms and FIPs, and (iii) facilitate information and knowledge management. Also, the Marine Stewardship Council will implement raising awareness activities and provide training on sustainable seafood certification and MSC standards for sustainable fishing and chain of custody. In addition, the National Fisheries Institute Crab Council will continue to provide funding to support the BSC FIPs in Indonesia and the Philippines, and the Monterey Bay Aquarium will collaborate through its ongoing work in building the demand for sustainable seafood

Costa Rica

143. In Costa Rica, the sustainable marine commodities platform will focus on the longline fishery for LPF, and will integrate public and private interested parties. The fishermen are organized in four chambers and one federation[89], but there are independent fishermen that do not integrate into these organizations. The project will make provisions to ensure that independent fishermen also participate in the platform and the FIPs.

144. Fish traders, processors and exporters include local companies (i.e., MARTEC, PMT, FRUMAR, Inversiones Cruz) and the National Chamber of Exporters of Fishery Products[90] (CANEPP). Inversiones Cruz is the main exporter of shark meat to Brazil and Mexico. Processors and exporters are crucial to pull improvements in the value chain. CANEPP and individual companies have expressed interest in developing fisheries improvement projects.

145. The main wholesalers are mainly based in the US (i.e., Fortune Fish, Incredible Fish, Seasource Importers and Sea delight). Their participation is vital because through their procurement policies can contribute to align the provision of mahi mahi and LPF.

146. Retailers are both global and local. Global retailers like Walmart-International and Tesco are directly involved with the Costa Rica longline fishery. Walmart Mexico and Central America, Automercado, Mas por Menos and Maxibodegas are retail chains that could leverage improvement for the proportion of the captures oriented to the domestic market or the export of shark meat (Central America and Mexico). In addition, the integration of hotels and restaurants is important because they can promote sustainable seafood in the local market. The tourist sector is organised in three chambers[91].

[89] These organizations are:
1. Cámara Nacional de la Industria Palangrera (CNIP);
2. Cámara de Pescadores de Quepos;
3. Cámara de pescadores artesanales de Puntarenas;
4. Cámara de Pescadores de Guanacaste;
5. Federación Nacional de Sector Pesquero (FENAPES)

[90] Cámara Nacional de Exportadores de Productos Pesqueros.

[91] Cámara Nacional de Turismo (CANATUR), Cámara Nacional de Ecoturismo (CANAECO), and Cámara Costarricense de Hoteles (CCH).

147. Key institutional stakeholders for the project are MAG (the Implementing Partner in Costa Rica), which administers the fisheries sector, MINAE, which administers biodiversity, and the Ministry of the President which has facilitated the inter-sectorial dialogue to introduce a new zoning and management scheme for tuna fisheries (FECOP, 2013). The Ministry of the President will initiate the platform by convening public and private stakeholders.

148. In addition, it will be vital the participation of:

a. INCOPESCA, the project executing agency, which is the line agency responsible for fisheries administration and managing the Marine Areas for Responsible Fisheries (Table 1.2). Its marketing department is central, because it supports improvement of the seafood value chains and is developing a traceability system for the domestic market.

b. The National Service for Animal Health[92] (SENASA), under MAG, is the agency responsible for food safety. It's Directorate for Food Safety of Animal Products (DIPOA[93]) inspects and approves seafood processing plants and grants the sanitary certificate.

c. The Viceministry of Water and Oceans, under MINAE, responsible for sustainable use of coastal and marine resources.

d. The National System of Conservation Areas (SINAC), under MINAE, responsible for the administration of marine protected areas (Table 1.2).

149. The project will also involve participation of local universities and NGOs. Some NGOs, like WIDECAST, PRETOMA and Conservation International, have had campaigns against longline fishing. On the other hand, the Costa Rican Fisheries Federation (FECOP) represent the Costa Rican tourism and sport fishing sector and has promoted the ban of purse seine tuna fishing in the EEZ (FECOP, 2013).

Ecuador

150. The National Council for Fisheries Development will be the basis to initiate the work on sustainable marine commodities platforms. From there, specific working groups will be established to address the specific aspects of the industrial purse seine tuna fishery, the artisanal LPF fishery and the hake fishery (Table 1.5).

151. The key institutional stakeholders are:

a. MAGAP (the IP in Ecuador), through VAP, will lead project activities, establish the platform and the corresponding working groups, support the FIPs, adopt the sustainable fisheries action plans and issue regulations that will be necessary to mainstream sustainability within the seafood value change and to improve the target fisheries. Also under MAGAP, INP will provide technical advice and scientific research.

b. The Ministry of Foreign Commerce will participate in the platform and the working groups. Its involvement is vital because it promotes exports and trade, and the development of new markets for Ecuadorian products.

c. MAE, through SGMC will participate in the platform[94]. The project will not implement activities within MPAs but it will be essential to the integration of fisheries management with marine conservation.

[92] Servicio Nacional de Salud Animal (SENASA).
[93] Dirección de Inocuidad de Productos de Origen Animal (DIPOA).
[94] The SGMC represent the Ministry of Environment in the National Council for Fisheries Development.

d. SENPLADES will be informed of project progress. This Secretary coordinates national planning and public investment, and oversees implementation of the National Development Plan. The involvement of SENPLADES will be vital to ensure that the target value chains and FIPs are integrated into national planning scheme.

152. For the work with the industrial tuna fishery, the private sector stakeholders are members of three organizations: (i) the Association of Tuna Boat Owners (ATUNEC), (ii) the National Chamber of Fisheries (CNP), and (iii) the Chamber of Tuna Processors (CEIPA). ATUNEC integrate independent tuna boat owners, CNP incorporate mainly processors that have their own tuna fleets, and CEIPA integrate most tuna processors. The tuna industry is vertically integrated, therefore these organisations include most of the producers, processors, exporters and traders related to the Ecuadorian fishery (e.g., Starkist, NIRSA, SALICA). CEIPA will be a key partner because it has developed the SEA which will be used as a basis for the industrial purse seine tuna FIP. The project will also include participation of NGOs, mainly WWF, Conservation International and the International Seafood Sustainability Foundation (ISSF). WWF has been advocating sustainable tuna fisheries in the EPO and works directly with the Ecuadorian tuna industry. Conservation International has minor direct involvement with the industrial tuna sector, but supports MPA management in Ecuador and the entire eastern tropical Pacific seascape. Finally, ISSF promotes improvement of global tuna fisheries to become MSC certified. ISSF actively work with the Ecuadorian tuna industry and participates in the meetings of the IATTC. Major players of the Ecuadorian tuna industry are members of ISSF.

153. The work with artisanal LPF fisheries will advance from the experience of the Dorado Advisory Council. The platform will include two working groups to address the specific aspects of the mahi mahi and LPF fisheries. The key private stakeholders are (i) the Fisheries Cooperatives of Manta, San Mateo and Santa Rosa (the main landing ports), (ii) the Association of Artisanal Boat Owners of Manta[95], and (iii) the Association of Whitefish Exporters (ASOEXPEBLA[96]), which integrates the main processors and exporters. There are independent fishermen that do not integrate the fisheries cooperatives, the project will make provisions to ensure that these fishermen also participate in the platform, the working groups and the FIPs. Major buyers from the US will be invited to participate in the platform and the fishery-specific working groups. Their participation is central because through their sourcing policies they can contribute to align the provision of mahi mahi and LPF. WWF is the main NGO to be involved. It has stimulated gear modifications to reduce bycatch, promoted MSC certification of the mahi mahi fishery, and supported the ongoing FIP. WWF also is strongly promoting rights-based management in Ecuadorian fisheries. The mahi mahi FIP is mature, therefore the project will contribute with a few strategic actions[97]: (i) conduct an independent performance evaluation of the PAN-Dorado, (ii) update the research component of the PAN-Dorado, and (iii) document the learnings and lessons of the FIP and disseminate them worldwide. A new FIP will be organized with the key stakeholders, focused on the handline and longline fisheries for bigeye tuna.

154. For the work with the hake fishery, the key private stakeholders are the industrial boat owners that have fishing authorizations, the artisanal fishermen that fish hake, and the processors and exporters (i.e., COBUS and CEPROMAR). At the moment there is no market leverage from the major buyers in Rusia and Venezuela to mainstream sustainable

[95] Asociación de Armadores Artesanales de Manta.
[96] Asociación de Exportadores de Pesca Blanca (ASOEXPEBLA).
[97] Requested by VAP.

practices within the value chain, but during project implementation SFP will conduct market intelligence research to identify opportunities for sustainable procurement of hake.

Indonesia

155. The Ministry of National Development Planning (Directorate of Marine Affairs and Fisheries) is the Implementing Partner in Indonesia. They will provide project oversight to ensure effective execution of project component 2, 3 and 4. A Project Management Unit (PMU) will be established to support day-to-day project management. BAPPENAS in coordination with MMAF will also coordinate and assist Provincial government which by Law No 23/2014 has authority to manage marine areas below 12 miles.

156. The national platform will integrate multi-stakeholder groups and will be led by government. The basis for the platform will be the fisheries for tuna and BSC, with working groups for two cross-cutting issues: marketing and regional initiatives. The key stakeholders are listed in Annex 2.

157. The work on tuna will be built on the basis of previous experience with tuna FIPs (Annex 1, Annex 4) and the preparation of the Indonesia National Tuna Management Plan (MMAF, 2012). The coordination with Provincial and District / City authorities will be built on the existing mechanism of an annual meeting of the Coordination Forum for Fisheries Resource Management and Utilization at provincial / regional and national levels. The project will take provisions to ensure participation of fishermen organizations and fishing and processing companies. The project will include participation of WWF, which is the main NGO that has promoted sustainable tuna fisheries and has supported the ongoing tuna FIPs. It will also be important the participation of the IPNLF which actively promotes pole and line fishing in the region.

158. The work on BSC will be structured on the basis of the ongoing FIP (Annex 1, Annex 3). The participation of the National Fisheries Institute Crab Council[98] of the US (NFI-CC) is vital because the sourcing policies of its members can pull processors and producers to comply with conservation and management measures. NFI-CC also fund BSC fisheries improvement projects in Asian countries[99]. Another key stakeholder is the Indonesia Blue Swimming Crab Processors Association (APRI), which congregates processors and has actively participated in fisheries improvement. Both NFI-CC and APRI will continue their support to improving the BSC fishery. There are many independent fishermen that capture the BSC. Therefore, the project will take provisions to ensure their participation in the platform and FIP. SFP launched the FIP and MMAF will use the learnings of existing FIPs to recommend expansion to other fisheries and regions. The project will promote synergies between the stakeholders of the BSC value chain and the FIPs in Indonesia and The Philippines.

Philippines

159. The main government stakeholders are BFAR and the LGUs:

a. BFAR is the Implementing Partner in Philippines and will lead project activities, establish the platform and the corresponding working groups, support the FIPs, adopt the corresponding sustainable fisheries action plans, and issue fisheries regulations that will be necessary to improve the target fisheries. BFAR will also coordinate with the LGUs

[98] NFI-CC represent the majority of BSC importers / buyers in the US, the main export market for Asian BSC.
[99] i.e., Indonesia, Philippines, Sri Lanka, Thailand, and Vietnam.

where target fisheries operate. NFRDI will provide technical advice and scientific research in support of improved fisheries management.

b. The LGUs will manage fishery resources and implement activities in their territories, in close coordination with BFAR.

160. The BSC working group will be structured on the basis of the ongoing FIP (Annex 1) and the Philippine Blue Swimming Crab Management Plan (BSCMP) (BFAR, 2013). Key private stakeholders are the Philippine Association of Crabs Processors (PACPI) and the NFI-CC. PACPI is an industry organization which congregates most processors and exporters[100] (e.g., Blue Star, Central Seafood, Heron Point, PUFFI, RGE Agridev Inc., and Sigma International), and has actively participated in BSC fisheries improvement. PACPI will continue its contribution to BSCMP implementation. The participation of the NFI-CC is vital because the sourcing policies of its members (e.g., Phillips Foods, Chicken of the Sea Frozen Foods, Bumble Bee, and Carrington Foods) can pull processors and producers to comply with conservation and management measures. In addition, NFI-CC sponsor BSC FIPs in Asia. Both PACPI and NFI-CC will continue their support to improving the BSC fishery. Most fishermen and local traders are independent. Also there are independent picking plants not associated to the main exporters. The engagement of these groups is fundamental for improving the enforcement of fishery regulations (e.g., minimum capture size, ban on the capture of berried females). Therefore, the project will encourage that processors/exporters, domestic retailers and wholesalers impose product control mechanisms (e.g., minimum size) to incentive fishermen, local traders and independent picking plant to engage into improving the fishery. SFP is the NGO that launched the FIP and will continue its role of facilitator of an industry-driven FIP. The project will promote synergies between the BSC platforms and FIPs in Indonesia and The Philippines.

161. The new octopus working group will be based on the experience with the BSC fishery. The key players will be the LGUs because octopus is a municipal fishery. However, LGUs have limited capabilities and BFAR will be crucial to provide technical assistance. Fishermen, local traders, processors and exporters are not associated. Therefore, the project will take provisions to engage this groups and motivate, at least, basic organization schemes. SPF will identify major US buyers and work to (i) engage them into responsible sourcing, (ii) promote participation in the national platform, and (iii) provide technical and financial resources for the FIP.

[100] There are eight processors/exporters in the Philippines, six of them are members of PACPI.

PART II: STRATEGY

Project Rationale

162. Overfishing is in part the result of market pressure because of growing seafood demand. Market tools have been used to motivate that the demand focuses on sustainable sources, however sustainable seafood products are still a small share of the market (Figure 1.7). The project will contribute to the transformation of the market by mainstreaming sustainability in the value chain of important seafood commodities from developing countries, improving emerging tools such as corporate sustainable purchase policies and FIPs, motivating changes in national fisheries policy for improved fisheries administration, and generating learnings to be shared worldwide.

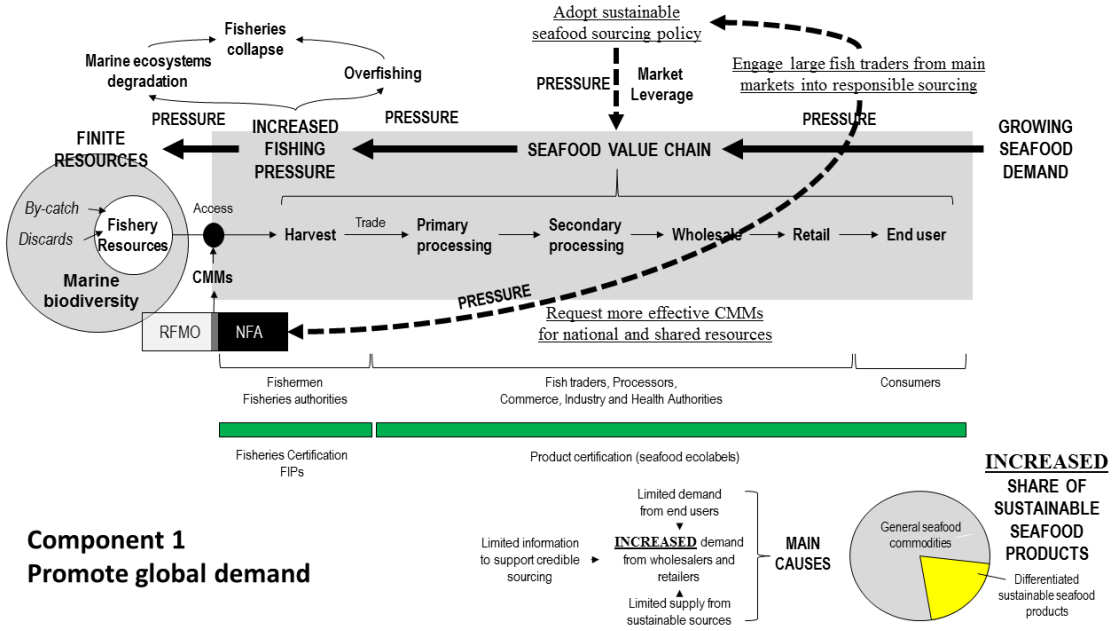


Figure 2.1. Expected influence in the baseline scenario from component 1 of the project.

163. The project consists of a multi-level intervention. Component 1 will concentrate on a major expansion in the number of large buyers and their suppliers from the main markets (EU, Japan, US) that internalize sustainable seafood sourcing. This will create market leverage to pull the seafood value chain into sustainable sourcing and disincentive IUU. In addition, the project will motivate major buyers to directly request national fisheries authorities and RFMOs the implementation of more effective conservation and management measures (Figure 2.1), particular emphasis will be given to tuna fisheries under WCPFC and IATTC. Ultimately, component 1 will focus on generating increased demand for sustainable seafood from major buyers from the EU, Japan and the US.

164. Component 2 will concentrate on establishing enabling conditions to improve the supply of sustainable seafood from developing countries. The project will implement demonstrations in Costa Rica, Ecuador, Indonesia and Philippines to generate experience that could be used in other countries. The core element of component 2 is the novel approach of developing sustainable marine commodities platforms that integrate the public and private stakeholders of the value chain with the common goal to supply sustainable

seafood. It is expected that the market leverage generated in component 1 will motivate the engagement of the value chains. On the EPO, the project will work in Costa Rica and Ecuador with the value chains for tuna, mahi mahi, and large pelagic fish, and the Ecuadorian value chain for hake. In Asia, the project will work with the Indonesian value chains for tuna and blue swimming crab, and the Filipino value chains for blue swimming crab and octopus. The platforms will motivate changes is public policy to generate an enabling environment for the operation of sustainable value chains.

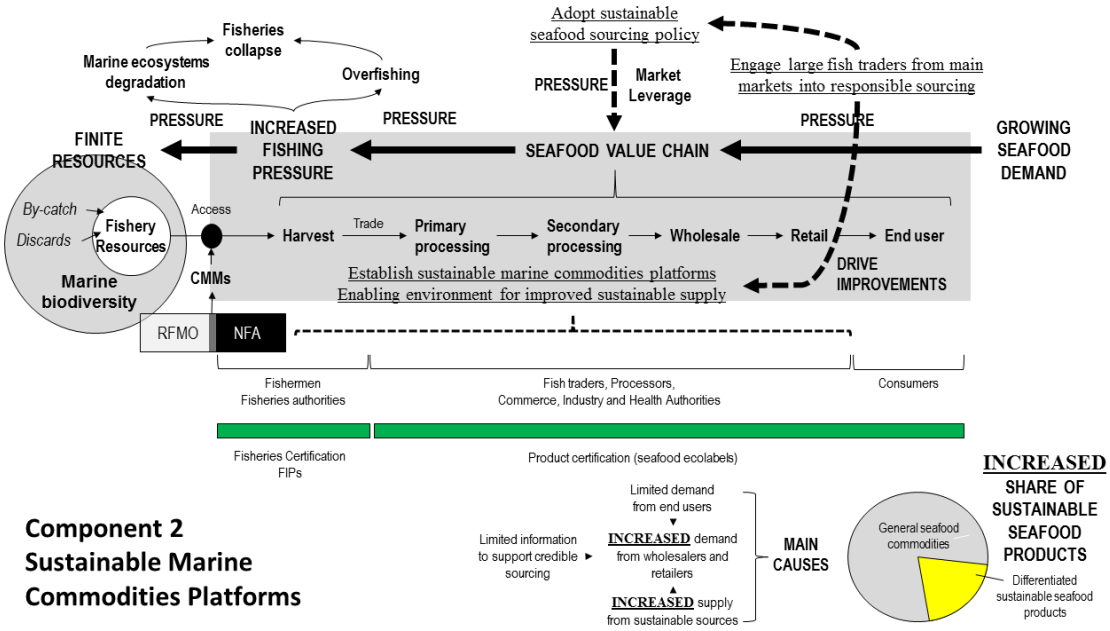


Figure 2.2. Expected influence in the baseline scenario from component 2 of the project.

165. In Component 3, the stakeholders of the platforms will develop practical experience with fisheries improvement projects (Figure 2.3). The project will work with FIPs in different stages of development, from very mature FIPs like mahi mahi in Ecuador and blue swimming crab in Indonesia and Philippines, to new endeavours like octopus in Philippines. Ongoing FIPs will be evaluated to identify key learnings and improvements for the FIP process. Complementarily, the tracking tools will be upgraded to secure that the stakeholders have credible information about FIP progress. The aim is to strengthen industry-driven FIPs in Costa Rica, Ecuador and the Philippines, and to support nationally-driven FIPs in Indonesia.

166. Finally, Component 4 will concentrate in information and knowledge sharing (Figure 2.4). A key element will be to update the existing information platforms (e.g., FishSource, FIP Directory, Metrics) to facilitate credible sourcing of sustainable seafood. Also project learnings will be disseminated to facilitate the development of sustainable marine commodities platforms and FIPs in other countries and contexts.

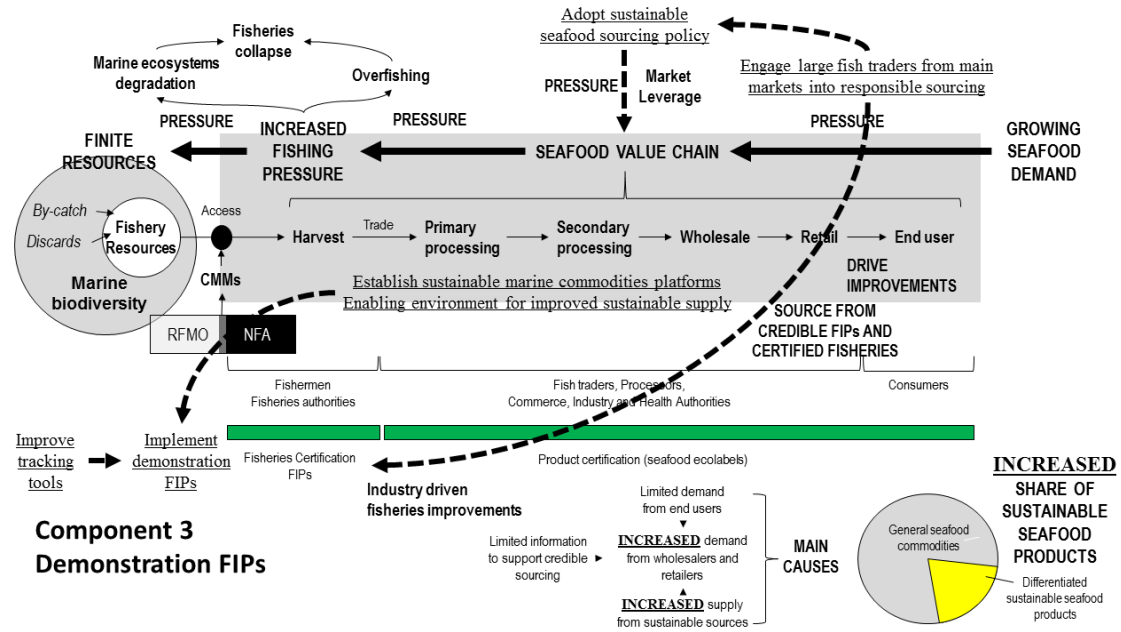


Figure 2.3. Expected influence in the baseline scenario from component 3 of the project.

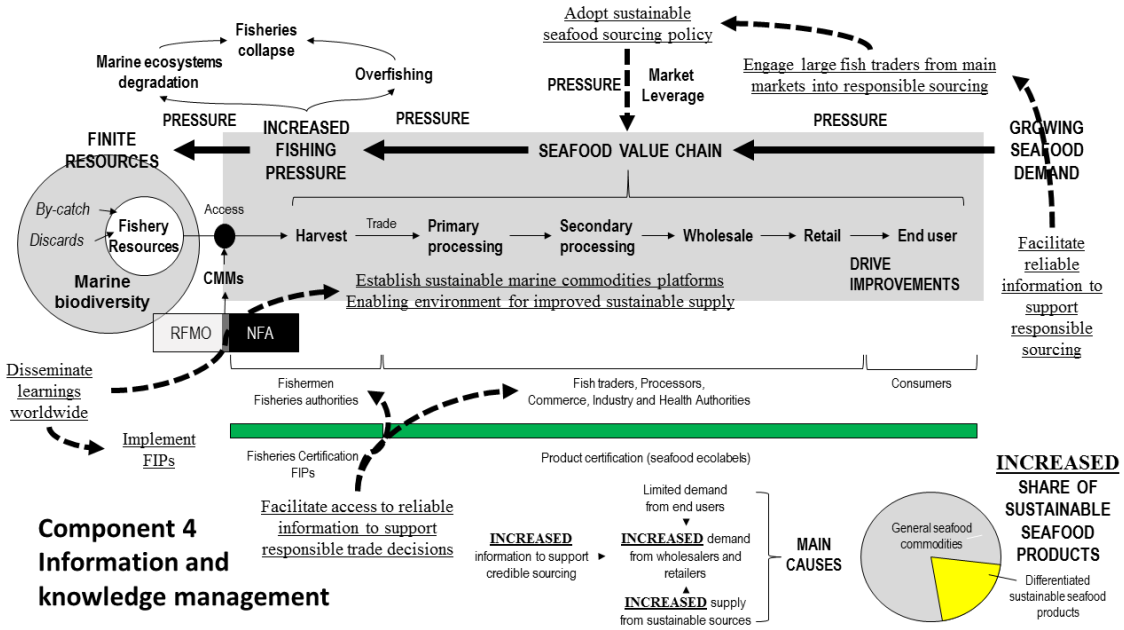


Figure 2.4. Expected influence in the baseline scenario from component 4 of the project.

Policy conformity

167. The four countries signed and ratified the Convention on Biological Diversity (Table 2.1). Conditions in Costa Rica, Ecuador, Indonesia and Philippines are highly favourable for the application of the approach proposed in this project: (i) there are government investments in fisheries management and monitoring, (ii) Governments are strongly supportive of fisheries improvement and seafood certification, (iii) the project will complement and build upon a well-developed portafolio of other projects supported by GEF.

Table 2.1. Dates of signature and ratification of the Convention on Biological Diversity.

Country	Date of signing	Date of ratification
Costa Rica	13 June 1992	26 August 1994
Ecuador	09 June 1992	23 February 1993
Indonesia	05 June 1992	23 August 1994
Philippines	12 June 1992	08 October 1993

168. In Costa Rica, the project contributes to the general objective of the National Fisheries and Aquaculture Development Plan that promotes productivity, competitiveness and the proper distribution of wealth in fishing activities. This plan was formalized in 2013, and defines the vision and key strategic directions to guide the fishing sector over the next 10 years. The project will contribute in particular to 6 of the 8 called “Structural Areas” (A. Research; B. Institutional strengthening; C. Management; D. International Management; E. Markets consolidation; F Fishery Infrastructure), and the “Oceanic fishery Operational Area” that seeks to recover and maintain populations of all species of pelagic fish, and to ensure the sustainability of this fishery resources for present and future generations, and to allow the development of responsible and competitive fishing. At present, the National Development Plan (2015-2018) for the new Administration is under development. However, it is anticipated that the project will contribute to Government´s pillar 1 “to boost economic growth and create more and better jobs”, and in particular to the objectives of Sector 3 rural and agricultural development, which includes fishery activities, and Sector 6 environment, energy and land use and marine spatial planning.

169. In Ecuador, the project contributes to Objective 10 of Ecuador’s national development plan, the “Plan Nacional del Buen Vivir” 2013-2017, “to incentive the transformation of the productive matrix”, an in particular policy 10.4 “to promote sustainable production and productivity and social inclusion and redistribution in the farming, aquaculture and fisheries sectors”.

170. In Indonesia, the project contributes to grandvision “Nawacita” of 1 and 8 of Indonesia Medium-Term Development Plan (RPJMN) 2015-2019. Grand vision no.1 focuses on role of government to secure the country sovereignity which including improving law enforcement to combat IUU fishing. Grand vision no. 8 focuses on ensuring economic stability and independency, including ensuring food security from fisheries such as improving management of fisheries area to ensure sustainability of fisheries stock, and development of maritime and marine-based economy

171. In Philippines, the project contributes to Chapter 4 of the Philippine Development Plan (2011-2016) - Competitive and Sustainable Agriculture and Fisheries Sector. In particular, Sector Outcome A: productivity in Agriculture and Fisheries sector increased, where strategies include increased investments in Research, Development and Extension (RD&E) through updated databases and information systems, strengthening of extension services through complementation of national, local and private sector entities. The project will also contribute to Sector Outcome B: forward linkage with the Industry and Services Sectors increased; wherein strategies will be implemented to promote value-adding of Agriculture and Fisheries products and agribusiness development; expanding existing markets and exploring new markets and linking farmers and fisherfolks to value-chains and commodity industry clusters.

PART III. RESULT AND PARTNERSHIPS

Project structure

172. The objective of the project is to mainstream sustainability into seafood supply chains through market and policy mechanisms and partnerships with the overarching goal of rebuilding and protecting fish stocks and livelihoods. This will contribute to mitigate overfishing and degradation of marine ecosystems. To do this, there will be a multilevel intervention of the seafood value chains of target fisheries in four countries. This in turn will generate knowledge and learnings that will be useful worldwide.

173. The project will be executed in 50 months. The entire project intervention will concentrate in four years, and the final two months will be used for project closure.

174. This project will generate six outcomes:

Outcome 1. Increased global market demand for sustainable certified marine commodities and associated reduction of IUU fisheries.

Outcome 2. Increased pressure on RFMOs and their Contracting Parties to adopt more sustainable and science-based practices for shark and tuna conservation and management measures through engagement of international value chains.

Outcome 3. Increased synergy and involvement of national and international players (i.e., retailers, traders, processors, fishermen and fisheries authorities) in sustainable seafood value chains.

Outcome 4. Increased sustainability scores of marine commodities purchased from project fisheries.

Outcome 5. Reliable and verifiable information of target marine commodities is publicly available and is used by value chain stakeholders for decision making and engagement in fishery improvement projects.

Outcome 6. Better knowledge management on mainstreaming sustainability into seafood value chains

175. Activities are arranged into four closely-integrated and interdependent components to deliver the set of interrelated outputs that collectively meet this challenge (3.5).

176. This is an inter-regional project, the components, outcomes and outputs described below will be delivered in collaboration among the five Implementing Partners -- MAG in Costa Rica, MAGAP in Ecuador, BAPPENAS in Indonesia, BFAR in Philippines and SFP as the Implementing Partner responsible for the international components and FIPs in Costa Rica, Ecuador and the Philippines. There will be an International Project Coordination Unit (IPCU) that will oversee the entire project. The members of the IPCU will be contracted with GEF resources.

Component 1. Promotion of global demand for sustainable marine commodities

177. This is a global component focused on increasing the number of major seafood buyers from the main international markets (i.e., EU, Japan, US) that demand and purchase seafood from sustainable sources (i.e., certified fisheries or credible FIPs). This in turn will contribute to increase the global demand for sustainable marine commodities. In August 2014 there were 270 seafood buyers (e.g., retailers, wholesalers, fish traders) that had internalised sustainable seafood purchasing policies (e.g., McDonalds, Tesco, Walmart). The project will engage at least 15 additional major buyers, with particular emphasis in buyers of tuna, sharks, mahi mahi, large pelagic fish, blue swimming crab, and octopus.

178. This component will be performed by SFP in coordination with the local fisheries authorities of the four countries, and with national project management teams. A Market Engagement Specialist will oversee and facilitate the activities of this component. This specialist will be contracted by SFP with counterpart resources. In addition, MSC will support market engagement through their ongoing programmes as in-kind co-financing.

Outcome 1. Increased global market demand for sustainable certified marine commodities and associated reduction of IUU fisheries.

179. To achieve this outcome the following outputs will be produced through the following activities:

Output 1.1. Improved seafood purchasing policies and targets to increase sourcing of certified goods of 15 major supply chain partners (retail and buyers) from EU, Japan and US which are following sustainability guidelines.

180. This is a delicate matter because it addresses corporate policies and decisions of seafood companies. SFP will work with existing partners (e.g., Walmart, ASDA, Tesco, Sainsbury's, McDonald's, Sobeys, and Publix) to strengthen their sourcing policies and purchase targets using the toolkit for sustainable seafood sourcing (see output 1.2). Though direct communication major buyers will be informed and "educated" into responsible sourcing. Major buyers will be approached through (1) seafood fairs[101] and meetings (e.g., Seafood Expo) in major markets, (2) sector group roundtables, (3) supplier roundtables, and (4) face to face meetings with major buyers (wholesale, retail) and processors. The intended target is that at least 15 major supply partners, mainly focused on the project target fisheries, strengthen their existing sourcing policies and increase their demand for sustainable seafood products.

[101] Information about responsible seafood sourcing will be presented and distribute in major events such as Seafood Expo Global, Seafood Expo North America, Seafood Expo Asia, and Boston Seafood Festival.

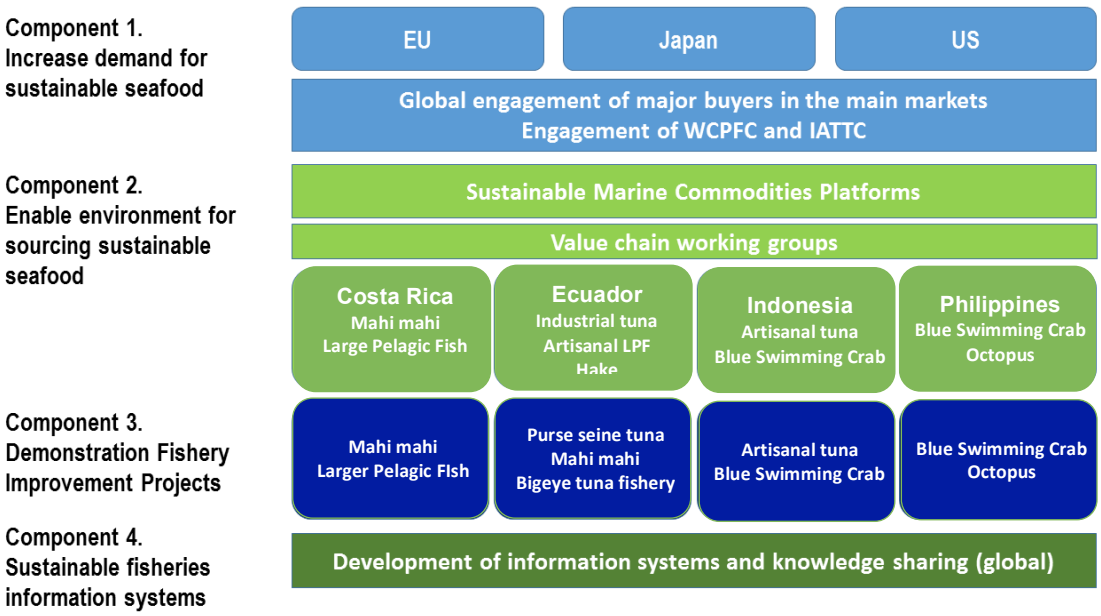


Figure 3.1. Project components and elements.

Output 1.2. Sustainable seafood sourcing policy guidance toolkit for retailers, wholesale buyers and processors.

181. Based on current experience and knowledge, a toolkit on sustainable seafood sourcing will be prepared for retailers, wholesalers and processors. The toolkit will provide guidance for the preparation and implementation of the corporate responsible sourcing policy. However, it is acknowledged that companies, while using these common resources and tools, will adapt them to their particular situation and corporate culture.

182. Key elements of the seafood sourcing policy will be:

a. To apply the FAO Code of Conduct for Responsible Fisheries

b. To adopt a model of continuous improvement (e.g., create and implement work plans to improve source fisheries rather than avoiding sourcing from them).

c. To engage peers in supply chain in continuous improvement efforts.

d. To include sustainability covenants and publish the policy online.

e. To use ratings and information systems in order to measure and monitor progress in responsible sourcing.

f. To request that the seafood supply sector implement traceability schemes and avoid seafood from illegal sources (IUU) and seafood fraud.

g. To prefer certified seafood products or products from reliable FIPs.

h. To consider the initial negative economic impact to fishermen from poorly managed fisheries and to incorporate positive incentives to motivate their engagement into responsible fishing.

i. To include considerations of ecosystem-based management, ENSO and climate change.

183. A draft will be prepared by SFP, submitted to a consultation process with key stakeholders, and finally published and widely distributed in electronic format. The toolkit will be available in, at least, English, Japanese and Spanish. All the activities of this output will be funded with GEF resources.

Output 1.3. At least 15 new supply chain partners from EU, Japan and US adopt purchase policies to incentivize sourcing only from fishermen and traders who provide sustainable seafood.

184. Market intelligence will be used to identify potential candidates, followed by a direct approach to provide information on responsible sourcing and present the toolkit. SFP will engage new partners through major seafood events, sector groups roundtables (tuna, BSC, LPF, whitefish), supplier roundtables, and face to face meetings with major buyers (wholesale, retail) and processors. GEF funds will be used to finance the Japan engagement specialist.

Outcome 2. Increased pressure on RFMOs and their Contracting Parties to adopt more sustainable and science-based practices for shark and tuna conservation and management measures through engagement of international value chains.

185. To achieve this outcome the following outputs will be produced through the following activities:

Output 2.1. At least four position statements of major international seafood buyers or their suppliers in support of more effective CMMs for tuna, sharks and LPF in IATTC and WCPFC.

186. SFP will establish long-term communication channels with major buyers of tuna and large pelagic fish from the Pacific Ocean. The project team will follow the array of meetings, processes and decisions of IATTC and WCPFC. This information will be compiled, systematised, and provided to major buyers to increase awareness and motivate interest in sustainable sourcing. There will be strong advocacy work with the major buyers to increase pressure on the RFMOs and their Contracting Parties to adopt science-based practices and conservation and management measures. The work will be closely coordinated with other international NGOs that also advocate sustainable tuna fisheries in the Pacific Ocean (e.g., ISSF, WWF), the UNDP/FAO/GEF project on Pacific Oceanic Fisheries Management[102] (GEF-ID 4746), and the FAO/GEF project Sustainable Management of Tuna Fisheries and Biodiversity Conservation in the Areas Beyond National Jurisdiction (GEF-ID 4581).

187. The target is that, during the 50 months of the project, major buyers issue at least four position statements requesting IATTC and WCPFC to adopt harvest control rules, reduce excess fishing capacity, regulate the use of FADs, improve management of bycatch, and develop management strategies for other pelagic fish that are exploited in the Pacific Ocean.

[102] The full Project name is “Implementation of Global and Regional Oceanic Fisheries Conventions and Related Instruments in the Pacific Small Island Developing States (SIDS)”. This is a second part of the Pacific Islands Oceanic Fisheries Management Project, which was implemented by UNDP with GEF funding.

Output 2.2. Draft regional management rules for mahi mahi presented to IATTC Scientific Advisory Committee

188. The lack of regional management has been a major constraint for the MSC certification of the mahi mahi fishery in the EPO. Currently there are ongoing mahi mahi FIPs in Ecuador, Panama and Peru. Therefore, GEF resources will be used to support the IATTC process to perform a regional stock assessment and to develop regional management rules for mahi mahi. The first technical meeting of this process will be held in Manta (Ecuador) on October 2014[103]; the process is expected to last at least three years and will require a number of additional workshops.

189. The project will support the participation of Costa Rican and Ecuadorian delegations in the technical meetings, including groundwork (i.e., preparatory meetings[104], travel expenses, technical advice). In addition, GEF funds will be available to co-sponsor regional technical meetings in Costa Rica and Ecuador[105]. The results of the meetings and the advances will be summarised and provided to major mahi mahi retailers, buyers and processors in Costa Rica, Ecuador and the US to increase awareness and motivate support for sound management rules. Also, SFP will maintain permanent education work with major US buyers and retailers. It is expected that a draft document with management rules will be ready by year 3, to be analysed by the IATTC Scientific Advisory Committee[106]. The project cannot guarantee that the Commission will issue management decisions for mahi mahi until year 4.

Component 2. Enabling environments for sustainable marine commodities supply chains

190. This component will be executed locally. It is focused on the design and development of sustainable marine commodities platforms in Costa Rica, Ecuador, Indonesia and Philippines. The purpose of the platforms is to convene and coordinate the public and private sectors to promote sustainable production of specific marine commodities and changes in the policy context. The platforms will have fishery specific working groups in each country (Figure 3.1) with technical assistance from the UNDP Green Commodities Programme.

191. A Global Fisheries Platform Advisor will oversee and guide the activities of this component. This specialist will be contracted by UNDP with GEF resources.

Outcome 3. Increased synergy and involvement of national and international players (i.e., retailers, traders, processors, fishermen and fisheries authorities) in sustainable seafood value chains

192. To achieve this outcome the following outputs will be produced through the following activities:

[103] https://www.iattc.org/Meetings/Meetings2014/OCT/1stTechnicalMeetingDoradoENG.htm

[104] These could be meetings of public and private stakeholders on each country and on-line meetings between Costa Rican and Ecuadorian delegations.

[105] The IPC will ensure that all events sponsored by the project comply with the UN guidelines for green meetings and sustainable events (UNEP, 2009; UNEP, 2012).

[106] The Scientific Advisory Committee was established by the Antigua Convention (article XI), and is composed of one representative designated by each member of the Commission.

Output 3.1. National sustainable marine commodities platforms established in 4 countries to assist suppliers and buyers to coordinate planning improvements in the environmental performance of target supply chains.

193. In Indonesia, there will be three working groups based on two commodities (Tuna and Blue Swimming Crab) and cross-cutting issues. The project will take specific provisions to ensure that non-associated fishermen are adequately represented and actively participate in the national platform activities.

194. In each country a National Platform Coordinator and a Partnership Advisor (in Indonesia, a Marine Commodities Supply Chain Advisor), both contracted by each Implementing Partner, will facilitate the design and development of the platforms. These posts will be funded with GEF resources during the first three years of the project. It is expected that afterwards the management of the platforms will be institutionalised in each country (except in the case of Indonesia, which plans to keep these positions for the fourth year as more activities will be implemented nationally).

195. With GEF resources in-depth sector analyses will be prepared in each country[107]. These analyses will be the basis for the design of the platforms. The specific stakeholders will be approached and invited to integrate the platforms. The project will take specific provisions to ensure that non-associated fishermen are adequately represented and actively participate in the process. There will be information meetings and training workshops[108]. In each country there will be at least the following training workshops: (i) sustainable seafood value chains, (ii) sustainable seafood certification, (iii) introduction to fisheries improvement projects, (iv) seafood traceability systems, (v) measures to deter IUU and seafood fraud, (vi) MSC standards for sustainable fishing and chain of custody, (vii) effects of climate change on fisheries, and (viii) effects of ENSO on fisheries. Each platform will have fishery specific working groups:

Costa Rica:	Mahi mahi and large pelagic fish.
Ecuador:	Industrial fisheries for tuna, artisanal fisheries for large pelagic fish, and hake.
Indonesia:	Tuna and blue swimming crab.
Philippines:	Blue swimming crab and octopus.

196. With assistance of the project the stakeholders of each platform will prepare and adopt a five years strategic plan. Key elements to address during the preparation phase will be (i) the possible negative initial impacts of entering into responsible fishing and sourcing, (ii) the probable effects of ENSO and climate change on the fisheries, and (iii) sustaining the platform in the long-term[109]. The project will provide initial support during the start-up (e.g., market information, meetings with international major buyers, training). The project will

[107] These analyses will include the identification of the initial negative impacts to fishermen and the value chain that might be generated by embarking into responsible fishing (e.g., reduction of income or landings).
[108] The IPC will ensure that all meetings and training events comply with the UN guidelines for green meetings and sustainable events.
[109] The platform will require, at a minimum, a facilitator / coordinator and funding for hosting meetings and technical advisory services.

monitor and assess the development of each platform. The learnings will be documented and disseminated (see component 4).

Table 3.1. Sustainable fisheries action plans to be prepared and the corresponding source of funding.

Country	SFAP funded by GEF	SFAP funded by national counterpart
Costa Rica	Large pelagic fish.	None
Ecuador	Mahi mahi[110] Purse seine tuna fishery Bigeye tuna artisanal fishery	Hake
Indonesia	Blue swimming crab	Artisanal tuna fisheries[111]
Philippines	Octopus.	Blue swimming crab[112]

Output 3.2. Sustainable fisheries action plans (SFAP) in place for best practices in fish harvesting in at least 8 fisheries

197. The project will facilitate the preparation of 10 sustainable fisheries action plans that will be officially adopted by the corresponding NFA. Seven plans will be prepared with GEF resources (Table 3.1). Each action plan will be prepared by a working group formed by stakeholders of the corresponding platform[113]. In each case, a specialist will be hired to prepare a situation analysis of the fishery and the corresponding value chain[114]. Based on this diagnostic a participatory planning process will be developed to prepare the SFAP. The plan will be based on the FAO Code of Conduct for Responsible Fisheries[115] (FAO, 2011) and will implement the precautionary approach to fisheries management. Ecuador has extensive experience in the preparation and implementation of SFAPs that could be used for South-South Cooperation.

198. The plan will be validated with the stakeholders and finally adopted by the NFA[116]. Implementation, in all cases, will be funded with counterpart resources.

199. Ecuador, Indonesia and Philippines already have action plans for mahi mahi (SRP, 2011), tuna (MMAF, 2012) and BSC (BFAR, 2013). In these cases, the project will invest GEF resources to have an external independent performance evaluation of each plan and, based on these results, to update the corresponding instrument. The project, using GEF resources, will monitor and assess the implementation of each SFAP. The learnings will be documented and disseminated (see component 4).

[110] Update of existing plan (i.e., PAN-Dorado).
[111] Update of the corresponding part of the existing plan (i.e., Indonesia National Tuna Management Plan).
[112] Update of existing plan (i.e., The Philippine Blue Swimming Crab Management Plan).
[113] In the case of Indonesia, BSC working groups will develop BSC action plans as well as management unit of BSC to manage harvest control rules.
[114] The situation analysis must include (i) the probable negative initial impacts to be generated by embarking into responsible fishing and sourcing, (ii) the known effects of ENSO on the fishery, and (iii) the foreseeable effects of climate change.
[115] The Code of Conduct for Responsible Fisheries was adopted on 31 October 1995 by the FAO Conference.
[116] The SFAPs will be public and accessible through the grid of websites of the project.

Component 3. Demonstration fisheries improvement projects (FIP)

200. This component will focus on the design and implementation of FIPs to allow platform stakeholders to gain practical experience in fisheries improvement and to increase the supply of sustainable seafood products. In addition, experience and learnings of FIPs will be documented and disseminated worldwide.

201. This component will be executed by SFP (which has specialised expertise on FIPs and market engagement) in coordination with the local fisheries authorities and the corresponding SMCP, in the case of Costa Rica, Ecuador and the Philippines. In the case of Indonesia, this component will be executed by the project team under direct supervision of the BAPPENAS. A Fisheries Improvement Specialist will oversee and facilitate the activities of this component. This specialist will be contracted by this Implementing Partner with counterpart resources for three of the participating countries (Ecuador, Costa Rica and the Phillipines). In Indonesia, two FIP Facilitators will be hired to oversee the activities for each of the FIPs in the country. In addition, MSC will have a subcontract to provide training on fisheries certification to fisheries officials, fishermen, fish traders and processors in each of the four countries.

202. In Costa Rica, Ecuador and the Philippines, a National FIP Coordinator (contracted by SFP)) will facilitate the design and development of the FIPs. Theses posts will be funded with GEF resources during the first three years of the project. It is expected that afterwards the management of the FIPs will be industry driven. In the case of Indonesia, the FIP facilitators (contracted by UNDP using GEF resources) will also undertake these roles, for four years.

Outcome 4. Increased sustainability scores of marine commodities purchased from project fisheries.

203. To achieve this outcome the following outputs will be produced through the following activities:

Output 4.1. Updated guidelines for developing responsible FIPs and progress classification instrument (tracking tool).

204. The existing instruments used to measure the advance of FIPs have major limitations and need to be updated. For example, the Filipino BSC fishery is currently rated “A” exceptional progress, but there has been minor advance in implementing appropriate management measures.

205. In the first year of the project, using GEF resources the existing instruments will be evaluated to clearly identify its limitations. Then an updated version of the guidelines and tracking tool will be prepared and tested[117]. The draft instruments will be submitted to a consultation process with key stakeholders, and finally published and widely distributed in electronic format. The updated guidelines and tracking tool will be available in, at least, English and Spanish.

[117] The PHI BSC fishery will be one of the FIPs used for validation.

Output 4.2. Implement at least 9 FIPs amongst the four countries[118].

206. The project will work with 9 FIPs (Figure 3.1). In the case of the four ongoing FIPs[119], GEF resources will be invested to perform external independent evaluations and to update the FIP plans[120][121]. A common methodology for assessing the socio-economic performance of a fishery, focusing on the livelihoods of fishers and wellbeing of fishing communities, is being developed by SFP and will be used by the project to guide a standardized National FIP Coordinators implementation of this analysis across all project fisheries.

207. In the case of the five new FIPs[122], the project will facilitate that the value chain stakeholders (including major buyers) establish an agreement to implement the improvement project. The agreement will indicate the responsibilities of the parties, as well as the expected results and performance indicators. Then, using GEF resources, a MSC pre-assessment and a FishSource profile will be prepared. Finally, the FIP plan[123] will be prepared and adopted by the stakeholders. The FIP plan will be publicly available.

208. In all cases, during the entire project, FIP stakeholders will receive training and technical support to enable an improved understanding of FIPs and the certification process. The project will take specific provisions to ensure that non-associated fishermen, fish traders and processors are adequately represented and actively participate in the FIP process. Training on the MSC standards for fisheries and chain of custody will be provided by the Marine

[118] In Indonesia, the FIP will be organised per product. The work on Tuna will be built based on previous experiences. As Indonesia has no MSC certified fisheries, but there are on going FIPs and several institutions facilitate the process to get the MSC, therefore this project will contribute to assess the bottleneck and challenges in improving the FIPs. The project will invite the participation of organisations who have on going FIPs to be assessed. The project will also contribute to address bait problem for pole and line fishing method. As Pole and line fishing method is one possible fishery to get MSC, however no tuna from pole and line is certified by MSC. One reason is that MSC requires fisheries management in place which beyond individual institution intervention, including bait management which has been major problem in pole and line fishing method. More integrated approach is needed, therefore this project will address this issue as one step to enter the MSC. The study will be conducted by P4KSI as the agency for marine research center with support from NGOs such as WWF Indonesia, MdPI, and SFP.
Similarly, BSC will conduct a study on harvest control rule by P4KSI, marine Research Center of MMAF. The study will support to enter MSC certification. Possible locations are: Lampung, North Java and Kendari. The result of the study will recommend on the Rules and management plan of BSC. This project will ensure the participation of relevant stakeholders and the results benefit wider stakeholder. With all of these, finally, the number of MSC certified fisheries is expected to increase during the project.

[119] The ongoing FIPs are: ECU - mahi mahi, IDN – tuna and BSC, PHI – BSC.

[120] The updated plans will include provisions to address the probable social and economic costs for fishermen that adopt responsible fishing. A methodology for assessing the socio-economic performance of a fishery, focusing on the livelihoods of fishers and wellbeing of fishing communities, is being developed by SFP. An initial experimental version of this methodology will be used in the first three or four months of the project to create a very preliminary socio-economic baseline for the targeted fisheries, which will then be used to help assess the socio-economic impact of fishery improvement efforts and management policies on fishers and whether mitigation strategies should be developed to address this impact.

[121] As Indonesia will work under a different logic, it will not create/update the FIP plans as described here, but FIP facilitators will prepare alternative planning instruments based on the existing FIP plans. Performance evaluations will be carried out as in the other countries in years 2 and 4.

[122] The new FIPs to be designed and launched are: CRI – tuna and mahi mahi, ECU – BET and PST, PHI – octopus.

[123] The FIP plan will be based on the FAO Code of Conduct for Responsible Fisheries and will apply the precautionary approach to fisheries management. The plan will also include provisions to address the trade-offs faced by fishermen when adopting responsible fishing (e.g., initial reduction of catch and income). The FIP plan will be public and accessible through the grid of websites of the project.

Stewardship Council under a subcontract with SFP. Training on FIPs and the updated guidelines and tracking tool will be provided by Sustainable Fisheries Partnership[124].

209. GEF resources will be invested for launching the new FIPs, however it is expected that the improvement projects will become fully funded by the industry. SFP will advocate to the major buyers of the target fisheries to invest in FIP implementation.

210. The project will monitor FIP implementation and prepare progress reports that will be publicly available. The sustainability scores of the FIPs are expected to increase during the project. It is predictable that by year 3 al least three FIPs are rated A, using the SFP progress rating system, and that by the end of the project at least eight FIPs are rated A. In addition the FishSource scores of the fisheries are expected to increase[125]. It is estimated that by year 3 at least 50% of the target fisheries have increased their scores and that by the end of the project at least 80% fisheries have increased their scores.

211. Finally, the number of MSC certified fisheries is expected to increase during the project. At the moment none of the project target fisheries have MSC certification (Annex 1). The Ecuadorian mahi mahi FIP is very advanced and is it expected to enter MSC full assessment in 2015. However, the major limitation for certification is the lack of a regional management system (see output 2.2). For those fisheries interested in MSC certification, the Marine Stewardship Council will provide support to enter fishery assessment. It is estimated that by year 3 at least 2 fisheries will have entered the MSC process[126] and that by the end of the project an additional fishery will have entered the process.

Component 4. Sustainable marine commodities information and knowledge management systems

212. This component will concentrate on (1) facilitating access to reliable information to value chain stakeholders in support of sound decision making, and (2) capturing, documenting and disseminating the learnings of the project

213. This is an international component which will be executed by SFP[127], which has specialised expertise on fisheries information management, in coordination with local fisheries authorities and value chain stakeholders, in Costa Rica, Ecuador and the Philippines. In Indonesia, this component will be managed by the PMU. A Communication Specialist and a Monitoring & Reporting Specialist will be hired to oversee and facilitate the activities of this component. This specialist will be contracted by this Implementing Partner, with GEF resources.

214. The project will use a grid of platforms to facilitate information access to value chain stakeholders. The grid is composed by FishSource, Metrics, FIP Directory, MSC website, GCP website, MMAF and BAPPENAS website, the project website and IW LEARN. The project website will have individual webpages for each SMCP and their corresponding fishery-specific working groups.

[124]The project will ensure that all meetings and workshop comply with the UN guidelines for green meetings and events.
[125] The baseline FishSource scores will calculated at the beginning of year 1.
[126] Meaning that the fishery has either (i) entered the process, (ii) is undergoing the process, or (iii) has been certified.
[127] Except in the case of Indonesia.

Outcome 5. Reliable and verifiable information of target marine commodities is publically available and is used by value chain stakeholders for decision making and engagement in fishery improvement projects.

215. To achieve this outcome the following outputs will be produced through the following activities:

Output 5.1. Profiles of all project target fisheries are developed and maintained in fisheries sustainability databases.

216. SFP has profiles of about 1,800 fisheries in its database, this information is publicly accessible through FishSource. Metrics is a private system used by companies to support their purchasing decisions and track their targets. For this project, SFP will run a gap analysis to identify information needs for the target fisheries. In the case of Indonesia, the PMU team will support development of the profiles and share to Fishsource in accordance to the FishSource standard. Profiles will be prepared and published on FishSource. In addition, SFP will install Metric on each company that participates in the project FIPs and train the users to make the best use of the tool.

217. The fishery profiles, and the corresponding FishSource scores and FIP ratings (using the updated progress classification instrument, see output 4.1), will be frequently updated. The level of satisfaction and quality level of the profiles will be measured as part of a continuous improvement strategy.

Output 5.2. Scientific working groups for key commodities (BSC, mahi mahi, BET, ITF, octopus) are created, SFP coordinators appointed, and work plans implemented in support of expert networks.

218. SFP has successfully created sector-based scientific working groups to carry out profile development for salmon and shrimp and will use the same approach in the present project. Also, SFP has learned that any database useful for and trusted by both researchers and industry cannot be sustained through voluntary (free of charge) contributions. It requires funding the right experts to compile and manage the data. Therefore, GEF funds will be invested to establish the seven working groups corresponding to the target fisheries and sustain their work until the fourth year of the project. Afterwards, the scientific working groups will be funded with counterpart funds. In the case of Indonesia, the two targeted fisheries will work under National Fisheries Platform, managed by PMU team.

Output 5.3. Information systems tailored to help industry stakeholders adopt proper procurement policies, provide them with advice on improvement actions in problematic fisheries, and track improvements being made toward set goals (i.e., FishSource, FIP Directory, project website).

219. SFP will identify specific information needs of stakeholders of the target fisheries in Costa Rica, Ecuador and Philippines. Three audiences will be evaluated: scientists, industry and general audience. Based on the former results, the protocols for information gathering, validation and publication will be adjusted to tailor information to the specific needs and formats required by the stakeholders. Then, the protocols will be implemented to facilitate relevant and reliable information through FishSource, project website and FIP Directory. Using GEF resources the fishery profiles and FIP information of the target fisheries will be translated to Bahasa Indonesia and Spanish to facilitate access to local audiences.

Indonesia PMU Team will ensure development of information system in coordination with global project team and partners.

Outcome 6. Better knowledge management on mainstreaming sustainability into seafood value chains.

Output 6.1. Best practices documented and experiences shared with other projects to incentivize change in other fisheries through IW:LEARN and project website.

220. All the activities of this output will be funded with GEF resources. In the first trimester of year 1 a bilingual (i.e., English and Spanish) project website will be established. The project website will have linkages and interaction with the following online platforms: IW:LEARN, Green Commodities Programme, Sustainable Fisheries Partnership, Marine Stewardship Council, FIP Directory, the Costa Rican Institute for Fisheries and Aquaculture, the Viceministry of Aquaculture and Fisheries of Ecuador, The Ministry of National Development Planning (Directorate of Marine and Fisheries) of Indonesia, and the Bureau of Fisheries and Aquatic Resources of Philippines. The project website will have specific webpages for each SMCP and their corresponding working groups.

221. The project learnings and best practices will be documented and distilled in years 2 and 4 following the strategy[128] outlined in Figure 3.2. In the last trimester of year 2, national two-day workshops will be organised in each country. The stakeholders of the SMCPs and FIPs will participate in these workshops to document advances, best practices and lessons. The memoirs of the workshops will be translated to English and Spanish for the benefit of a wider audience and published in the project website. Then, the results of the national workshops will be presented in one-day online regional workshops (i.e., America and Asia). These workshops will allow the exchange of experience among stakeholders and to identify commonalities in best practices and lessons. The memoirs of these workshops will also be translated to English and Spanish and published in the project website. Also, a one-day international online workshop will be held to present regional findings, exchange experiences and document best practices and lessons. This workshop will have simultaneous translation to facilitate participation of all the stakeholders. The memoirs of the international workshop will be in English, with an extended summary in Spanish to facilitate access to local audiences. Finally, one page communication briefs will be prepared, in Spanish and English, to share specific best practices and lessons. The briefs will be in electronic format and will be widely disseminated. In addition, it will be translated in Bahasa Indonesia and printed for selected target beneficiaries.

222. In the last trimester of year 2 a mid-term external evaluation will provide additional insights about the learnings of the project.

223. In the third trimester of year 4 a similar step-wise process will be conducted to document the project learnings.

224. Finally, in the last trimester of year 4, based on the results of the strategy (Figure 3.2), the project team will prepare three electronic publications documenting the experience, best practices and lessons in the fields of sustainable seafood value chains, SMCP, and FIPs. The proposed titles are:

[128] The IPC will ensure that all meetings and workshops comply with the UN guidelines for green meetings and sustainable events.

a. The role of the wholesale and retail sector in promoting sustainable seafood value chains.

b. Sustainable Marine Commodities Platforms: lessons from America and Asia.

c. Fisheries Improvement Projects: lessons from America and Asia.

225. The publications will be in English with extended summaries in Bahasa Indonesia, Spanish and Tagalog. Complementarily, one page communication briefs will be prepared to share specific best practices and key lessons. The briefs will also be in the three languages and will be widely distributed worldwide.

226. The workshop memoirs, evaluation reports and publications will be publically available through a network of platforms (Figure 3.3).

227. The International Project Coordinator will present project learnings in the International Water Conferences (i.e., IWC10 and IWC11). With GEF resources the project will cover the participation of one delegate from each country to these conferences.

Project Indicators, Risks and Assumptions

228. The project has established a set of indicators that are detailed in the Section II of the present document. The expected long-term global impact will be a reduction in the number of overfished marine stocks caused by a major swift in the value chains towards sustainable seafood. In the mid-term this change could be seen in an increase of certified fisheries, the main proxy is MSC[129] certified landings.

229. Most indicators are outcome indicators, but measuring them is a complex exercise. Outcomes 5 and 6 have mainly process indicators also because measuring improvements in information access and knowledge management is difficult.

230. The project risk table was revised during project preparation. The updated Risk Matrix is attached below (Table 3.3).

Incremental Reasoning and Expected Global, National and Local Benefits

231. This project will result in global environmental benefits in the form of improved management of finite fishery resources. The project will contribute to a transformation of the market and to pull the seafood value chain into responsible sourcing. Positive market leverage will motivate improved fisheries management and therefore will reduce pressure on marine biodiversity (Figures 1.7, 2.1, 2.2., 2.3 and 2.4). The project will also contribute to improve fisheries in areas of high conservation value like the Coral Triangle (Selig et al., 2014). Furthermore, the project will contribute to the development of CMMs for mahi mahi in the EPO. This could have a high impact because the approval of management measures for this species will facilitate MSC certification of mahi mahi fisheries in several countries. Finally, the learnings generated by the project will be replicable and useful worldwide.

232. At the national level, the project will contribute to mainstream sustainability into key seafood value chains, strengthen public – private dialogue and collaboration, and motivate policy changes in support of sustainable fisheries administration. For Costa Rica this will be

[129] Taking into account that the MSC standard is the major certification scheme available at the moment.

the first experience with FIPs and fisheries certification. In Ecuador, Indonesia and Philippines the project will contribute to improve management of highly valuable fisheries like tuna, mahi mahi and blue swimming crab.

233. At the local level, fishermen will benefit from access to a growing market, long-term alliances with seafood chain stakeholders and, in the mid-term, an increased harvest.

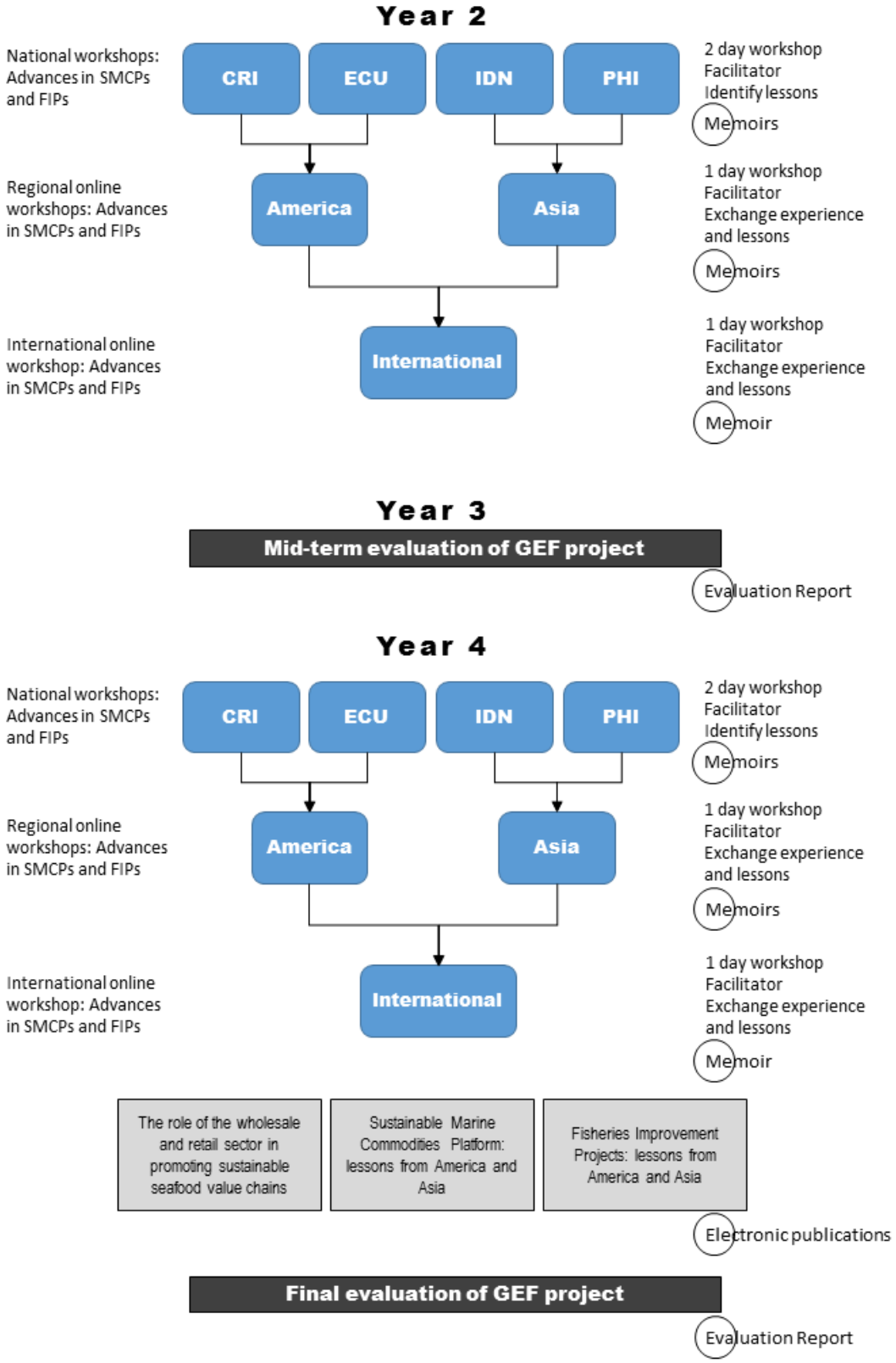


Figure 3.2. Strategy to document and capture learnings and best practices.

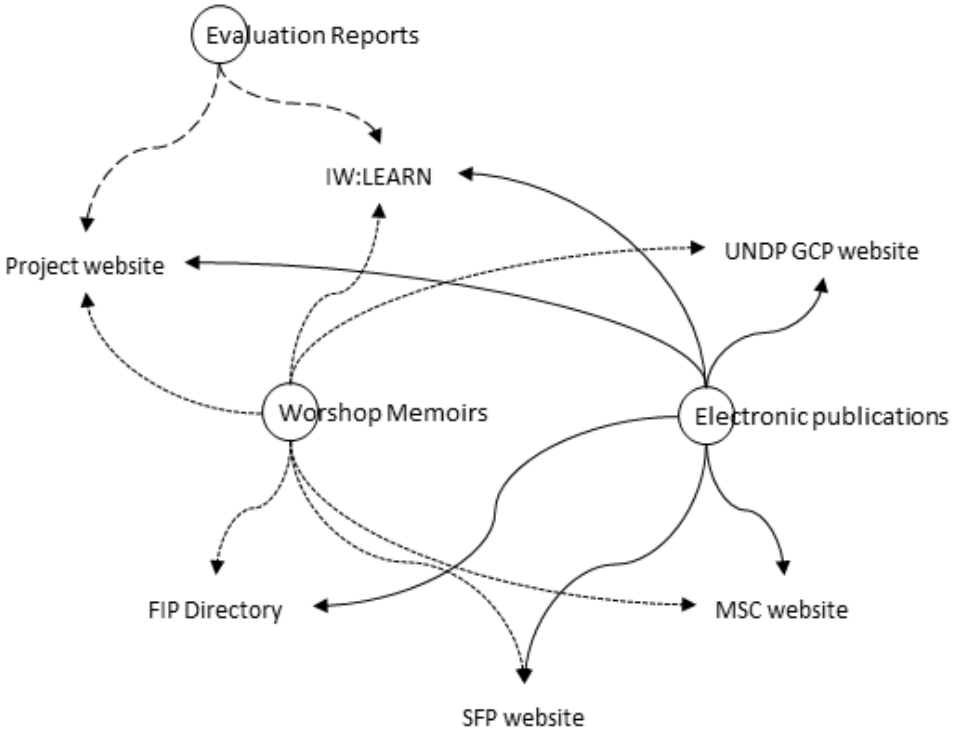


Figure 3.3. Network of electronic platforms to be used to disseminate the best practices and learnings of the project.

Table 3.3. Risks and Proposed Mitigation Measures to the project.

Risks	Rating	Risk mitigation strategy
NATURAL. The ENSO. It is well documented that the warm and cold phases of the ENSO strongly affect the fisheries of the four countries. The chance of an El Niño 2014-2015 was 65% on 07 August 2014. It is very probable that an ENSO will develop during project implementation. This will affect the availability of key species like tuna and mahi mahi, therefore influencing the interest of the stakeholder to continue participating / investing in the SMCP and FIPs. Also, El Niño may damage vital infrastructure in coastal areas.	High	At the start of the project the situation will be assessed and the work plan will include provisions in case of an ENSO. The project has mainstreamed this topic in seafood sourcing policies, marine commodities platforms and FIPs. In case of an ENSO, the project will motivate the stakeholders to include mitigation measures in their plans and activities.

Risks	Rating	Risk mitigation strategy
POLITICAL. Changes in political administrations in target countries affect the continuity of the national platforms, strategy development, and implementation of joint action plans.	Medium	All the countries will have elections during project implementation[130]. The project will strengthen cooperation mechanisms among stakeholders to ensure continuity during transition periods.
NATURAL. Climate change. Between 1970 and 2004, sea surface temperature around the planet rose between 0.2-1.0 ^{o}C with a mean increase of 0.6 ^{o}C. The pH of world oceans has decreased by 0.1 units. The tropics and eastern boundary upwelling ecosystems such as the Humboldt Current System are among those ecosystems that are particularly vulnerable to changes in pH. These trends may affect migration patterns of pelagic species (like tuna, mahi mahi and LPF) and primary productivity.	Medium	It is not foreseen that in the following five years climate change will dramatically modify the target fisheries. However, the project has mainstreamed this topic in seafood sourcing policies, marine commodities platforms and FIPs. The project will motivate that the value chain stakeholders include climate change in their plans and decisions.
SOCIAL. Fishermen and processors in developing countries do not perceive advantages in certification	Medium	It is known that certification, in general, does not command a price premium. The project will provide information and training on sustainable seafood certification to support informed decisions. Also the project will support the use of credible FIPs as a mechanism to establish commercial links among the members of the seafood chain.
POLITICAL. Limited interest by WCPFC and IATTC to adopt stronger CMMs for tuna, sharks and large pelagic fish. Decision making is a very political and complex process in both tuna RFMOs.	Medium	The project will bring to the table some of SFP's major retail partners to work with RFMOs and their Contracting Parties in order to create and adopt more effective CMMs for both target and non-target species, and to enhance data collection efforts. The project will coordinate efforts with other entities that advocate stronger CMMs like ISSF and WWF.
POLITICAL. Limited interest by national fisheries authorities to strengthen fisheries monitoring, and advance in stock assessment, regulations and policies, and fisheries control and enforcement.	Medium	The project will maintain permanent communication with the NFAs to motivate support for improved fisheries management of the target fisheries. Also, the project will motivate major buyers to request more effective CMMs. Finally, the project will coordinate efforts with other entities that advocate improved fisheries management in the participating countries.

[130] Costa Rica just had elections in 2014, and will have the next elections in 2018. Ecuador will have elections in 2017. Indonesia just had elections in 2014 and will have the next elections in 2019. Philippines will have elections in 2016.

Risks	Rating	Risk mitigation strategy
SOCIAL. Limited motivation to share information between institutions in public and private sectors at national levels[131]	Medium	The project will strongly promote open collaboration to create trust among the stakeholders. Signed agreements will be used to guarantee information flow and property (when applicable).
SOCIAL. Reduction of the global demand for seafood	Low	The demand for seafood has continued to grow despite the increase in prices. The project cannot influence the world demand for seafood.
SOCIAL. Major buyers and retailers show little knowledge or interest in changing purchasing policies for marine commodities.	Low	The current trend is that major buyers and retailers from developed countries are making strong commitments to purchase sustainable seafood. In component 1, the project will implement a major effort to engage new major buyers. A key message will be that to stay in business it is necessary to establish long-term partnerships with their suppliers and to have a sustainable source of seafood.
SOCIAL. FIPs, partnering buyers with fishers, fail to make the latter incorporate best practices.	Low	The project will incentivize buyers to offer increasingly good price premiums and enhance market access to those fishers who may adopt changes towards sustainable harvesting. It will also encourage fish buyers to avoid purchasing from exporters who are suspected of trading IUU fish or incur in seafood fraud.
POLITICAL. The current commitment to cooperate at national level is diminished.	Low	The project will aim to mediate existing conflicts between marine commodities supply chain stakeholders and public institutions to ensure long-term cooperation and joint action to increase adoption of best practices in the harvesting of target fisheries. Also, the project will work to facilitate, and increase, when appropriate, cooperation between the agencies responsible for biodiversity protection (e.g., ministries of the environment) and national fisheries authorities in each country.

[131] It is well known that access to relevant and reliable information is a key request of value chain stakeholders to support their day-to-day and strategic decisions. However, it is common that public and private actors are reluctant to share their information.

Coordination with other GEF related initiatives

234. Of particular importance will be coordination with the following initiatives:

235. The project will seek to use the results of the UNDP/GEF funded project Sulu-Celebes Sea Sustainable Fisheries Management Project (GEF-ID 3524) under implementation with Indonesia, Malaysia and Philippines in the Coral Triangle. Of particular interest will be the Transboundary Diagnostic Analysis to identify the priority actions that are relevant for the target fisheries.

236. The project will be implemented in coordination with the FAO/GEF funded project Sustainable Management of Tuna Fisheries and Biodiversity Conservation in the Areas Beyond National Jurisdiction (GEF-ID 4581) under implementation in the five tuna RFMOs. Of particular interest will be that:

a. The current project promotes that major buyers pressure IATTC and WCPFC to adopt the measures of the regional action plans[132] to be prepared by the FAO/GEF initiative.

b. The work in Costa Rica, Ecuador and Indonesia incorporate the advances in bycatch mitigation in tuna fisheries to be developed by the FAO/GEF initiative.

c. The current project makes sure that training activities do not duplicate those of the FAO/GEF initiative.

237. The project will establish coordination with the recently approved regional UNDP/FAO/GEF funded project Implementation of Global and Regional Oceanic Fisheries Conventions and Related Instruments in the Pacific Small Island Developing States (SIDS) (GEF-ID 4746) to be implemented in countries[133] of the WCPFC. Of particular interest will be:

a. The development of ecosystem-based CMMs for tuna and non-target species in the WCPFC.
b. The broad multi-stakeholder involvement into sustainable oceanic fisheries management.

238. The project will establish synergies and linkages with the recently approved UNDP/GEF funded project Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas (GEF-ID 5393) to be implemented in Indonesia, Philippines, and Vietnam. Of particular interest will be:

a. The mainstreaming of climate change concerns into national fisheries policy in Indonesia and the Philippines.

b. The work with market-based approaches to promote sustainable tuna fisheries. Coordination will be crucial because this new initiative will also promote fisheries improvement and certification.

c. The development of a regional knowledge platform. It will be necessary to link the efforts of both projects on this field to ensure that information, best practice and lessons are easily accessible.

[132] The regional action plans will contain conservation and management measures, harvest control rules and reference points for priority stocks.
[133] Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.

239. The project will coordinate with the recently approved UNEP/GEF funded project Establishment and Operation of a Regional System of Fisheries Refugia in the South China Sea and Gulf of Thailand (GEF-ID 5401) to be implemented in Cambodia, Indonesia, Philippines, Thailand, Malaysia and Vietnam. An initial action will be to identify the relationship of the fisheries refugia with the target fisheries of the present project to establish synergies.

240. The project will also coordinate with the proposed Conservation International/GEF funded project Improving mangrove conservation across the Eastern Tropical Pacific Seascape (ETPS) through coordinated regional and national strategy development and implementation (GEF-ID 5771). An initial action will be to identify linkages with target fisheries in Costa Rica and Ecuador to establish collaborations.

241. The proposed project will coordinate closely with FAO-led global program Coastal Fisheries Initiative, which is a program (GEF-ID 9060) that has pilot projects in Indonesia (GEF-ID 9129) and in Peru & Ecuador (GEF-ID 9124), as well as with the also FAO-led global program "Sustainable fisheries management and biodiversity conservation of deep-sea living marine resources and ecosystems in the areas beyond national jurisdiction (ABNJ)" (GEF-ID 4660), and the project "Enabling transboundary cooperation for sustainable management of the Indonesian seas" (GEF-ID 5768) . The FAO-led global programmes are of relevance to two of the four country interventions proposed in this program (Ecuador and Indonesia), while the ABNJ is relevant for the entire project and the four participating countries and the Indonesian seas is pertinent to what the Global Marine Commodities is proposing for Indonesia. There is complementarity and no duplication between the proposed GMC project and the FAO programs as the latter are focusing on either i) finding a new paradigm for coastal fisheries management, or ii) to support the development, management and sustainability of deep sea fisheries and associated biodiversity conservation in the ABNJ; or iii) facilitating the implementation of ecosystem approaches to fisheries management in Indonesia, while the proposed UNDP project is focusing on mainstreaming sustainability into seafood supply chains through market and policy mechanisms and partnerships with the overarching goal of rebuilding and protecting fish stocks and livelihoods.

Sustainability

Environmental sustainability

242. The project incorporates the precautionary approach to fisheries management in key elements like the seafood sourcing policy guidelines, the sustainable fisheries action plans, and the FIPs. Processors and fish traders have to comply with the environmental requirements of their respective countries.

Social sustainability

243. The project incorporates a participatory approach and has maximized the involvement of all the stakeholders of the seafood value chains. The project will take provisions in each country to ensure that non-associated fishers, fish traders and processors are adequately represented and actively participate in the sustainable marine commodities platforms and the FIPs. Also, to prevent a language barrier, the fishery profiles and FIP information of the target fisheries will be available in English and Spanish to facilitate access to local

audiences. Project publications will be in English with extended summaries in Bahasa Indonesia, Spanish and Tagalog.

Institutional sustainability

244. The project is anchored on the national fisheries authorities of the four countries. The commitment of the NFAs is reflected in their contribution of important resources to co-finance the project. In addition, project activities will contribute to strengthen the role of the NFAs, but will also include participation of other actors of the national institutional framework that are part of the seafood value chains.

Financial sustainability

245. GEF resources will be used to fund strategic actions. Major endeavours, like increase market engagement and provision of information to stakeholders, will continue with their existing financing mechanisms. The running of the sustainable marine commodities platforms will be institutionalised on each country and the FIPs will be designed to be funded by the industry.

Replicability

246. The project is highly replicable. The GEF funding has been strategically allocated to activities that have a high potential for triggering catalytic effects. Also, the project incorporates specific actions to document and to disseminate worldwide the best practices and learnings (see outcome 6). The lessons learned will have immediate application worldwide in a range of contexts.

PART IV. PROJECT MANAGEMENT

Cost Effectiveness

247. The project will ensure cost-effectiveness of the GEF resources by:

a. Allocating GEF funds to deliverables that are strongly catalytic such as:

   i. The preparation of a toolkit to facilitate the preparation and implementation of sustainable seafood purchasing policies,

   ii. The update of guidelines for developing credible FIPs and the tools for measuring FIP progress, and

   iii. Electronic platforms to facilitate the access to key information to support informed decision-making.

b. Building on the learnings from the current practice on responsible sourcing, public-private sustainable commodities platforms, fisheries improvement projects, and information management.

c. Transferring the management of the marine commodities platforms and the FIPs to the stakeholders. It is foreseen that until year 3 the platforms will be institutionalised and the FIPs will be industry-driven.

d. Supporting the development of best practices and learnings that are highly replicable worldwide.

248. In summary, the cost-effectiveness of the project is reflected by the fact that future major changes in the seafood value chains could be obtained with a relatively small investment in key strategic actions, with a high degree of synergy and replicability.

Linkages to ongoing related activities

249. Overlapping and double funding will be avoided at all times. It is important to emphasize and encourage a close and permanent coordination with similar initiatives within the areas of intervention with the intention of capitalizing the impact of this project.

Administrative Costs

250. Costs associated with project cycle management services will be covered by the standard GEF Implementing Agency fee and the internal division of these with CO will follow current UNDP procedures. On the other hand, Direct Project Services will be charged using the “Universal Price List for Direct Project Services” in case IPs decide to request administrative and financial support from UNDP for implementing project activities.

Contribution of the implementing Partners

251. The IPs will provide in-kind contributions to this initiative. The IPs will ensure the active participation of their technical staff particularly from the national fisheries authorities and the fisheries monitoring and research associated to the target fisheries in each country. Finally,

the IPs will institutionalise the running of the Sustainable Marine Commodities Platforms and the Fisheries Improvement Projects.

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

252. In order to accord proper acknowledgement to GEF for providing funding, a GEF logo should appear on all relevant GEF project publications, including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding projects funded by GEF should also accord proper acknowledgment to GEF.

Property of Equipment and Goods

253. The goods and equipment purchased as part of this project will belong to UNDP CO during the implementation phase, and transfer to national beneficiaries will be undertaken in accordance to UNDP procedures and policies and subject to agreement with the Implementing Partners. Only national organizations will be considered as beneficiaries.

Audit

254. In providing these services, UNDP will apply its rules and regulations. The Support services and conditions attached to them are described in the Country Office Support Service Agreement in Section IV of this document. Services provided by the UNDP Country Office, including those through the COSS modality, will be subject to audit by UNDP's external (the United Nations Board of Auditors) and/or internal auditors (UNDP's Office of Audit and Investigation).

Collaborative arrangements with related projects

255. To ensure the maximum benefit of the programmatic approach promoted by this project, a number of coordination mechanisms will be established with these and other emerging initiatives, including the following:

- Annual planning meetings between the relevant GEF projects and selected projects from other funding sources.
- Participation in the GEF Biennial International Waters Conferences.
- Protocols of understanding in which specific meetings are scheduled by each project on a regular basis to discuss and explore project findings of relevance to marine conservation

Prior obligations and Prerequisites

256. None

PART V. PROJECT RESULTS FRAMEWORK

Sustainable Development Goal (s): Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development; Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
UN Partnership for Development Framework (UNPDF)/Country Programme Outcome*:* Outcome 3. By 2020, Indonesia is sustainably managing its natural resources, on land and at sea, with an increased resilience to the effects of climate change, disasters and other shocks.
Output 1.3. Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste. **Output 2.5.** Legal and regulatory frameworks, policies and institutions enabled to ensure the conservation, sustainable use, and access and benefit sharing of natural resources biodiversity and ecosystems, in line with international conventions and national legislation.
Applicable GEF Strategic Objective and Program: IW Objective 2: Catalyze multistate cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems (LMEs) while considering climatic variability and change
Applicable GEF Expected Outcomes: IW Outcome 2.3: Innovative solutions implemented for reduced pollution, rebuilding or protecting fish stocks with rights-based management, ICM, habitat (blue forest) restoration/conservation, and port management and produce measureable results
Applicable GEF Outcome Indicators: IW Indicator 2.3: Measurable results for reducing land-based pollution, habitat, and sustainable fisheries from local demonstrations

	Indicator	**Baseline**	**Mid-term target** **(will be reviewed in inception)*	**Targets** **End of Project**	**Source of verification**	**Risks and Assumptions**
Project Objective[134] (equivalent to output in ATLAS) To mainstream sustainability into seafood supply chains through market and policy mechanisms and	MSC certified landings *International Certification Schemes applied*	2012: 6.5 million tonnes (8% of marine capture)	-	>7.0 million tonnes	MSC Global Impacts Report FAO SOFIA	The end-users and the stakeholders of the seafood value chains have an increased interest in sustainable seafood.

[134] *Objective (Atlas output) monitored quarterly ERBM and annually in APR/PIR. Annual target to be developed and agreed by the project steering committee*

	Indicator	Baseline	Mid-term target *(will be reviewed in inception)*	Targets End of Project	Source of verification	Risks and Assumptions
partnerships with the overarching goal of rebuilding and protecting fish stocks and livelihoods						
Outcome 1[135] Increased global market demand for sustainable certified marine commodities and associated reduction of IUU fisheries	1a. Number of fisheries for the targeted commodities (tuna, large pelagics, blue swimming crab) that are MSC certified holders or other international certification schemes as well as in the process of FIP implementation, including SFP partners and their suppliers.	Tuna 17 (11 FIP, 6 MSC) LPF 7 (5 FIP, 2 MSC) BSC 3 (all FIP)	Year 2. >10% increase	Year 4. >20% increase *Indonesia to confirm their contribution for Tuna and BSC	Annual report from SFP through its Metrics system (used by all retail/buyer partners and their suppliers) APR/PIR Government Statistic Reports	Supply of seafood products from certified fisheries and FIPs. Growing demand from end buyers for seafood products from sustainable sources
	1b. Number of international seafood buyers (including SFP partners plus suppliers to SFP partners) with sustainable seafood purchasing policies	270 (August 2014)	Year 3. >279	Year 4. >285	Government Statistic Reports Annual report from SFP APR/PIR	There is sufficient supply of seafood products from certified fisheries and FIPs. Buyers are interested in sourcing from sustainable fisheries
Outcome 2 Increased pressure on RFMOs and their	2. Number of buyers (including SFP partners plus suppliers to SFP	0	Year 2. >2 (IATTC = 1; WCPFC = 1)	Year 4. >4 (IATTC = 2; WCPFC = 2)	Annual report of IATTC and WCPFC meetings	International seafood buyers are willing to issue position statements to the OROPs.

[135] *All outcomes monitored annually in the APR/PIR. It is highly recommended not to have more than 4 outcomes.*

	Indicator	Baseline	Mid-term target *(will be reviewed in inception)*	Targets End of Project	Source of verification	Risks and Assumptions
Contracting Parties to adopt more sustainable and science-based practices for shark and tuna conservation and management measures through engagement of international value chains	partners) with procurement policies for tuna that include support of more effective CMMs for tuna, sharks and LPF in IATTC and WCPFC				APR/PIR	
Outcome 3 Increased synergy and involvement of national and international players (i.e., retailers, traders, processors, fishermen and fisheries authorities) in sustainable seafood value chains	3a Number of Sustainable Marine Commodities Platforms	0	Year 2: >6	Year 3: 9	APR/PIR	There is sufficient market leverage to promote engagement of the seafood value chain of target fisheries. Fisheries authorities support SMCPs. The members of the seafood value chain have interest in participating in the SMCPs.
	3b. Number of Sustainable Fisheries Action Plans under implementation	5[136] No of Indonesian roadmap on sustainable fisheries value chain	Year 3: >8	Year 4: 10 Year 4: Indonesian roadmap on sustainable fisheries value chain endorsed	Legal instruments adopting the SFAPs APR/PIR	There is sufficient market leverage to promote engagement of the seafood value chain. The fisheries authorities and the members of the seafood value chain support and participate in SFAPs.

[136] Costa Rica: 0. Ecuador: PAN-Dorado, PAT-EC. Indonesia: Indonesia National Tuna and BSC Management Plans. Philippines: The Philippine Blue Swimming Crab Management Plan.

	Indicator	Baseline	Mid-term target *(will be reviewed in inception)*	Targets End of Project	Source of verification	Risks and Assumptions
Outcome 4 Increased sustainability scores of marine commodities purchased from project fisheries	4a. Number of FIPs rated 'A' (exceptional progress[137])	1 (PHI BSC)	Year 3: >3	Year 4: >8	Annual report from SFP APR/PIR	Buyers prefer seafood products from credible FIPs and certified fisheries Fishermen and processors see market opportunities in FIPs and certification.
	4b. Private investment in FIPs	US$250,000/year		Year 3: >US$1,500,000/year		
	4c. Number of fisheries in certification process (have entered process, undergoing assessment, or have been certified)	Fisheries entered into certification process: 0	Year 3: >2	Year 4: >3		
	4d. Performance based scoring system (e.g. MSC & FishSource scores.etc.)	CRI mahi mahi (stock level) http://www.fishsource.com/site/goto_profile_by_uuid/3ce5df58-e0c3-11e1-8650-40406781a598 score 1: <6; score 2: <6; score 3: <6; score 4: ≥6; score 5: ≥6 CRI tuna – Yellowfin - score 1: ≥6; score 2: ≥6; score 3: ≥8; score 4: 7.3;	Year 1: baseline FishSource scores for all fisheries Year 3: For 50% of the target fisheries (50% = 5 fisheries) there is an improvement of at least one level (levels = <6, ≥6, and ≥8) in 2 of the 5 FishSource scores (assuming not ≥8)[138]	Year 4: For 80% of the target fisheries (80% = 8 fisheries) there is an improvement of at least one level (levels = <6, ≥6, and ≥8) in 2 of the 5 FishSource scores (assuming not ≥8)		

[137] Refer to SFP´s FIP progress rating system. A: exceptional progress, B: good progress, C: some recent progress, D: some past progress, E: negligible progress.

[138] As noted, we will identify THREE levels of FS scores: <6, ≥6, and ≥8. If a score is 8 or above– and we do have scores in the range of 9 and 10 – it will count the same as a score of 8 exactly.

	Indicator	Baseline	Mid-term target *(will be reviewed in inception)*	Targets End of Project	Source of verification	Risks and Assumptions
		score 5: 8.0 Bigeye – score 1: ≥6; score 2: ≥6; score 3: ≥8; score 4: 8.3; score 5: 8.2 Skipjack - score 1: ≥6; score 2: ≥6; score 3: ≥8; score 4: 9.2; score 5: ≥8 ECU mahi mahi http://www.fishsource.com/site/goto_profile_by_uuid/0374001c-08b9-11e0-9d10-40406781a598 score 1: <6; score 2: <6; score 3: <6; score 4: ≥6; score 5: ≥6 ECU BET http://www.fishsource.com/site/goto_profile_by_uuid/80772932-0895-11e0-92d6-40406781a598 (note that this profile is differentiated by jurisdiction, being under EC rather than IATTC, and by using longline gear; for the stock-based Eastern Pacific bigeye tuna profile under IATTC, the scores are exactly the same - see http://www.fishsource.com/site/goto_profile_by_uuid/49dba91e-f42a-11de-8bc6-daf105bfb8c2) score 1: ≥6; score 2: ≥6; score 3: ≥8; score 4: 8.3;				

	Indicator	Baseline	Mid-term target *(will be reviewed in inception)*	Targets End of Project	Source of verification	Risks and Assumptions
		score 5: 8.2 ECU PST http://www.fishsource.com/site/goto_profile_by_uuid/2582166e-d6fb-11e1-b0bb-40406781a598 score 1: ≥6; score 2: ≥6; score 3: ≥8; score 4: 9.2; score 5: ≥8 IDN tuna http://www.fishsource.com/site/goto_profile_by_uuid/8b60efea-0a39-11e0-910f-40406781a598 score 1: ≥8; score 2: ≥6; score 3: <6; score 4: 9.0; score 5: 9.2 IDN BSC http://www.fishsource.com/site/goto_profile_by_uuid/97f035f0-2e53-11dd-87d8-daf105bfb8c2 score 1: <6; score 2: <6; score 3: NA; score 4: NA; score 5: <6 PHI BSC http://www.fishsource.com/site/goto_profile_by_uuid/4298031c-2e58-11dd-87d8-daf105bfb8c2 score 1: ≥6; score 2: ≥6; score 3: <6; score 4: NA; score 5: <6 PHI octopus -- no FishSource				

	Indicator	Baseline	Mid-term target *(will be reviewed in inception)*	Targets End of Project	Source of verification	Risks and Assumptions
		profile/scores at present				
Outcome 5 Reliable and verifiable information of target marine commodities is publically available and is used by value chain stakeholders for decision making and engagement in fishery improvement projects	5a. Number of registered users	FishSource: 2270 (individuals) Metrics: 472 (Number of companies subscribed – the number of registered individuals/employees for each company will vary by company size and their management structure)	FS Year 3: >15% increase Metrics Year 3: >10% increase	FS Year 4: >25% increase Metrics Year 4: >20% increase	Annual report from SFP APR/PIR	Industry and research/NGO audiences see increased value in registering for FishSource to access features not available to public users. Industry partners to SFP see increased value in assessing their sustainability commitments using Metrics risk ratings.
	5b. Number of visitors (average visitors per month to the site)	FishSource: 1,875 FIP Directory: 282 MSC website: NA	Year 3: >15% increase	Year 4: >30% increase	Google Analytics- Annual report from SFP Annual report from MSC APR/PIR	Industry and research/NGO audiences see increased value in obtaining fishery information from FishSource. Industry and research/NGO audiences see increased value on obtaining information on FIPs through FIP Directory.
	5c. Level of satisfaction (in terms of meeting user expectations) of information users for each site (exceeds expectations =3; meets expectations = 2; below	FishSource: NA[139] Metrics: NA MSC: NA FIP Directory: NA	Year 1: baseline for all sites.[140] Year 3: average = 2	Year 4: average = 2.5	Survey report from SFP APR/PIR Survey report from MSC	Users of all these sites are increasingly satisfied (in terms of meeting or exceeding their expectations) with the information content, organisation, and navigation.

[139] No user satisfaction data has been collected yet.
[140] We cannot differentiate visitors to the websites or their satisfaction level by marine commodities, only by the site itself (overall)

	Indicator	Baseline	Mid-term target *(will be reviewed in inception)*	Targets End of Project	Source of verification	Risks and Assumptions
	expectations = 1; averaging scores for all areas)					
	5d. Quality level for the profiles for each group/sector (e.g., quality of tuna profiles), based on review by independent experts, with each sector graded A, B or C.	0	Year 1: baseline for all target marine commodities	Year 4: One grade level increase by group/sector (assuming not grade A)	Review report from SFP APR/PIR	Independent experts evaluate FishSource profiles highly for the target marine commodity sectors.
Outcome 6 Better knowledge management on mainstreaming sustainability into seafood value chains	6a Documentation of best practices and development of gudelines/database/ training modules related to seafood value chain analysis and sustainable production	0	Year 1: Strengthened Database Year 2: Value chain analysis guidelines for Tuna and BSC developed	Year 4: Best practices documented	Project Publication APR/PIR	Best practice information shared by the project is increasingly accessed by IW:LEARN users.

Output	Activities
1.1. Improved seafood purchasing policies and targets to increase sourcing of certified goods of 15 major supply chain partners (retail and buyers) from EU, Japan and US which are following sustainability guidelines	a. Seafood expo stand (US, EU, Japan) b. Sector group roundtables (tuna, BSC, LPF) c. Supplier roundtables (tuna, BSC, LPF) d. Face to face meetings with major buyers (wholesale, retail) and processors.
1.2. Sustainable seafood sourcing policy guidance toolkit for retailers, wholesale buyers and processors	a. Prepare draft b. Consultation with stakeholders c. Electronic publication and distribution
1.3. At least 15 new supply chain partners from EU, Japan and US adopt purchase policies to incentivize sourcing only from fishermen and traders who provide sustainable seafood.	a. Present policy guidance toolkit in sector group roundtables (tuna, BSC, LPF) b. Present policy guidance toolkit in supplier roundtables (tuna, BSC, LPF) c. Face to face meetings with major buyers (wholesale, retail) and processors.

Output	Activities
2.1. At least four position statements of major international seafood buyers or their suppliers in support of more effective CMMs for tuna, sharks and LPF in IATTC and WCPFC	a. Follow meetings and decisions of IATTC and WCPFC b. Establish long-term communication channels with major buyers of species covered by both RMFOs c. Advocate to major buyers for them to request more effective CMMs
2.2. Draft regional management rules for mahi mahi presented to IATTC	a. Support participation of ECU and CRI delegations b. Follow meetings and decisions and disseminate briefs to stakeholders c. Advocate to major US buyers to press for sound management rules d. Advocate to major ECU and CRI processors and retailers to support sound management rules
3.1. National sustainable marine commodities platforms established in 4 countries to assist suppliers and buyers to coordinate planning improvements in the environmental performance of target supply chains	a. In-depth sector analysis. b. Engage sector specific stakeholders c. Information meetings and training workshops on (i) sustainable seafood value chains, (ii) sustainable seafood certification, (iii) introduction to fisheries improvement projects, (iv) seafood traceability systems, (v) measures to deter IUU and seafood fraud, (vi) MSC standards for sustainable fishing and chain of custody, (vii) effects of climate change on fisheries, and (viii) effects of ENSO on fisheries.. d. Platform establishment. e. Prepare five years strategic plan f. Platform support (market information, meetings with major buyers, roundtables, training) g. Monitoring and evaluation
3.2. Sustainable fisheries action plans (SFAP) in place for best practices in fish harvesting in at least 8 fisheries [CRI: LPF - ECU: mahi mahi, BET, PST, hake – IDN: tuna, BSC,– PHI: BSC, octopus]	a. Establish working group b. Situation analysis of fishery and value chain c. Participatory planning d. Adopt SFAP e. Support SFAP implementation f. Monitoring and evaluation
4.1. Updated guidelines for developing responsible FIPs and progress classification instrument (tracking tool)	a. Evaluate the performance and limitations of existing instruments b. Prepare proposed updates and trial run c. Consultation d. Prepare final instruments e. Electronic publication and dissemination
4.2. Implement at least 9 FIPs amongst the four countries [CRI: tuna, mahi mahi - ECU: mahi mahi, BET, PST - IDN: tuna, BSC– PHI: BSC, octopus]	a. For ongoing FIPs, conduct external performance evaluation and update FIP plan. b. For new FIPs: i. Establish FIP agreement among stakeholders (fishermen, processors, buyers, fisheries authority) ii. Conduct pre-assessment and FishSource profile iii. Prepare FIP plan and make all information publicly available c. Training and support for suppliers, fishermen, and regulators to enable an

Output	Activities
	improved understanding of FIPs and the certification process (guidelines for developing credible FIPs and tracking tool) d. Implement FIP e. Monitor FIP implementation and prepare progress reports f. For fisheries interested in MSC certification, encourage and support demonstration fisheries to enter MSC fishery assessment when FIP tracking indicates it is ready.
5.1. Profiles of all project target fisheries are developed and maintained in fisheries sustainability databases (i.e. FishSource.com; MSC.org) based upon reliable, publicly available, up-to-date information on stock status, management quality, and environmental & biodiversity impacts of fishing activities	a. Gap analysis to identify information needs for target fisheries. b. Gather additional information. c. Validate information with SFP improvement team d. Complete fisheries profile with up-to-date information e. Publish fisheries profile in FishScource f. Install Metrics system on each company that participate in the project FIPs g. Train new Metric users h. Update fishery profiles and the corresponding scores and FIP ratings
5.2. Scientific working groups for key commodities (BSC, mahi mahi, BET, ITF, octopus) are created, SFP coordinators appointed, and work plans implemented in support of expert networks	a. Identify experts for working groups (3-5 scientists per group x 7 target fisheries) b. Contract experts with specific terms of reference c. Appoint SFP coordinators to oversee the working groups d. Prepare working group work plans e. Implement working group work plans
5.3. Information systems tailored to help industry stakeholders adopt proper procurement policies, provide them with advice on improvement actions in problematic fisheries, and track improvements being made toward set goals (i.e. FishSource, FIP Directory)	a. Identify specific information needs of stakeholders from target fisheries (scientific, industry and general audiences). b. Adjust protocols for information gathering, validation and publication in FishSource and FIP Directory. c. Implement updated protocols. d. Monitor and evaluate satisfaction of target audiences.
6.1. Best practices documented and experiences shared with other projects to incentivize change in other fisheries through IW:LEARN and project website	a. Establish and maintain bilingual project website (i.e., English and Spanish). b. Establish and maintain linkages and interaction with IW LEARN, GCP, SFP, MSC, FIP Directory, and the platforms of the NFAs. c. Document and distil learnings through coordinated national, regional and international workshops in years 2 and 4. d. Participate in IWC10 and IWC11. e. Prepare three electronic publications with project learnings (with extended summaries in Bahasa Indonesia, Spanish and Tagalog). f. Midterm external independent evaluation on year 2 (final quarter) and final external independent evaluation on year 4 (last quarter).

PART VI. MONITORING FRAMEWORK AND EVALUATION

257. The project will be monitored through the following monitoring and evaluation (M&E) activities.

Project start

258. A **Project Inception Workshop** (PIW) will be held within the first two months of project start with those with assigned roles in the project organization structure, UNDP country office and where appropriate/feasible regional technical policy and programme advisors as well as other stakeholders. The Inception Workshop is crucial to building ownership for the project results and to plan the first year annual work plan. For the present project the PIW will include a workshop on each of the four countries and a teleconference with all the IPs and the COs..

259. The Inception Workshop should address a number of key issues including:

a. Assist all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of UNDP CO and RCU staff vis à vis the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff will be discussed again as needed.

b. Based on the project results framework and the relevant GEF Tracking Tool if appropriate, finalize the first annual work plan. Review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks.

c. Provide a detailed overview of reporting, monitoring and evaluation requirements. The Monitoring and Evaluation work plan and budget should be agreed and scheduled.

d. Discuss financial reporting procedures and obligations, and arrangements for annual audit.

e. Plan and schedule the meetings of the Steering Committee. Roles and responsibilities of all project organization structures should be clarified and meetings planned. The first meeting of the Steering Committee should be held within the first 12 months following the inception workshop.

260. An **Inception Workshop report** is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

Quarterly

1. Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform.

2. Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS. Risks become critical when the impact and probability are high. Note that for UNDP GEF projects, all financial risks associated with financial

instruments such as revolving funds, microfinance schemes, or capitalization of ESCOs are automatically classified as critical on the basis of their innovative nature (high impact and uncertainty due to no previous experience justifies classification as critical).

3. Based on the information recorded in ATLAS, a Project Progress Reports (PPR) can be generated in the Executive Snapshot.

4. Other ATLAS logs can be used to monitor issues, lessons learned etc. The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.

Annually

261. **Annual Project Review / Project Implementation Reports** (APR/PIR). This key report is prepared to monitor progress made since project start and in particular for the previous reporting period (30 June to 1 July). The APR/PIR combines both UNDP and GEF reporting requirements.

262. The APR/PIR includes, but is not limited to, reporting on the following:

- Progress made toward project objective and project outcomes - each with indicators, baseline data, and end-of-project targets (cumulative)
- Project outputs delivered per project outcome (annual).
- Lesson learned/good practice.
- AWP and other expenditure reports
- Risk and adaptive management
- ATLAS QPR
- Portfolio level indicators (i.e., GEF focal area tracking tools) are used by most focal areas on an annual basis as well.

Periodic Monitoring through site visits

263. The COs and the UNDP RCU will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Other members of the Project Steering Committee may also join these visits. A Field Visit Report/BTOR will be prepared by the CO and UNDP RCU and will be circulated no less than one month after the visit to the project team and members of the PSC.

Mid-term of project cycle

264. The project will undergo an independent **Mid-Term Evaluation** (MTE) at the mid-point of project implementation (last trimester of year 2). The Mid-Term Evaluation will determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations

for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this MTE will be prepared by the Ecuador CO as the lead country office based on guidance from the Regional Coordinating Unit and UNDP-GEF. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the UNDP Evaluation Office Evaluation Resource Center (ERC).

265. The relevant GEF Focal Area Tracking Tools will also be completed during the mid-term evaluation cycle.

End of Project

266. An independent **Final Evaluation** will take place three months prior to the final meeting of the PSC and will be undertaken in accordance with UNDP and GEF guidance. It is expected that the Final Evaluation will be executed in the last trimester of year 4. The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The Terms of Reference for this evaluation will be prepared by the Ecuador CO as the lead country office based on guidance from the Regional Coordinating Unit and UNDP-GEF.

267. The Terminal Evaluation should also provide recommendations for follow-up activities and requires a management response which should be uploaded to PIMS and to ERC.

268. The relevant GEF Focal Area Tracking Tools will also be completed during the final evaluation.

269. During the last three months (i.e., months 48 to 50), the project team will prepare the **Project Terminal Report**. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

Learning and knowledge sharing

270. Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums.

271. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyse, and share lessons learned that might be beneficial in the design and implementation of similar future projects.

272. Finally, there will be a two-way flow of information between this project and other projects of a similar focus.

M&E work plan and budget

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project team staff time*	Time frame
Inception Workshop and Report	▪ Project Manager ▪ Ecuador CO lead CO ▪ UNDP COs, UNDP GEF	Indicative cost: US$10,000	Within first two months of project start up
Measurement of Means of Verification of project results.	▪ UNDP GEF RTA/Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members.	To be finalized in Inception Phase and Workshop.	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on *output and implementation*	▪ Oversight by Project Manager ▪ Project team	To be determined as part of the Annual Work Plan's preparation.	Annually prior to APR/PIR and to the definition of annual work plans
APR/PIR	▪ Project manager and team ▪ UNDP CO ▪ UNDP RTA ▪ UNDP EEG	None	Annually
Periodic status/ progress reports	▪ Project manager and team	None	Quarterly
Mid-term Evaluation	▪ Project manager and team ▪ UNDP lead CO ▪ UNDP COs ▪ UNDP RCU ▪ External Consultants (i.e. evaluation team)	Indicative cost: US$45,000	At the mid-point of project implementation.
Final Evaluation	▪ Project manager and team ▪ UNDP lead CO ▪ UNDP CO ▪ UNDP RCU ▪ Implementing partners ▪ External Consultants (i.e. evaluation team)	Indicative cost : US$45,000	At least three months before the end of project implementation
Project Terminal Report	▪ Project manager and team ▪ UNDP lead CO ▪ UNDP CO ▪ Implementing partners ▪ local consultant	0	At least three months before the end of the project
Audit	▪ UNDP CO ▪ Project manager and team ▪ Implementing partners	Indicative cost per country: US$3,750. Total:15,000	Every year during the project lifetime
Visits to field sites	▪ UNDP CO ▪ UNDP RCU (as appropriate) ▪ Government representatives	For GEF supported projects, paid from IA fees and operational	Yearly

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project team staff time*	Time frame
		budget	
Dissemination of lessons learnt	▪ Project Coordination Unit	0	At least three months before the end of the project
TOTAL indicative COST Excluding project team staff time and UNDP staff and travel expenses		US$ 115,000 (+/- 2% of total budget)	

PART VII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

Institutional arrangements

273. This is an inter-regional project to be implemented under the National Implementation Modality (NIM) in Indonesia. The United Nations Development Programme will be the **GEF Implementing Agency** (IA) and therefore will be ultimately responsible to GEF for the channeling of resources to the executing agencies in accordance with UNDP rules and regulations. The **Implementing Partner** (IP) will be Deputy for Maritime Affairs and Natural Resources, Ministry of National Development Planning (BAPPENAS). The international NGO Sustainable Fisheries Partnership Foundation (SFP) will be responsible for implemention of components 1 of the project[141] in coordination with International Project Coordination Unit and national team.

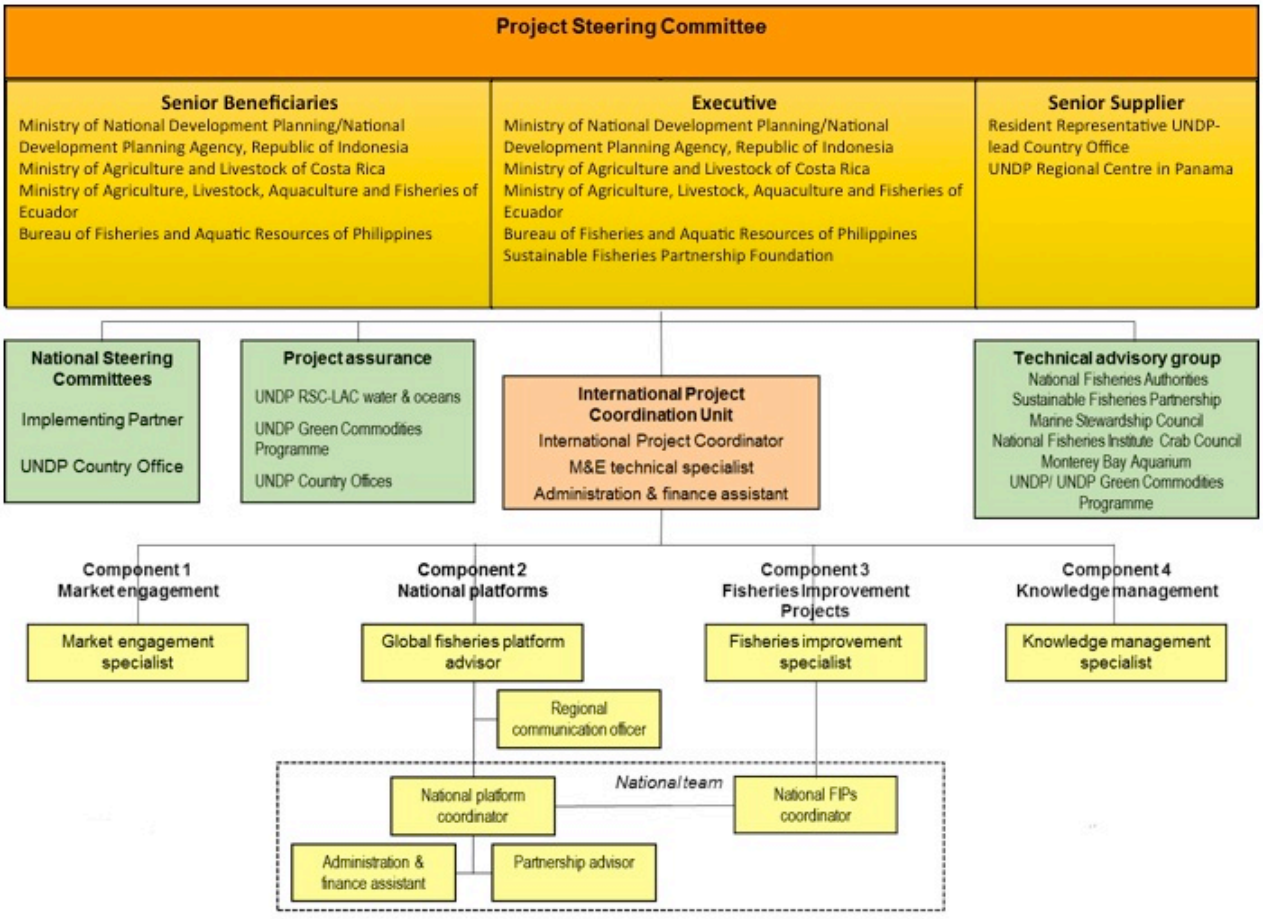


Figure 7.1. Project organisation structure[142].

[141] As mentioned before, SFP will be fully responsible of the development of components 1 project wide, and components 3 and 4 in three of the participating countries: Costa Rica, Ecuador and the Philippines. In the case of Indonesia, SFP will coordinate with officials contracted in the country for components 2, 3 and 4 and participate and support the activities that are mutually agreed between SFP, UNDP and BAPPENAS at project start (it will be discussed during the project Inception Meeting).

[142] In regards to the Project Organization Structure, it varies in the case of Indonesia, as more components will be executed nationally and hence the national team varies (and SFP will not be the Implementing Partner in charge of the components mentioned in the).

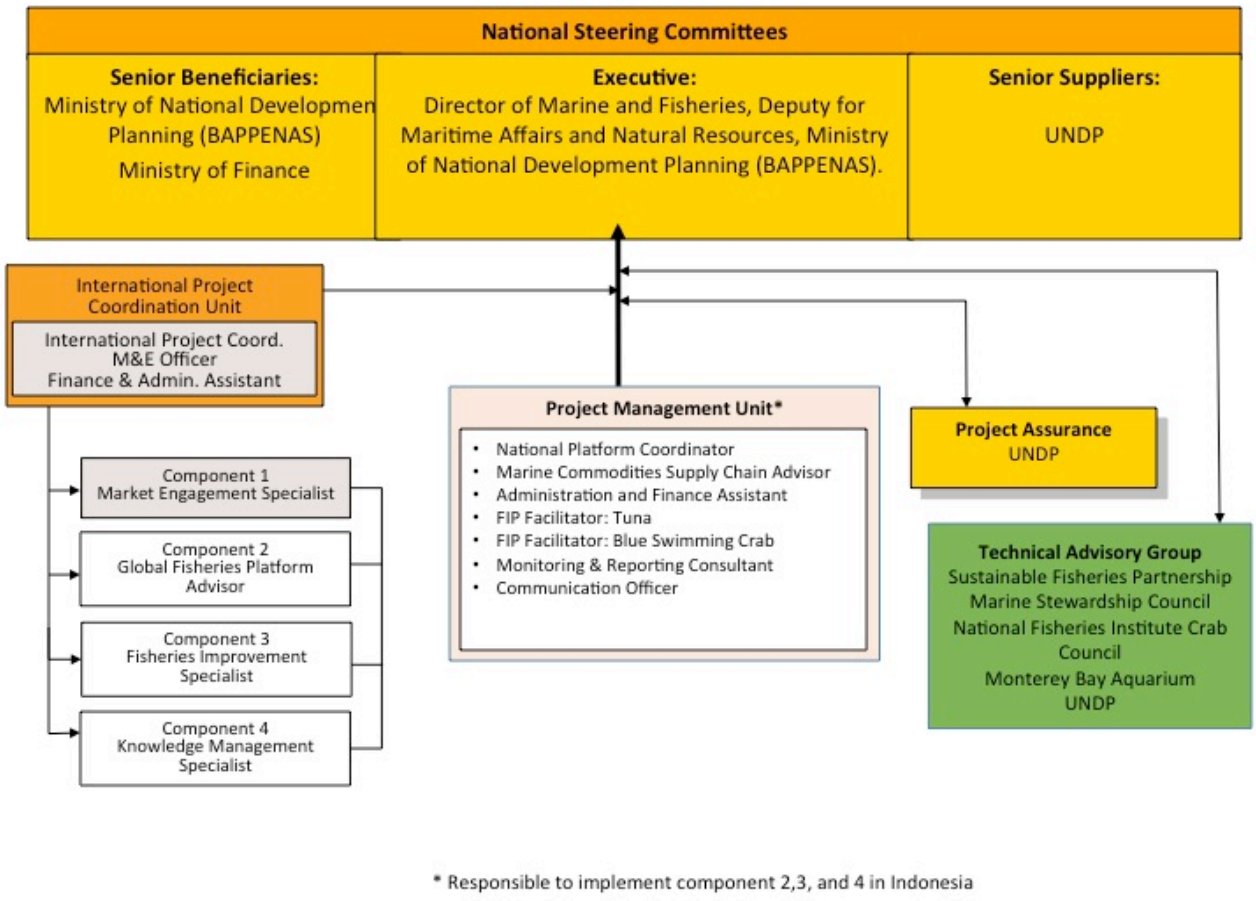


Figure 7.2. Project organisation structure for Indonesia

274. A **Project Steering Committee** (PSC) will be instituted to provide oversight and strategic guidance to the project. The PSC will integrate representatives of the IPs and the IA. In addition, there will be a **National Steering Committee** on each country to provide strategic guidance and a **Technical Advisory Group** (TAG) to support project implementation by providing technical advice and recommendations to the project partners. The project organisation structure is presented in 7.1.

Implementation arrangements

Implementing Agency

275. UNDP will be the implementing agency of the GEF, and as such will provide project cycle management services as quality assurance and oversight of project implementation.UNDP will be responsible for monitoring and evaluation of project interventions, achieving project outputs, and for the effective use of GEF resources. UNDP shall provide project cycle management services as defined by the GEF Council (described in Annex 5), that will include the following:

a. Providing financial and audit services to the project.

b. Overseeing financial expenditures against project budgets.

c. Ensuring that activities including procurement and financial services are carried out in strict compliance with UNDP/GEF procedures.

d. Ensuring that the reporting to GEF is undertaken in line with the GEF requirements and procedures.

e. Facilitate project learning, exchange and outreach within the GEF family.

f. Contract the project mid-term and final evaluations and trigger additional reviews and/or evaluations as necessary and in consultation with the project counterparts.

276. The project will be implemented under the NIM modality through the respective national institution with support from UNDP country office (CO) in Indonesia, for component 2, 3 and 4. The lead CO (Ecuador) will also be responsible for the inter-regional components of the project.This project will also require participation of the UNDP Green Commodities Programme (GCP), and the UNDP Regional Centre in Panama (UNDP RSC-LAC).

277. At the request of the Government of Indonesia, UNDP can also provide Direct Project Services (DPS) specific to project inputs according to its policies and convenience. In this case, the IP will subscribe a Letter of Agreement (LOA) specifying the services to be provided and the corresponding costs. In accordance with GEF requirements, the costs of these services will be part of the executing entity's Project Management Cost allocation identified in the project budget. UNDP and the Government of Indonesia acknowledge and agree that these services are not mandatory and will only be provided in full accordance with UNDP policies on recovery of direct costs.

278. UNDP will provide **project assurance** in support of the PSC by carrying out objective and independent project oversight and monitoring functions. This role ensures that appropriate project management milestones are managed and completed. Project assurance will be executed by (1) the water and oceans group of UNDP RSC-LAC, (2) GCP, and (3) the UNDP Country Offices in Costa Rica, Ecuador, Indonesia and Philippines. The project assurance team will review and analyse the project reports and the draft annual plan and budget before it is presented to the steering committee, and make recommendations to improve project performance.

279. Ecuador CO as lead country office will contract the members of the International Project Coordination Unit (IPCU) and oversee their technical, administrative and financial performance. GCP will provide technical advice and oversee implementation of component 2 of the project.

Implementing Partner

280. There will be an agency with lead responsibility for execution of agreed activities and will also be the National Focal Point. In Indonesia, the project implementing partner is the Ministry of National Development Planning, Republic of Indonesia (BAPPENAS), Directorate of Marine and Fisheries. The IP will take overall responsibility for the implementation of the activities in the country. The IP could request the service of the UNDP CO for the provision of DPS.

281. The Implementing Partner is:

Deputy for Maritime Affairs and Natural Resources, Ministry of National Development Planning (BAPPENAS), which responsible for coordinating, formulating, and implementing policy, as well as monitoring, evaluating, and controlling planning of national development in the marine and fisheries sector. The **Director of Marine and Fisheries** will act as a National Project Director (NPD) for this project.

Steering Committee

282. A **Project Steering Committee** will be instituted to provide oversight and strategic guidance to the project. The PSC will be integrated by (1) official delegates of MAG, MAGAP, MMAF, BFAR, and SFP (2) the Resident Representative of the Ecuador CO as lead country office, and (3) an official delegate of the UNDP Regional Centre in Panama. The members of the PSC will select the Chair during their first meeting. The International Project Coordinator (IPC) will serve as secretary of the committee. The PSC will meet once a year by teleconference.

283. The PSC will be responsible for making decisions about the overall management of the project and for maintaining the strategic focus of the project components. The PSC will (1) oversee project implementation, (2) approve the annual budget and work plan as supplied by the International Project Coordinator, (3) examine the annual progress report and provide comments and recommendations, (4) approve any major changes in project plans or strategy, (5) be responsible for the overall evaluation of the project, analyse the mid-term and final evaluation reports and provide comments and recommendations, and (6) arbitrate any conflicts which might arise. The PSC may be convened extraordinarily by the Chair, on the request of individual members.

National Steering Committee

284. In each country there will be a **National Steering Committee** (NSC) to provide oversight and strategic guidance to the implementation in the country. The NSC will be integrated by an official delegate of the Implementing Partner (BAPPENAS), Ministry of Finance and the Assistant Country Director of the UNDP Country Office. The NSC will meet at least once a year.

285. The NSC will (1) oversee project implementation at the national level, (2) make executive decisions for the project in the country, (3) facilitate inter-ministerial coordination, (4) approve the national annual budget and work plan, (5) examine the annual progress report and provide comments and recommendations, (6) approve any major changes in the national plans or strategy, (7) arbitrate any conflicts which might arise at the national level. The NSC may be convened extraordinarily by request of individual members.

Technical Advisory Group

286. A **Technical Advisory Group** will support project implementation by providing technical advice and recommendations to the project partners. The TAG will facilitate interaction among technical representatives of government agencies, NGOs and private companies. By request of the PSC or the International Project Coordinator, the TAG will analyse technical issues and provide recommendations and advice. In addition, the TAG will facilitate and promote the discussion and analysis of technical matters and the exchange of learnings among countries and project partners.

287. The TAG will be integrated by technical representatives of the national fisheries authorities of the four countries, SFP, GCP, UNDP (COs and/or Regional), MSC, NFI-CC, MBAq and private companies (e.g., McDonald´s, Walmart).

288. The TAG will have a semiannual meeting by teleconference. In the first meeting, the TAG members will nominate a Chair and establish the rules of operation. The IPC will serve as secretary of the meetings.

Implementing Partner for components 1, 3 and 4

289. The international NGO Sustainable Fisheries Partnership Foundation will be the **Implementing Partner** for the delivery of the outputs of components 1, 3 and 4 of the project (in Costa Rica, Ecuador and the Philippines), however will not be responsible for the activities carried out in Indonesia under components 2, 3 and 4 but will coordinate with the official in the country in charge of overseeing these components[143].

290. For the execution of project activities SFP will appoint one **Project Coordinator**, three **Component Specialists** (to be located in SFP facilities around the world) and three **National FIP Coordinators** (to be located one on each participating country). The component specialists will be financed with co-funding resources and the project coordinator and the national FIP coordinators will be financed with GEF resources.

291. The **SFP Project Coordinator** will oversee all the elements executed by SFP and will make sure that all activities and deliverables are executed according to the work plan. The SFP Project Coordinator will closely harmonize his/her activities with the International Project Coordinator. The SFP coordinator will not be responsible over the activities carried out in Indonesia under components 2, 3 and 4 but will coordinate with the official in the country in charge of overseeing these components[144]. The SFP Project Coordinator will prepare SFP related annual workplans and budgets.

292. The **Market Engagement Specialist** will coordinate the promotion of global demand for sustainable marine commodities (component 1), the **Fisheries Improvement Specialist** will coordinate the demonstrations of sustainable supply chains for marine commodities (component 3), and the **Knowledge Management Specialist** will coordinate the sustainable marine commodities information and knowledge management systems (component 4). The components specialists will be SFP staffers funding through co-financing and will work with the SFP Project Coordinator to closely coordinate their activities with the International Project Coordinator and will be responsible for:

a. Ensuring prompt delivery of project outputs and the generation of project outcomes.

b. Maintaining proper communication and collaboration with key stakeholders.

c. Maintaining proper collaboration and coordination with the other members of the project team

293. In addition, the Fisheries Improvement Specialist will have close coordination with the Global Fisheries Platform Advisor and will guide the work of the four national FIP coordinators.

[143] Also with FIP facilitators, as relevant and if previously agreed between BAPPENAS and SFP.
[144] Also with FIP facilitators, as relevant and if previously agreed between BAPPENAS and SFP.

294. The detailed TOR for the component specialists and the national FIP coordinators will be prepared at project start by SFP in collaboration with the International Project Coordinator.

International Project Coordination Unit

295. The project will have a small IPCU integrated by an International Project Coordinator, a Monitoring and Evaluation Officer (M&E-O), and an Administration and Finance Assistant. The IPCU will run the project on a day-to-day basis. The salary scale for the project staff is presented in Table 7.1.

International Project Coordinator

296. The IPC will be contracted for 50 months with GEF resources. The IPC will run the project on behalf of the IPs to ensure that the project produces the outputs and outcomes specified in the project document to the required standard of quality and within the specified constraints of time and cost. She/he will work in close cooperation with, and oversee, the SFP team.

Table 7.1. Salary scale for the project[145].

Post	Salary (US$/month)
International Project Coordinator	5,016
SFP Project Coordinator	4,950
Component coordinator (i.e., Global Fisheries Platform Advisor, Fisheries Improvement Specialist, Knowledge Management Specialist)	4,500
National Coordinator (i.e., National Platform Coordinator, National FIP Coordinator)	4,000
Communication Officer	1,667
Partnership Advisor	2,500
Monitoring and Evaluation Officer	1,900
Administration and Finance Assistant	1,700

297. The IPC will:

a. Be the signing authority of requests to UNDP for disbursements of project funds.

b. Ensure the logistical, administrative and financial effectiveness of the IPs in fulfilling its roles set out above

c. To this end, provide monitoring, supervision and guidance to the country teams.

d. Promote incidence in and coordination with the IPs, SFP, GCP and the donor agencies that are supporting them.

[145] This may vary for some posts in Indonesia (e.g. the Partnership Advisor is Marine Commodities Supply Chain advisor and receives a different salary). For more details please refer to the budget and its notes.

298. In addition, the IPC -- with the assistance of SFP for components 1, 3 and 4 -- will manage the following:

a. Preparation of project reports, work plans, budgets and accounting records,

b. Drafting of TOR, technical specifications and other documents,

c. Identification of consultants and supervision of consultants and suppliers,

d. Overseeing the implementation of project activities in a timely and efficient way,

e. Supervise and provide administrative support to the national platform coordinators.

f. Maintaining contacts with project partners at the national and international level.

g. Organization of seminars, workshops and field trips, which are linked to project activities.

299. The IPC in close coordination with SFP and UNDP will produce in a timely fashion annual work plans and budgets to be approved by the PSC and quarterly operational and annual progress reports for submission to the Project Steering Committee. The reports will provide details about the progress made, any shortcomings and the necessary adjustments made to achieve project outcomes. The IPC will also be responsible for any national or international service provider and the recruitment of specialist services.

The Monitoring and Evaluation Officer

300. The M&E-O will be contracted for 48 months with GEF resources. The M&E-O will monitor the advance of the project to ensure that the outputs and outcomes are delivered within the specified constraints of time and cost. The M&E-O will (1) compile and systematize the information of the project indicators to be provided by various sources (e.g., SFP, NPC), (2) verify that the activities are being implemented according to the annual work plan and budget at the international and national levels, and (3) prepare quarterly reports with recommendations for the IPC. The M&E-O will be supervised by the IPC.

The Administration and Finance Assistant

301. The Administration and Finance Assistant will be contracted for 50 months with GEF resources. This person will provide administration, logistics and finance support to the IPC and the national teams. Under supervision of the UNDP administrative team of the lead country office Ecuador, this assistant will prepare financial and operational information and consolidate accounting information. The Administration and Finance Assistant of the IPCU will provide direct support to the Ecuadorian national team and will oversee and closely coordinate with the administration and finance assistants to be located in Costa Rica, Indonesia and Philippines.

The component specialists

302. To ensure consistency of the intervention, there will be a specialist to guide and coordinate implementation of each of the four components of the project:

- A **Market Engagement Specialist** to be responsible for component 1,
- A **Global Fisheries Platform Advisor** to be responsible for component 2,
- A **Fisheries Improvement Specialist** to be responsible for component 3, and
- A **Knowledge Management Specialist** to be responsible for component 4.

303. The four component specialists will closely coordinate their activities with the IPC and among themselves.

304. The market engagement, fisheries improvement and knowledge management specialists will be appointed by SFP and will be financed with co-funding resources. The Global Fisheries Platform Advisor will most probably be based in the IPCU (definitive location will be decided at project start), will be hired by the UNDP, and will be financed with GEF resources for four years.

305. The four component specialists will be responsible for:

a. Ensuring prompt delivery of project outputs and the generation of project outcomes.

b. Maintaining proper communication and collaboration with key stakeholders.

c. Maintaining proper collaboration and coordination with the other members of the project team.

d. Identifying and documenting best practices and learnings.

e. Coordinating with national officers in charge of different project outcomes, as relevant.

306. In addition, the **Global Fisheries Platform Advisor** will facilitate the implementation of the Sustainable Marine Commodities Platform in each country and will guide the work of the four **National Platform Coordinators** (NPC), the **Partnership Advisors**, and the two regional **Communication Officers**. In addition to the responsibilities outlined above, this specialist will:

a. Maintain fluid communication with the IPC, the three component specialists, and GCP,

b. Provide strategic guidance and advice to the National Platform Coordinators and the Implementing Partners,

c. Facilitate collaborative work among the National Platform Coordinators, and

d. Motivate and facilitate close collaboration and coordination of the National Platform Coordinators with the National FIP Coordinators.

307. The **Fisheries Improvement Specialist** will orient the FIPs and guide the work of the **National FIP Coordinators** in Costa Rica, Ecuador and the Philippines. In addition to the responsibilities outlined above, this specialist will:

a. Provide strategic guidance and advice to the National FIP Coordinators and the Implementing Partners,

b. Facilitate collaborative work among the National FIP Coordinators, and

c. Motivate and facilitate close collaboration and coordination of the National FIP Coordinators with the National Platform Coordinators[146].

The national teams

308. In Indonesia, there will be a national team integrated by: a National Platform Coordinator, a Marine Commodities Supply Chain Advisor/Partnership Advisor, two FIP Facilitators (who will focus on each of the targeted fisheries in the country), a Monitoring and Reporting Consultant (for knowledge products) and an Administration and Finance Assistant. All will be contracted by BAPPENAS as national IP, through UNDP under COSS arrangement.

309. During project execution, efforts will be undertaken to institutionalize in each country the management of the Sustainable Marine Commodities Platforms and the Fisheries Improvement Projects.. The role of FIP coordination will be transitioned to industry leadership, and it is expected that FIPs will be fully industry driven at the end of year 3. In the case of Indonesia, there will be a strong national execution, of more activities, GEF funding is requested for four years for all positions except the Assistant[147].

310. The **National Platform Coordinators** will facilitate the inception and implementation of the national sustainable marine commodities platforms. These specialists will be trained by GCP and will receive guidance and advice from GCP staff and the Global Fisheries Platform Advisor. The NPCs will

a. Ensure prompt implementation of the annual work plan to the required standard of quality and within the specified constraints of time and cost.
b. Facilitate the organisation of the national platform and the corresponding working groups[148].
c. Organise tailor made training of the platform stakeholders.
d. Coordinate the preparation of the platform five years strategic plan.
e. Motivate the institutionalisation of the platform to become self-sustained.
f. Provide coordination and technical support for the operation of the national platform[149].
g. Monitor implementation and prepare progress reports.
h. Maintain proper communication and collaboration with the Implementing Partner and key stakeholders.
i. Closely collaborate and coordinate with the national FIPs coordinator.
j. Maintain proper collaboration and coordination with the other members of the project team.
k. Prepare the country's draft annual work plan and budget for component 2[150].

[146] And will coordinate with FIP facilitators in Indonesia if previously agreed between BAPPENAS and SFP.
[147] Nonetheless, salaries will be adjusted in the case of this country according to UNDP (Indonesia) proforma costs of hiring Service Contract (SC) and Individual Contract (IC) consultancy fee rate, hence the budget allocated will generally be similar to that allocated to the other countries.
[148] In the case of Indonesia, "facilitate the design and development of the national platform, including involvement of private sector to promote sustainable production of marine commodities".
[149] And in the case of Indonesia, also the corresponding working groups.

311. The detailed TOR for the NPCs will be prepared by the IPC in coordination with the IPs, UNDP/ GCP.

312. The **FIP Facilitators** in Indonesia will:

a. Ensure prompt implementation of the annual work plan to the required standard of quality and within the specified constraints of time and cost.

b. Facilitate the preparation and signing of FIP agreements among stakeholders.

c. Assess training need assessment for each FIP stakeholder in cooperation with global team.

d. Organise/design tailor made training for FIP stakeholders.
e. Coordinate the preparation of the FIP plans.
f. Provide technical support during initial FIP implementation.

g. Facilitate that the stakeholders assume FIP management so that it becomes self-driven.

h. Monitor FIP implementation and prepare progress reports.

i. Maintain proper communication and collaboration with the Implementation Partner and key stakeholders.

j. Closely collaborate and coordinate with the National Platform Coordinator and relevant project team/consultants.

k. Maintain proper collaboration and coordination with the other members of the project team.

l. Prepare the country's draft annual work plan and budget for component 3.

313. The detailed TOR for the National FIP Coordinator will be prepared at project start by the IPC, the IPs, and UNDP/GCP.

314. The **Marine Commodities Supply Chain Advisor** in Indonesia will provide technical advice and work closely with National Platform Coordinator to ensure government and stakeholders' buy-in of the national platform. The advisor will ensure technical quality of the produced action plans and facilitate development of management unit operational guidelines in coordination/consultation with global team and UNDP/GCP. The detailed TOR for the Advisor will be prepared by the IPC in coordination with the IP and UNDP/GCP.

315. The **Monitoring and Reporting** consultant in Indonesia will contribute to the effective implementation of the evaluation policy, ensure that minimum monitoring and evaluation requirements for projects are met, and participates in the conduct of thematic and cross-cutting evaluations which, at minimum adheres to Fishource outputs. The Consultant will also track results and apply the monitoring framework as set up in the project document in line with prevailing internal monitoring guidelines, ensuring that reporting arrangements and requirements are in place and are being implemented in a timely manner. The Consultant will work closely with Communication Officer and Project team both at national and global levels and contribute in producing Project knowledge products. SFP Coordinator will coordinate

[150] In the case of Indonesia, prepare the country's draft annual work plan and budget for components 2, 3 and 4.

closely with the Monitoring and Reporting consultant who oversee Component 4 in Indonesia. The detailed TOR for the Monitoring and Reporting consultant will be prepared at the project start by BAPPENAS and UNDP Indonesia in coordination with IPC and GCP.

316. There will be two **Communication Officers** to support the work of the national teams. One Communication Officer will assist the work of the Costa Rican and Ecuadorian national teams, and the other will support the work of the Indonesian and Filipino national teams. The officer for Indonesia and Philippines will be contracted by UNDP Indonesia on behalf of BAPPENAS, using GEF resources, during years two, three and four of the project; he/she will also be overseen by the Global Fisheries Platform Advisor and will have close coordination with the Knowledge Management Specialist and the Monitoring and Reporting consultant in Indonesia. The location of the Communication Officer will be decided during the Inception Workshop. These officers will (1) facilitate information of the project to national and international stakeholders, (2) prepare material for the press, (3) write content and news for the website (including project website and FIP Directory), (4) maintain social media accounts that could be useful to the key stakeholders (e.g., twitter), and (5) organize and communicate project events (e.g., meetings, workshops). They will prepare fishery-specific strategies to reach and engage independent fishermen, fish traders and processors. The Communication Officers will ensure that all project activities comply with the UN guides for green events and meetings (UNEP, 2009; UNEP, 2012). The detailed TOR for these officers will be prepared at project start by the IPC in coordination with GCP/UNDP, SFP, and BAPPENAS[151].

317. The national **Administration and Finance Assistant** will provide administration, logistics and finance support to the national team. This person will keep the required records and will prepare the financial and operational information required by the IPCU. Each of these assistants will be hired for the first three years of the project with GEF resources.

[151] The latter only for the work of the Communication Officer in Indonesia.

PART VIII. FINANCIAL PLANNING AND MANAGEMENT

Cash Transfer Modalities and Financial Report

318. In implementing the project and to mitigate risk and relieve administration burdens, the BAPPENAS requested UNDP to provide the following services that would normally be undertaken by the Implementing Partner, such as: (i) identification and recruitment of project personnel; (ii) procurement of goods and services; (iii) administration of the donor contribution; and (iv) management of grant agreements and related disbursements for project-related activities. This services is entitled to reimbursement for the costs of service provision according to Universal Price List (UPL). The UNDP services will be provided upon request from the IP for activities within the Project Document (Annual Work Plan) in accordance with the regulations, rules and procedures of UNDP. The project will be implemented under NIM with full Country Office Support Services (COSS) and no cash transfer from UNDP to Project Implementing Partner.

319. With respect to the Government of Indonesia's reporting procedures on grant realization, UNDP shall prepare the Minutes of Handover (Berita Acara Serah Terima – BAST) of Goods and Services to be signed jointly by UNDP and the Implementing Partner's Authorized Budget Owner (Kuasa Pengguna Anggaran - KPA). This will be submitted by the Implementing Partner as an attachment of SP3HL-BJS (Authorization Letter of Revenue Recognition of Direct Grant: Goods, Services, and Securities) to the State Treasury Service Office (Kantor Pelayanan Pembendaharaan Negara – KPPN) under the Directorate General of Treasury (Direktorat Jenderal Perbendaharaan) of the Ministry of Finance.

320. The BAST can be prepared on annual basis after issuance of final UNDP Combined Delivery Report (CDR). UNDP will prepare CDR based on the expenditures reports received from the project and recorded in Atlas (the UNDP corporate management system). The CDR constitutes the official report of expenditures and obligations of the project for a given period.

321. Budget Revision and Tolerance: As per the UNDP requirements outlined in the UNDP POPP, the Project Steering Committee can agree on a budget tolerance level for each plan under the overall annual work plan allowing the project manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the Steering Committee. Should the following deviations occur, the Project Manager and UNDP Country Office will seek the approval of the UNDP-GEF team as these are considered major amendments by the GEF: a) budget re-allocations among components in the project with amounts involving 10% of the total project grant or more; b) introduction of new budget items/or components that exceed 5% of original GEF allocation.

322. Project Closure: Project closure will be conducted as per the UNDP requirements outlined in the UNDP POPP (see https://info.undp.org/global/popp/ppm/Pages/Closing-a-Project.aspx). On an exception basis only, a no-cost extension beyond the initial duration of the project will be sought from in-country UNDP colleagues and then the UNDP-GEF Executive Coordinator.

323. UNDP and Government of Indonesia may decide to extend the duration of the project to take account of delays in implementing certain activities and therefore in producing results or received additional financial resources. Such extensions shall be consulted with the Project Steering Committee. Upon approval by the Project Steering Committee, the revised project document shall be signed by all the signatories to the original project document or agreed by exchange of letter, subject to UNDP and Government regulations. The request for extension of project document amendment will be consulted with the government at least 2 (two) months before the financial closing date.

324. Operational completion: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed including the final clearance of the Terminal Evaluation Report that must be available in English, and after the final project board meeting. The Implementing Partner through a Project Steering Committee decision, will notify the UNDP Country Office when the operational closure has been completed. The relevant parties will then agree on the disposal of any equipment that is still the property of UNDP.

325. Financial completion: 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). Upon the financial completion, UNDP will notify the government and provide the report as a basis for project completion**.**

326. The project will be financially completed within 12 months of operational closure or after the date of cancellation. 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 the UNDP-GEF Unit for confirmation before the project will be financially closed in Atlas by the Country Office.

327. Refund to Donor: should a refund of unspent funds to the GEF be necessary, this will be managed directly by the UNDP-GEF Unit in New York.

PART IX. TOTAL BUDGET AND WORK PLAN

INDONESIA

Award ID:	00083791	Project ID	00092095	PIMS: 4754	GEF: 5271
Award Title:	Global Sustainable Supply Chains for Marine Commodities				
Business Unit:	IND10				
Project Title:	Global Sustainable Supply Chains for Marine Commodities				
PIMS no.	4754				
Implementing Partner	Ministry of National Development Planning (Directorate of Marine and Fisheries) of Indonesia				

GEF Outcome/ Atlas Activity	Responsible party	Fund ID	Source of funds	ERP/ATLAS Budget Description/ Input	Atlas Code	Year 1	Year 2	Year 3	Year 4	Total	Budget notes
						US$	US$	US$	US$	US$	
1.Promotion of global demand for sustainable marine commodities	BAPPENAS/UNDP	62000	GEF	Contractual Services-Individual	71400	5,000	5,000	5,000	4,100	19,100	1
	GEF subtotal outcome 1					**4,690**	**4,690**	**4,690**	**4,690**	**18,760**	
2. Enabling environmentsfor sustainable marine commodities supply chains	BAPPENAS/UNDP	62000	GEF	Contractual Services - Individual	71400	35,000	80,000.00	80,000.00	58,760.00	253,760.00	2
				Travel	71600	2,000	28,000.00	10,000.00	11,190.00	51,190.00	3
				Contractual services - companies	72100		35,000.00			35,000.00	5
				Communications	72400	1,000	1,000.00	1,000.00	1,850.50	3,400.00	34
				Training	75700	8,000	30,000.00	45,000.00	30,000.00	114,000.00	4
	BAPPENASUNDP for Indonesia and Philipines component			International Consultants	71200	-	20,000.00	20,000.00	20,000.00	60,000.00	6
	GEF subtotal outcome 2					**46,000**	**194,000**	**156,000**	**121,801**	**517,350**	
3. Demonstration fisheries improvement projects (FIPs)	BAPPENAS/UNDP	62000	GEF	Local Consultants	71300	10,000	33,000.00	33,000.00	33,216.00	109,216.00	7
				International Consultants	71200		7,000.00		7,000.00	14,000.00	8
				Travel	71600		27,000.00	27,000.00	16,609.00	70,609.00	9
				Miscellaneous Expenses	74500	3,000	23,000.00	13,000.00	1,500.00	40,050.50	10

GEF Outcome/ Atlas Activity	Responsible party	Fund ID	Source of funds	ERP/ATLAS Budget Description/ Input	Atlas Code	Year 1	Year 2	Year 3	Year 4	Total	Budget notes
						US$	US$	US$	US$	US$	
				Training	75700	4,000	33,000.00	27,000.00	23,216.00	87,216.00	11
	GEF subtotal outcome 3					**17,000**	**123,000**	**100,000**	**81,541**	**321,092**	
4. Sustainable marine commodities information and knowledge management systems.	BAPPENAS/UNDP	62000	GEF	Local Consultants	71300		14,000.00	14,000.00	14,025.50	42,025.50	12
				Miscellaneous Expenses	74500	2,000	7,000.00	7,000.00	2,000.00	18,000.00	13
				Travel	71600	2,000	20,000.00	20,000.00	2,700.00	44,700.00	14
				International Consultants	71200		3,000.00	3,000.00	3,000.00	9,900.00	15
	GEF subtotal outcome 4					**4,000**	**44,000**	**44,000**	**21,726**	**114,626**	
Project Management											
				Direct project costs	74598	8,188	8,032.93	6,034.35	4,708.27	26,963.19	17
				Audit services	74100		1,875.00	937.50	937.50	3,750.00	16
	GEF subtotal project management			Total		**8,188**	**9,908**	**6,972**	**5,646**	**30,713**	
	GEF total					**80,188**	**375,908**	**311,972**	**234,813**	**1,002,880.19**	

Budget note

Budget Note	Details per responsible party
1	Marine Commodities Supply Chain Advisor (partnership advisor) to be hired in Indonesia (US$ 1954.167/month). He/she will assign 20% of the time to work in Component 1 corresponding to $18,760. Total for Component 1: US$ 18,760
2	National Platform Coordinator in Indonesia for four years US$40000/year (US$ 3333.33/month). Total: US$160,000
	Marine Commodities Supply Chain Advisor (partnership advisor) to be hired in Indonesia (US$1954.167/month). He/she will assign 70% of the time to work in component 2 and 10% to work in supervising knowledge products (this involves coordination with SFP for activities under component 4) . Total for Component 2: US$ 75,040. Administration and Finance Assistant to support national team in Indonesia.. US$1,700/month x 36 months. Total: US$61,200
3	Travel expenses of National Platform Coordinator for three years (US$6,000 per year). Total US$18,000 Travel fund for communication officers to visit the other country. US$2,500 officer a year, starting year 2. Total US$7,500. Travel cost (airplane ticket + per diem) of national delegations to fish shows/fairs in years 2 and 3 to meet with major buyer in side events organized by SFP. In year 2 Indonesia (2 person/country) x US$4,000/person. Total US$16,000.
4	For Indonesia: Platform meetings during the first three years of the project. Lump sum of US$16,000 in the first year, afterwards US$15,000/year in years 2 and 3, to cover various items. The venues will be provided by Implementing Partner when its is possible. The details for the use of the annual fund will be included in the work plan. Total: US$46,000 Training workshops for stakeholders of the value chain. Topics to be covered: (i) sustainable seafood value chains, (ii) sustainable seafood certification, (iii) introduction to fisheries improvement projects, (iv) seafood traceability systems, (v) measures to deter IUU and seafood fraud, (vi) MSC standards for sustainable fishing and chain of custody, (vii) effects of climate change on fisheries, and (viii) effects of ENSO on fisheries. US$4,000/workshop x 8 workshops = US$32,000. Indonesia will implement the amount assigned to its National Platform Coordinator nationally (US$6,000).
5	In year 1, contract of in-depth sector analysis for the country (US$10,000) using individual contract (IC) consultant and the preparation of five-year strategic plan for the platform (US$5,000) that will also be undertaken by IC consultant. In year 2, contract the preparation of two sustainable fisheries action plans (US$10,000/plan x 2 plans = US$20,000) by IC consultants. Total US$35,000

Budget Note	Details per responsible party
6	Communication Officer for three years to support Indonesia and Philippines (based in Indonesia and managed by Indonesia), US$ 1,666.67/month. Total US$ 60,000.
7	Two FIP facilitators (Tuna, BSC) to work in Indonesia for Component 3. Salary US$ 1384/month. Total/year: US$ 33216. Grand Total: US$ 132864.
8	In Indonesia, performance evaluations will be conducted in year 2 and 4 of the project for tuna, blue swimming crab FIP with performance reviewed using the same methodology as in the other 3 countries, total= US$ 14,000
9	For years 1 to 4, travel expenses for Indonesia FIP facilitators (domestic travel). US$16,609 per year. Total US$84,436 For years 1 to 3, travel expenses for international experts to support FIPs (international travel). US$10,450 per country per year. Grand Total US$97,786
10	In Indonesia, miscellaneous costs for FIPs= US$4,400 for FIP BSC per year x 3 years, and US$ 8,800 for FIP Tuna x 3 years. There will be a national management of these resources. Total: US$39,600
11	In Indonesia, training for FIP participants = for FIP BSC 2 workshops x US$ 5500/workshop, for for FIP Tuna 2 workshops x US$ 11,000/workshop . There will be a national management of these resources. Total: US$33,000
12	In Indonesia, a project monitoring & reporting consultant will be hired to produce knowledge products and its management; in collaboration with the communications officer. GEF contribution to salary: US$ 1,168.792. Total per year: US$ 14,025.5. Grand total= US$ 56,102.
13	In Indonesia, miscelanous expenses in years 1 to 3, an amount of US$1,279 and US$1,278 in year 4. Total: US$5,115
14	Participation in GEF International Waters Conference (IWC) for Indonesia representative for 2 events. Total: US$16,000. Participation of National Platform Coordinator in GCP community of learning. Total: US$8,700

Budget Note	Details per responsible party
	National two-day workshops to document advances, best practices and lessons in years 2 and 4 (last trimester of year 2 and third trimesters of year 4). Each workshop includes site, facilitator, video recording, coffee breaks, lunch, and memoirs in English and Spanish. US$10,000/workshop. Indonesia will implement its workshops nationally: 2 workshops x US$ 10,000= US$ 20000 (US$10,000 in year 2 and US$10,000 in year 4). Total: US$20,000
15	Knowledge products for Indonesia in charge of its Communications officer to support the country with Component 4. Total: US$9,900
16	Audit in years 1 to 4. US$ 937.5 per country per year.
17	Direct project costs according to UNDP Universal Price List.
34	In years 1 to 3, high-speed internet connection service in project office. US$ 1,200 per year. Total US$ 3,600

PART X. LEGAL CONTEXT

328. 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."

329. This project will be implemented by The Ministry of National Development Planning/BAPPENAS (Directorate of Marine and Fisheries) of Indonesia ("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.

PART XI. RISK MANAGEMENT

330. Consistent with the Article III of 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.
331. 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.
332. 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 list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml.

333. 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).

334. 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.

335. 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.

336. 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 UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

337. 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 and (b) 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.

338. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes. 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.

339. The signatories to this Project Document will promptly inform one another 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.

340. UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement.

    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 or corruption, 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 responsible parties, subcontractors and sub-recipients.

341. 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.

342. 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.

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

PART XII. MANDATORY ANNEXES

(Separated files)

Annex 1. Existing FIPs and certified fisheries in Costa Rica, Ecuador, Indonesia and Philippines (June 2014). Information for all FIPs and certified fisheries of the country.

Annex 2. Situation analysis of tuna, blue swimming crab and national sustainable marine product platforms roadmap in Indonesia.

Annex 3. FIP Feasibility Analysis blue swimming crab Indonesia

Annex 4. FIP Feasibility Analysis tuna Indonesia

Annex 5. Project cycle management services.

Annex 6. GEF tracking tool

Annex 7. Terms of reference for Project Steering Committee and Key Project Staff

Annex 8. UNDP environmental and social screening

Annex 9. Stakeholder Engagement Plan

Annex 10. Gender Analysis and Action Plan

Annex 11. UNDP Risk Log

Annex 12. Country Office Support Office (COSS) Agreement

Annex 13. Supplemental Provisions to the Project Document

Annex 14. Letters of endorsement and co-financing

References

ADB. 2014. State of the Coral Triangle: Indonesia. Asian Development Bank (ADB). Coral Triangle Initiative. Mandaluyong City, Philippines: 68 pp.

ADB. 2014a. State of the Coral Triangle: Philippines. Asian Development Bank (ADB). Coral Triangle Initiative. Mandaluyong City, Philippines: 103 pp.

Agnew, D. J., Gutierrez, N. L., Stern-Pirlot, A. & D.D. Hoggarth. 2014. The MSC experience: developing an operational certification standard and a market incentive to improve fishery sustainability. ICES Journal of Marine Science 71: 216–225.

Aires-da-Silva, A., Lennert-Cody, C. E., Maunder, M. N., Román-Verdesoto, M., Minte-Vera, C. A., Vogel, N. W., Martínez-Ortíz, J., Carvajal, J. M., Guerrero, P. X. & F. Sondheimer. Resultados preliminares de actividades de investigación colaborativa de la CIAT sobre el dorado en el océano pacífico oriental y plan de investigación futura. Documento SAC-05-11b. Comisión Interamericana del Atún Tropical (CIAT). Comité Científico Asesor. Quinta Reunión La Jolla, California (USA). 12-16 de mayo de 2014: 27 pp.

Allen, G. R. 2007 Conservation hotspots of biodiversity and endemism for Indo-Pacific coral reef fishes. Aquatic Conservation: Marine and Freshwater Ecosystems 18(5): 541-556.

Allen, G. R. 2008. Conservation hotspots of biodiversity and endemism for Indo-Pacific coral reef fishes. Aquatic Conserv: Mar. Freshw. Ecosyst. 18: 541–556.

Allen, G.R. & M. Adrim. 2003. Coral reef fishes of Indonesia. Zool. Stud. 42: 1–72.

Banks, S. 2002. Ambiente físico. Páginas 22-35 En Danulat, E. & G.J. Edgar (eds.) Reserva Marina de Galápagos. Línea Base de la Biodiversidad. Fundación Charles Darwin / Servicio Parque Nacional Galápagos, Santa Cruz, Galápagos, Ecuador.

Bartholomew, N.S. 2014. Fishery Improvement Projects: How Retailers and the Supply Chain Advance Seafood Sustainability. Food Marketing Institute (FMI). Arlington, Virginia, USA: 26 pp.

Baske, A., Gibbon, J., Benn, J. & A.Nickson. 2012. Estimating the use of drifting Fish Aggregation Devices (FADs) around the globe. Pew Environment Group. The Pew Charitable Trusts. Washington, D.C.: 8 pp.

Bearez, P. 1994. Ictiología y arqueología: estudio del sitio Salango (Manabi). 20 años en el Ecuador: resúmenes de las comunicaciones presentadas en el ciclo de conferencias por los 20 años del ORSTOM en Ecuador. ORSTOM: 181-184.

Belgrano, A. & C.W.Fowler. 2013. How Fisheries Affect Evolution. Science 342(6163): 1176-1177.

Bessudo, S., Soler, G.A., Klimley, A.P., Ketchum, J.T., Hearn, A. & R. Arauz. 2011. Residency of the scalloped hammerhead shark (*Sphyrna lewini*) at Malpelo Island and

evidence of migration to other islands in the Eastern Tropical Pacific. Environ.Biol.Fish. 91: 165-176.

BFAR. 2013. The Philippine Blue Swimming Crab Management Plan. Department of Agriculture. Bureau of Fisheries and Aquatic Resources (BFAR). Manila, The Philippines: 33 pp.

Blower, D. 2001. Las múltiples facetas del mullu: mucho más que una concha Spondylus. Arqueología del Área Intermedia 3:25-51.

Bostock, J., McAndrew, B., Richards, R., Jauncey, K., Telfer, T., Lorenzen, K., Little, D., Ross, L., Handisyde, N., Gatward, I. & R. Corner. 2010. Aquaculture: global status and trends. Phil. Trans. R. Soc. B 365: 2897–2912. doi:10.1098/rstb.2010.0170

Bromhead D, Foster J, Attard R, Findlay J. & J. Kalish. 2000. A review of the impact of fish aggregating devices (FADs) on tuna fisheries. In: Anonymous. Final report to Fisheries Resources Research Fund. Australian Bureau of Rural Sciences. Canberra, Australia.

Brouwer, I.A. 2008. Fish, omega-3 fatty acids and heart disease. Pages 165–181 In Børresen, T. (ed.) Improving seafood products for the consumer. Woodhead Publishing Limited. Cambridge, England.

Brusca, R.C. 1987. Biogeographic Relationships of Galapagos Marine Isopod Crustaceans. Bulletin of Marine Science 41(2): 268-281.

Cannon, J. 2007. FishSource Scores. How they're calculated and what they represent. Sustainable Fisheries Partnership (SFP): 20 pp.

Online www.fishsource.org/indices_overview.pdf

Carpenter, K.E. & V.G. Springer. 2005. The center of the center of marine shore fish biodiversity: the Philippine Islands. Environmental Biology of Fishes 72: 467–480,

CASS. 2013. Guidelines for Supporting Fishery Improvement Projects. Conservation Alliance for Seafood Solutions (CASS). Online http://solutionsforseafood.org/sites/default/files/documents/FIP Guidelines.pdf

Castro, G. 2009. Criterios para la interpretación del patrón de asentamiento, en sitios Kambelí, en el valle bajo del río Arenillas, Provincia de El Oro, Ecuador. Artículos de Tesis de Grado - FIEC. Repositorio de la Escuela Superior Politécnica del Litoral (ESPOL).

En línea http://www.dspace.espol.edu.ec/handle/123456789/1508

Castro, R. 2012. Descripción de los artes de pesca utilizados por el sector pesquero en la costa Ecuatoriana. Instituto Nacional de Pesca (INP). Guayaquil, scEcuador: 10 pp.

Chamberlain, T. & G. Titili. 2001. Seafood processing. Community Fisheries Training Pacific Series 6. USP Marine Studies Programme / SPC Coastal Fisheries Programme: Training Materials for Pacific Community Fisheries: 32 pp.

Christensen, N. 1971. Observations of the Cromwell Current near the Galapagos Islands

Deep Sea Research and Oceanographic Abstracts 18(1): 27-30.

Christian, C., Ainley, D., Bailey, M., Dayton, P., Hocevar, J., LeVine, M., Nikoloyuk, J., Nouvian, C., Velarde, E., Werner, R. & J. Jacquet. 2013. A review of formal objections to Marine Stewardship Council fisheries certifications. Biological Conservation 161: 10–17.

Cooper, J.E. & W.A. Laurie. 1987. Investigation of deaths in marine iguanas (Amblyrhynchus cristatus) on Galapagos. Journal of Comparative Pathology 97(2): 129-136.

Cortés, J. 2012. Marine biodiversity of an Eastern Tropical Pacific oceanic island, Isla del Coco, Costa Rica. Rev. biol. trop. 60(3): 131-185.

Cortés-Sánchez, M., Morales-Muñiz, A., Simón-Vallejo, M.D., Lozano-Francisco, M.C., Vera-Peláez, J.L., Finlayson, C., Rodríguez-Vidal,J., Delgado-Huertas, A., Jiménez-Espejo, F.J., Martínez-Ruiz, F., Martínez-Aguirre, M.A., Pascual-Granged, A.J., Bergadà-Zapata, M.M., Gibaja-Bao, J.F., Riquelme-Cantal, J.A., López-Sáez, J.A., Rodrigo-Gámiz, M., Sakai, S., Sugisaki, S., Finlayson, G., Fa, D.A. & N.F. Bicho. (2011) Earliest Known Use of Marine Resources by Neanderthals. PLoS ONE 6(9): e24026. doi:10.1371/journal.pone.0024026

Cruz, M., Gaibor, N., Mora, E., Jiménez, R. & J. Mair. 2003. The known and unknown about marine biodiversity in Ecuador (continental and insular). Gayana 67(2): 232-260

Curtis, H. & R. Barr. 2012. 2012 Survey of the UK Seafood Processing Industry. Sea Fish Industry Authority. Edinburgh, UK: 36 pp.

Dagorn, L., Filmalter, J.D., Forget, F., Amandé, M.J., Hall, M.A., Williams, P., Murua, H., Ariz, J., Chavance, P. & N. Bez. 2012. Targeting bigger schools can reduce ecosystem impacts of fisheries. Can. J. Fish. Aquat. Sci. 69: 1463–1467.

Dagorn, L., Holland, K. N., Restrepo, V. & G. Moreno, G. 2012a. Is it good or bad to fish with FADs? What are the real impacts of the use of drifting FADs on pelagic marine ecosystems?. Fish and Fisheries. doi: 10.1111/j.1467-2979.2012.00478.x

Danulat, E. & G.J. Edgar (eds.) 2002. Reserva Marina de Galápagos. Línea Base de la Biodiversidad. Fundación Charles Darwin / Servicio Parque Nacional Galápagos, Santa Cruz, Galápagos, Ecuador: 484 pp.

De Silva, D.A.M. 2010. Value chain of fish and fishery products: origin, functions and application in developed and developing country markets. FAO Project: A value-chain analysis of international fish trade and food security with an impact assessment of the small-scale sector. Rome, FAO: 53pp. [Online: http://www.fao.org/valuechaininsmallscalefisheries/value-chain-bibliography/en/]

Dirhamsyah, D. 2012. IUU fishing in Indonesia´s live reef fisheries. Australian Journal of Maritime and Ocean Affairs 4(2): 44-52.

Doddema, M. 2012. On Fisheries Improvement Projects. An analysis of the suitability of Fisheries Improvement Projects for achieving improvements in fisheries. A case study of a Fisheries Improvement Project for the yellow-fin tuna fishery in Lagonoy Gulf, the

Philippines. MSc Thesis ENP 80436. Wageningen University, The Netherlands: 73 pp.

Eikeset, A.M., Richter, A., Dunlop, E.S., Dieckmann, U. & C. Stenseth. 2013. Economic repercussions of fisheries-induced evolution. www.pnas.org/cgi/doi/10.1073/pnas.1212593110.

FAO. 2007. Making fish trade work for development and livelihoods in west and central Africa. Policies linking trade to fisheries management. New Direction in Fisheries – A Series of Policy Briefs on Development Issues, No. 10. FAO, Rome: 12 pp.

FAO. 2009. Guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries. Revision 1. Rome, FAO: 97 pp.

FAO. 2009a. Responsible fish trade. FAO Technical Guidelines for Responsible Fisheries. No. 11. Rome, FAO: 23 pp.

FAO. 2011. Code of Conduct for Responsible Fisheries. Rome, FAO: 91 pp.

FAO. 2014. The State of World Fisheries and Aquaculture 2014. Opportunities and challenges. FAO, Rome: 223 pp.

FAO. 2014a. Contribución de la pesca y la acuicultura a la seguridad alimentaria y el ingreso familiar en Centroamérica. FAO, Panamá: 91 pp.

FAO. 2014b. Report on the effects of ecolabelling schemes on fisheries. Committee on Fisheries (COFI). Sub-committee on fish trade. Fourteenth Session. Bergen, Norway, 24–28 February 2014. Document COFI:FT/XIV/2014/6: 5pp.

FAO. 2014c. Evidence on utilization of the FAO draft evaluation framework and the economic impact from ecolabelling on returns to the fisheries sector. Committee on Fisheries (COFI). Sub-committee on fish trade. Fourteenth Session. Bergen, Norway, 24–28 February 2014. Document COFI:FT/XIV/2014/Inf.9: 5 pp.

FAO/WHO. 2011. Report of the Joint FAO/WHO Expert Consultation on the Risks and Benefits of Fish Consumption. Rome, 25–29 January 2010. FAO Fishery and Aquaculture Report 978. Rome, FAO: 50 pp.

FECOP. 2013. Tuna catches and fisheries management in Costa Rica's exclusive economic zone. A proposal for alternative development. Presented to the Government of the Republic by the National Fisheries Sector Commission and the Costa Rican Fisheries Federation (FECOP) in consultation with INCOPESCA. August 2013: 80 pp.

Fitriana, R. & N. Stacey. 2012. The Role of Women in the Fishery Sector of Pantar Island, Indonesia. Asian Fisheries Science Special Issue. 25S:159-175.

FLACSO & MIPRO. 2011. Enlatados de productos de mar (R4). Boletín mensual de análisis sectorial de MIPYMES 14. Junio 2011. Centro de Investigaciones Económicas y de la Micro, Pequeña y Mediana Empresa. Facultad Latinoamericana de Ciecias Sociales (FLACSO) - Ministerio de Industrias y Productividad (MIPRO). Quito, Ecuador: 28 pp.

Froese, R. & A. Proelß. 2012. Evaluation and legal assessment of certified seafood.

Marine Policy 36: 1284–1289.

Garcia, S.M. & A.A. Rosenberg. 2010. Food security and marine capture fisheries: characteristics, trends, drivers and future perspectives. Phil. Trans. R. Soc. B 365: 2869–2880. doi:10.1098/rstb.2010.0171

Gerrodette, T., Olson, R., Reilly, S., Watters, G. & W. Perrin. 2012. Ecological metrics of biomass removed by three methods of purse-seine fishing for tunas in the Eastern Tropical Pacific Ocean. Conservation Biology, 26: 248–256.

Gilman, E. 2011. Bycatch governance and best practice mitigation technology in global tuna fisheries. Marine Policy 35: 590-609.

Gilman, E., Passfield, K. & K. Nakamura. 2014. Performance of regional fisheries management organizations: ecosystem-based governance of bycatch and discards. Fish and Fisheries 15:327-351.

Gilman, E.L. & C.G. Lundin. 2009. Minimizing Bycatch of Sensitive Species Groups in Marine Capture Fisheries: Lessons from Tuna Fisheries. pp. 150-164 in Grafton, Q., Hillborn, R., Squires, D., Tait, M. & M.Williams (eds.) Handbook of marine fisheries conservation and management. Oxford University Press.

Glynn, P.W. (ed.) 1990. Global Ecological Consequences of the 1982-83 El Niño-Southern Oscillation. Elsevier Oceanography Series.

Gordon, A.L. 2005. Oceanography of the Indonesian seas and their throughflow. Oceanography 18(4):14–27.

Gudmundsson, E., Asche, F. & M. Nielsen. 2006. Revenue distribution through the seafood value chain. FAO Fisheries Circular 1019. Rome, FAO: 42 pp.

Guinea, M. 2006. Un sistema de producción artesanal de cuentas de concha en un contexto doméstico manteño: Japoto (provincia de Manabí, Ecuador): Bulletin de l'Institut Français d'Études Andines 35 (3): 299-312.

Gutiérrez, N.L., Valencia, S.R., Branch, T.A., Agnew, D.J., Baum, J.K., Bianchi, P.L., Cornejo-Donoso, J., Costello, C., Defeo, O., Essington, T.E., Hilborn, R., Hoggarth, D.D., Larsen, A.E., Ninnes, C., Sainsbury, K., Selden, R.L., Sistla, S., Smith, A.D.M., Stern-Pirlot, A., Teck, S.J., Thorson, J.T. & N.E. Williams. 2012. Eco-label conveys reliable information on fish stock health to seafood consumers. PLoS ONE 7(8), e43765. doi:10.1371/journal.pone.

Hallier, J.P. & D. Gaertner. 2008. Drifting fish aggregation devices could act as an ecological trap for tropical tuna species. Mar Ecol Prog Ser 353: 255-264.

Harger, J.R.E. 1995. ENSO variations and drought occurrence in Indonesia and the Philippines. Atmospheric Environment 29(16): 1943–1955.

Hennessey, T. & M. Healey. 2000. Ludwig´s ratchet and the collapse of New England groundfish stocks. Coastal Management 28: 187-213.

Herrera, M., Elias, E., Castro, R. & C. Cabanilla. 2009. Evolución de la pesqueria

artesanal del atún en aguas ecuatorianas. Instituto Nacional de Pesca (INP). Guayaquil, Ecuador. 28 pp.

Hibbeln, J.R., Davis, J.M., Steer, C., Emmett, P., Rogers, I., Williams, C. & J. Golding. 2007. Maternal seafood consumption in pregnancy and neurodevelopmental outcomes in childhood (ALSPAC study): an observational cohort study. Lancet 369: 578–85.

Hoeksema, B.W. 2007 Delineation of the Indo-Malayan Centre of Maximum Marine Biodiversity: the Coral Triangle. Chapter 5 In: Renema, W. (ed.) Biogeography, Time and Place: Distributions, Barriers and Islands.Springer Publishing.

Holm, O. 1989. Materias primas del mar. Los anzuelos de concha de la cultura Valdivia, apr. 3.500- 1500 a. de Cristo, Revista del Instituto de Historia Marítima. 4(7):7-18.

Hunter, J. 2013. Mahi mahi Coryphaena hippurus. Costa Rica, Ecuador, Guatemala and Peru. Surface longline. Monterey Bay Aquarium SeafoodWatch. 15 August 2013: 51 pp.

IATTC. 2012. Tunas and billfishes in the Eastern Pacific Ocean in 2011. Fishery Status Report No. 10 Inter-American Tropical Tuna Commission (IATTC). La Jolla, USA: 162 pp.

IATTC. 2013. Annual Report of the Inter-American Tuna Commission 2009. Inter-American Tropical Tuna Commission (IATTC). La Jolla, USA: 124 pp.

Idrovo Urigüen, J. 1994. Santuarios y conchales en la provincia de El Oro. Casa de la Cultura Ecuatoriana, Machala, Ecuador.

Ingles, J.A. 2004. Status of the blue crab fisheries in the Philippines, pages 47-52. In DA-BFAR. In turbulent seas: The status of Philippine marine fisheries. Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR). Coastal Resource Management Project. Cebu City, Philippines.

IPNLF. 2014. International Pole & Line Foundation Annual Report 2013. International Pole & Line Foundation (IPNLF). London, UK: 12 pp. Online http://ipnlf.org/wp-content/uploads/2014/07/IPNLF-Annual-report-May-2014_email.pdf

Jackson, J.B.C., Kirby, M.X., Berger, W.H., Bjorndal, K.A., Botsford, L.W., Bourque, B.J., Bradbury, R.H., Cooke, R., Erlandson, J., Estes, J.A., Hugher, T.P., Kidwell, S., Lange, C.B., Lenihan, H.S., Pandolfi, J.M. & C.H. Peterson. 2001. Historical Overfishing and the Recent Collapse of Coastal Ecosystems. Science 293(5530): 629-637.

Jacquet, J. Hocevar, J., Lai, S., Majluf, P., Pelletier, N., Pitcher, T., Sala, E., Sumaila, R, & D. Pauly. 2010a. Conserving wild fish in a sea of market-based efforts. Oryx 44(1): 45-56.

Jacquet, J. L., Pauly, D., Ainley, D., Holt, S., Dayton, P. & J. Jackson. 2010. Seafood stewardship in crisis. Nature 467: 28–29.

Jerardino, A. & C.W. Marean. 2010. Shellfish gathering, marine paleoecology and modern human behavior: perspectives from cave PP13B, Pinnacle Point, South Africa. Journal of Human Evolution 59(3-4): 412–424.

Jiménez, C.E. & J. Cortés. 2001. Effects of the 1991-92 El Niño on scleractinian corals of the Costa Rican central Pacific coast. Rev.Biol.Trop. 49: 239-250.

Jiménez, C.E. & J. Cortés. 2003. Coral cover change associated to El Niño, eastern Pacific, Costa Rica, 1992-2001. P.S.Z.N. Mar.Ecol. 24: 179-192.

Joint FAO/WHO Food Standards Programme. 2013. Codex Alimentarius Commission Procedural Manual. Twenty-first edition. Rome, FAO: 204 pp.

Kris-Etherton, P.M., Harris, W.S. & L.J. Appel. 2002. Fish Consumption, Fish Oil, Omega-3 Fatty Acids, and Cardiovascular Disease. Circulation 106: 2747-2757. doi: 10.1161/01.CIR.0000038493.65177.94

Kuparinen, A., & J.A. Hutchings. 2012. Consequences of fisheries-induced evolution for population productivity and recovery potential. Proc. R. Soc. B 7 279(1738): 2571-2579.

Kurien, J. 2005. Responsible fish trade and food security. FAO Fisheries Technical Paper 456. Rome, FAO: 102 pp.

Laurie, W.A. 1990. Effects of the 1982-83 El Niño-Southern Oscillation Event on Marine Iguana (Amblyrhynchus Cristatus Bell, 1825) Populations on Galapagos. Elsevier Oceanography Series 52: 361-380.

Lee, T., Fukumori, I., Menemenlis, D., Xing, Z. & L.L.Fu. 2002. Effects of the Indonesian Throughflow on the Pacific and Indian Oceans. JOURNAL OF PHYSICAL OCEANOGRAPHY 32: 1404-1429.

Lem, A. 2013. A value-chain analysis of international fish trade and food security with an impact assessment of the small-scale sector. Summary Article. Proceedings of the International Institute of Fisheries Economics & Trade Conference (IIFET). July 2012, Tanzania: 13 pp.

Lyon, B. & S.J.Camargo. 2008. The seasonally-varying influence of ENSO on rainfall and tropical cyclone activity in the Philippines. Clim.Dyn. 32: 125-141.

Lyon, B., Cristi, H., Verceles, E.R., Hilario, F.D. & R. Abastillas. 2006. Seasonal reversal of the ENSO rainfall signal in the Philippines. Geophysical Research Letters 33(24) L24710, doi:10.1029/2006GL028182.

M&A International. 2013. The seafood industry: A sea of buyers fishing for M&A opportunities across the entire value chain. M&A Internacional Inc. 30 pp.

Marean, C.W. 2010. Pinnacle Point Cave 13B (Western Cape Province, South Africa) in context: The Cape Floral kingdom, shellfish, and modern human origins. Journal of Human Evolution 59(3-4): 425-443.

MARIBUS. 2010. World Ocean Review. Living with the Oceans. MARIBUS gGmbH. Hamburg, Germany; 236 pp.

Marko, P.B., Nance, H.A. & K.D. Guynn. 2011. Genetic detection of mislabeled fish from a certified sustainable fishery. Current Biology 21(16): 621 - 622.

Marsac, F., Fonteneau, A. & F. Ménard. 2000. Drifting FADs used in tuna fisheries: an ecological trap? In: Le Gall, J.Y., Cayré, P. & M. Taquet M (eds.) Pêche thonière et dispositifs de concentration de poissons. Actes Colloques IFREMER 28:537–552.

Martin, S.M., Cambridge, T.A., Grieve, C., Nimmo, F.M. & D.J. Agnew. 2012. An Evaluation of Environmental Changes Within Fisheries Involved in the Marine Stewardship Council Certification Scheme. Reviews in Fisheries Science 20(2): 61-69.

Martínez-Ortíz, J. & M. Zúñiga-Flores (eds.) 2012. Estado actual del conocimiento del recurso dorado (*Coryphaena hippurus*) Linnaeus, 1758 en aguas del Océano Pacífico suroriental (2008-2011). Informe técnico final del proyecto "dinámica de la población: la pesca y la biología del dorado en Ecuador". Ministerio de Agricultura, Ganadería, Acuacultura y Pesca (MAGAP) - Marine Stewardship Council (MSC) - Escuela de Pesca del Pacífico Oriental (EPESPO):142 pp.

McCosker, J.E., Stephens, J.S. & R,H. Rosenblatt. 2003. Cottoclinus canops, a new genus and species of blenny (Perciformes: Labrisomidae) from the Galápagos Islands PROCEEDINGS-CALIFORNIA ACADEMY OF SCIENCES 54(1/8): 155-160.

McGowan, M. & K. McClain. 2010. Market and cannery overview. Presentation to Workshop on global tuna demand and fisheries dynamics in the eastern Pacific Ocean. May 2010. La Jolla (USA).

Mester, A. 1985. Un taller manteño de concha madreperla del sitio Los Frailes, Manabí. Miscelánea Antropológica Ecuatoriana 5(5):101-111.

MICIP. 2006. Plan de Acción Nacional para la Conservación y el Manejo de Tiburones de Ecuador. Ministerio de Industria, Comercio Exterior y Pesca (MICIP). Quito, Ecuador: 44 pp.

Miloslavich, P., Klein, E., Díaz, J.M., Hernández, C.E., Bigatti, G., Campos, L., Artigas, F., Castillo, J., Penchaszadeh, P.E., Neill, P.E., Carranza, A., Retana, M.V., Días de Astarloa, J.M., Lewis, M., Yorio, P., Piriz, M.L., Rodríguez, D., Yoneshigue-Valentin, Y., Gamboa, L. & A. Martin. 2011. Marine Biodiversity in the Atlantic and Pacific Coasts of South America: Knowledge and Gaps. PLoS ONE 6(1): e14631. doi:10.1371/journal.pone.0014631

MMAF. 2012. Indonesia National Tuna Management Plan. Directorate of Fish Resource Management. Directorate General of Capture Fisheries. Ministry of Marine Affairs and Fisheries (MMAF). Jakarta, Republic of Indonesia: 60 pp.

MMAF. 2014. Fish Consumption Statistic 2011-2013. www.statistik.go.id cited on 10 September 2014.

Morgan, A.C. 2011. Fish Aggregating Devices and Tuna: Impacts and Management Options. Ocean Science Division, Pew Environment Group, Washington, D.C.: 17 pp.

MSC. 2011. Harnessing market forces for positive environmental change - The MSC theory of change. Marine Stewardship Council (MSC). London, UK: 5 pp. Online http://www.msc.org/documents/msc-brochures/msc-theory-of-change.

MSC. 2013. Marine Stewardship Council: Global Impacts Report 2013. Marine Stewardship Council (MSC). London, UK: 56 pp.

MSC. 2014. Benchmarking and Tracking Tool (BMT). Guidance for benchmarking fisheries improving towards MSC certification. Marine Stewardship Council (MSC). London, UK: 21 pp.

Nemenzo, F. 1982. Studies on the systematics of scleractinian corals in the Philippines. Pages 25-32. In: Gomez, E.D. Birkeland, C.E., Buddemeier, R.W. Johannes, R.E., Marsh, J. A. & R.T. Tsuda (eds.) Proceedings of the 4th International Coral Reef Symposium Vol. 1. Marine Sciences Center, University of the Philippines, Manila, Philippines.

Nesheim, M.C. & A.L. Yaktine (eds.) 2007. Seafood choices balancing benefits and risks. Committee on Nutrient Relationships in Seafood: Selections to Balance Benefits and Risks. Institute of Medicine of the National Academies. The National Academies Press. Washington, D.C. USA: 722 pp.

NMFS. 2012. Fisheries of the United States 2011. Current Fishery Statistics 2011. National Marine Fisheries Service (NMFS). Silver Spring, MD, USA: 124 pp.

OECD/FAO. 2011. Fish. Pages 147 – 158 in OECD-FAO Agricultural Outlook 2011, OECD Publishing. http://dx.doi.org/10.1787/agr_outlook-2011-en

OECD/FAO. 2014. Fish and seafood. Pages 189 - 203 in OECD-FAO Agricultural outlook 2014. OECD Publishing. http://dx.doi.org/10.1787/agr_outlook-2014-11-en

Paolisso, M. 2007. Taste the Traditions: Crabs, Crab Cakes, and the Chesapeake Bay Blue Crab Fishery. American Anthropologist 109(4): 654–665.

Pauly, D. & M.L. Palomares. 2005. Fishing down marine food webs: it is far more pervasive than we thought. Bulletin of Marine Science 76(2):197-211.

Pauly, D., Christensen, V., Dalsgaard, J. Froese, R., & F. Torres. 1998. Fishing Down Marine Food Webs. Science 279(5352): 860-863

Pauly, D., Watson, R. & J. Alder. 2005. Global trends in world fisheries: impacts on marine ecosystems and food security. Philos Trans. R. Soc. Lond. B Biol. Sci. 360(1453): 5–12.

Perez, M.L., Pido, M.D., Garces, L.R. & N.D. Salayo. 2012. Towards Sustainable Development of Small-Scale Fisheries in the Philippines: Experiences and Lessons Learned from Eight Regional Sites. WorldFish, Penang, Malaysia. Lessons Learned Brief 2012-10: 15 pp.

Peterson, H. C. & K., Fronc 2007 Fishing for consumers: market-driven factors affecting the sustainability of the fish and seafood supply chain. Pages 424–452 In Taylor, W.W., Schechter, M.G. & L.G. Wolfson (eds.) Globalization: effects on fisheries resources. Cambridge University Press. Cambridge, UK.

Powers, J.E. & P.A.H. Medley. 2013. An Evaluation of the Sustainability of Global Tuna

Stocks Relative to Marine Stewardship Council Criteria. ISSF Technical Report 2013-01. International Seafood Sustainability Foundation (ISSF), Washington, D.C., USA: 251 pp.

Prieto, I. 2010. Tuna Cannery and Market Overview in Ecuador. Presentation to Workshop on global tuna demand and fisheries dynamics in the eastern Pacific Ocean. May 2010. La Jolla (USA). Online http://fisheriesstockassessment.com/files/economics/P11_Ivan_English.pdf

Rhodes, K.L., Warren-Rhodes, K., Houk, P., Cuetos-Bueno, J. & Q. Fong. 2011. An Interdisciplinary Study of Market Forces and Nearshore Fisheries Management in Micronesia. A Report of the Marine Program of the Asia Pacific Conservation Region. The Nature Conservancy. Report No.6/11: 120 pp.

Salas, E., RoSS salazar, E. & A. Arias (eds.) 2012. Diagnóstico de áreas marinas protegidas y áreas marinas para la pesca responsable en el Pacífico costarricense. Fundación MarViva. San José, Costa Rica: 174 pp.

Salazar, S. 2013. Situación actual de la pesca artesanal en Costa Rica. Anuario de Estudios Centroamericanos, Universidad de Costa Rica 39: 311-342.

Salm, R.V., J.R. Clark & E. Siirila. 2000. Marine and Coastal protected areas: a guide for planners and managers. Third edition. IUCN. Washington DC: 371 pp.

Schmitt, C. V. 2011. Adrift in a Sea of Information about Sustainable Seafood: The Maine Consumer Perspective. Maine Policy Review 20(1): 96 -104.

Schneider, N. 1998: The Indonesian Throughflow and the Global Climate System. J. Climate, 11, 676–689.

Schwerdtner Mañez, K. & S.C.A. Ferse. 2010. The History of Makassan Trepang Fishing and Trade. PLoS ONE 5(6): e11346. doi:10.1371/journal.pone.0011346

Seafood Choice Alliance. 2007. The European Marketplace for Sustainable Seafood. April 2007. Silver Spring, USA: 31 pp.

Seafood Choice Alliance. 2008. The U.S. marketplace for sustainable seafood: are we hooked yet? Silver Spring, USA: 34 pp.

Selig, E. R., Turner, W. R., Troeng, S,, Wallace, B. P., Halpern, B. S., Kschner, K., Lascelles, B. G., Carpenter, K. E. & R. A. Mittermeier. 2014. Global Priorities for Marine Biodiversity Conservation. PLoS ONE 9(1): e82898. doi:10.1371/journal.pone.0082898

Seminoff, J.A., Zarate, P., Coyne, M., Foley, D.G., Parker, D., Lyon, B.N. & P.H. Dutton. 2008. Post-nesting migrations of Galapagos green turtles *Chelonia mydas* in relation to oceanographic conditions: integrating satellite telemetry with remotely sensed ocean data. Endang.Species Res. 4:57-72.

SFP. 2012. Fishery Improvement Projects. Sustainable Fisheries Partnership (SFP): 6 pp.

Online http://cmsdevelopment.sustainablefish.org.s3.amazonaws.com/2012/01/12/FIP Overview Jan 2012-d6749f2d.pdf

SFP. 2014. The Seafood Industry Guide to FIPs. An introduction to setting up and running a fishery improvement project. Sustainable Fisheries Partnership (SFP): 8 pp.

Online http://cmsdevelopment.sustainablefish.org.s3.amazonaws.com/2014/04/28/SFP FIPS Guide 2014-1722c02f.pdf

Sherman, K. & G. Hempel (eds.) 2009. The UNEP Large Marine Ecosystem Report: A perspective on changing conditions in LMEs of the world´s Regional Seas. UNEP Regional Seas Report and Studies 182. United Nations Environment Programme (UNEP). Nairobi, Kenya: 852 pp.

Siason, I.M., Tech, E., Matics, K.I., Choo, P.S., Shariff, M., Heruwati, E.S, Susilowati, T., Miki, N., Shelly, A.B., Rajabharshi, K.G., Ranjit, R., siriwardena, P.P.G.N., Nandeesha, M.C. & M. Sunderarajan. 2001. Women in Fisheries in Asia. In Proceedings of the Global Symposium on Women in Fisheries. WorldFish Center.

Springsteen, F.J. & F.M. Leobrera. 1986. Shells of the Philippines. Carfel Shell Museum. Malate, Metro Manila, Philippines: 317 pp.

Sprintall, J. & A. Révelard. 2014. The Indonesian Throughflow response to Indo-Pacific climate variability. Journal of Geophysical Research: Oceans 119: 1161-1175.

Sprintall, J., Gordon, A.L., Koch-Larrouy, A., Lee, T., Potemra, J.T., Pujina, K. & S.E. Wijffels. 2014. The Indonesian seas and their role in the coupled ocean–climate system. Nature Geoscience 7: 487-492.

SRP. 2011. Plan de acción nacional para la conservación y manejo del recurso dorado en Ecuador (PAN Dorado). Martínez-Ortiz, J. & P. Guerrero-Verduga (eds.) Subsecretaría de Recursos Pesqueros (SRP) - Ministerio de Agricultura, Ganadería, Acuacultura y Pesca (MAGAP). Manta, Ecuador: 102 pp.

Stobutzkia, I.C., Silvestre, G.T., Abu Talib, A., Krongprom, A., Supongpan, M., Khemakorn, P., Armada, N., & L.R. Garces. 2006. Decline of demersal coastal fisheries resources in three developing Asian countries. Fisheries Research 78: 130-142.

Taylor, B. 2013. Blue Swimmer Crab Portunus pelagicus. Philippines. Bottom gillnet, Pot. Monterey Bay Aquarium SeafoodWatch. 23 September 2013: 45 pp.

Teisla, M.F., Roeb, B. & R.L. Hicks. 2002. Can Eco-Labels Tune a Market? Evidence from Dolphin-Safe Labeling. Journal of Environmental Economics and Management 43(3): 339–359.

Thorsdottir, I. & A. Ramel. 2008. Fish consumption and the health of children and young adults. Pages 136–164 In Børresen, T. (ed.) Improving seafood products for the consumer. Woodhead Publishing Limited. Cambridge, England.

Toral-Granda, V., Lovatelli, A. & M. Vasconcellos, M. (eds.) 2008. Sea cucumbers. A global review of fisheries and trade. FAO Fisheries and Aquaculture Technical Paper 516. Rome, FAO: 317 pp.

Trujillo, P. Cisneros-Montemayor, A.M. Harper, S. & D. Zeller. 2012. Reconstruction of Costa Rica's marine fisheries catches (1950-2008). Fisheries Centre. The University of

Bristish Columbia. Working Paper Series. Working paper 2012-03: 21 pp.

Tveteras, S., Asche, F., Bellemare, M.F., Smith, M.D., Guttormsen, A.G., Lem, A., Lien, K. & S. Vannuccini. 2012. Fish Is Food - The FAO's Fish Price Index. PLoS ONE 7(5): e36731. doi:10.1371/journal.pone.0036731

UNDP. 2012. Guidance for National Sustainable Commodity Platforms. Green Commodities Facility. United Nations Development Programme (UNDP). New York, USA: 18 pp.

UNDP. 2014. Human Development Report 2014. Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience. United Nations Development Programme (UNDP). New York, USA: 226 pp.

UNEP. 2006. Challenges to International Waters – Regional Assessments in a Global Perspective. United Nations Environment Programme (UNEP). Nairobi, Kenya: 125 pp.

UNEP. 2009. Certification and Sustainable Fisheries. United Nations Environment Programme (UNEP). Division of Technology, Industry and Economics. Nairobi, Kenya: 86 pp.

UNEP. 2009. Green meeting guide 2009. United Nations Environment Programme (UNEP). Nairobi, Kenya: 69 pp.

UNEP. 2012. Sustainable events guide. United Nations Environment Programme (UNEP). Nairobi, Kenya: 114 pp.

United Nations. 1995. Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982, Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. UN General Assembly, Doc. A/CONF.164/37. September 8, 1995: 36 pp.

A & HHS. 2010. Dietary Guidelines for Americans, 2010. 7th Edition. U.S. Department of Agriculture (USDA) and U.S. Department of Health and Human Services (HHS). U.S. Government Printing Office. Washington, DC.: 95 pp.

Valle, C., Cruz, F., Cruz, J.B., Merlen, G. & M.C. Coulter. 1987. The impact of the 1982–1983 El Niño-Southern Oscillation on seabirds in the Galapagos Islands, Ecuador. Journal of Geophysical Research: Oceans 92(C13): 14437–14444.

Valle, C.A. & M.C. Coulter. 1987. Present status of the flightless cormorant, Galapagos penguin and greater flamingo populations in the Galapagos Islands, Ecuador, after the 1982-1983 El Niño. The Condor 89(2):276-281.

Wafar, M., Venkataraman, K., Ingole, B., Ajmal Khan, S. & P. LokaBharathi. 2011. State of Knowledge of Coastal and Marine Biodiversity of Indian Ocean Countries. PLoS ONE 6(1): e14613. doi:10.1371/journal.pone.0014613

Washington, S. & L. Ababouch.2011. Private standards and certification in fisheries and aquaculture: current practice and emerging issues. FAO Fisheries and Aquaculture Technical Paper 553. Rome, FAO: 181 pp.

Washington, S. 2008. Ecolabels and marine capture fisheries: current practice and emerging issues. GLOBEFISH Research Programme. Vol.91 FAO, Rome: 52 pp.

Weeks, R., Russ, G.R., Alcala, A.C. & A.T. white. 2009. Effectiveness of MPA in the Philippines for biodiversity conservation. Conservation Biology 24(2): 531-540.

Wehrtmann, I.S. & J. Cortés (eds.) 2009. Marine Biodiversity of Costa Rica, Central America. Monographiae Biologicae 86. Springer.

Wessells, C.R., Cochrane, K., Deere, C., Wallis, P. & R. Willmann. 2001. Product certification and ecolabelling for fisheries sustainability. FAO Fisheries Technical Paper 422. Rome, FAO: 83 pp.

Wiedenfeld, D. A. 2012. Analysis of the effects of Marine Stewardship Council fishery certification on the conservation of seabirds. American Bird Conservancy (ABC). The Plains, VA, USA: 40 pp.

Wikelski, M. & C. Thom. 2000. Marine iguanas shrink to survive El Niño. Nature 403: 37-38.

WWF. 2009. Assessment Study of On-Pack, Wild-Capture Seafood Sustainability Certification Programmes and Seafood Ecolabels. An independent assessment by Accenture Development Partners (ADP). WWF International. Gland, Switzerland: 146 pp. Online:http://awsassets.panda.org/downloads/full_report_wwf_ecolabel_study_lowres.pdf

WWF. 2013. FIP Handbook. Guidelines for Developing Fishery Improvement Projects. WWF-US Fisheries Program. December 2013: 83 pp.

Wyrtki, K. 2005. Discovering the Indonesian throughflow. Oceanography 18(4):28–29.

Wyrtki, K., 1958: The water exchange between the Pacific and the Indian Oceans in relation to upwelling processes. Inst. Mar. Res., Djarkata. Proc. Ninth Pac. Sci. Cong. 16: 61- 65.

Yau, A.J.Y. 2011. Octopus. Seafood Watch. Seafood Report. Monterey Bay Aquarium. 24 August 2011. 46 pp.