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|---|---|---|
| **Project title:** *Towards joint integrated, ecosystem-based management of the Pacific Central American Coastal Large Marine Ecosystem (PACA, Pilot Project Mexico* | | |
| **Countries:** México | **Implementing Partner (GEF Executing Entity):** Instituto de Ecología de la Universidad Nacional Autónoma de México | **Execution Modality**: Full Support to National implementation (NIM) |
| **Contributing Outcome (UNDAF/CPD, RPD, GPD)**: MEXICO COOPERATION FRAMEWORK - OUTCOME 6. By 2025, the Mexican State implements policies, strategies, and programmes that allow moving towards a green economy that promotes the mitigation of climate change and the strengthening of the institutional framework, taking into consideration energy efficiency, promotion of clean and renewable energy, production, consumption, transportation, cities, and sustainable agriculture, with a focus on health, human rights, gender, interculturality, life cycle, and territory. Country Programmed Document (CPD) Output 5: Strengthened capacities and partnerships between key actors for the promotion of sustainable economies and the fortification of institutional frameworks to create resilience to climate change.<br>Signature solutions: Governance / Environment: nature-based solutions for development | | |
| **UNDP Social and Environmental Screening Category:** *Moderate* | **UNDP Gender Marker:** *2* | |
| **Atlas Award ID: 00099248** | **Atlas Project/Output ID: 00102556** | |
| **UNDP-GEF PIMS ID number:** 6273 | **GEF Project ID number:** 10076 | |
| **LPAC Regional Project meeting date:** *13 October 2021*<br>*LPAC Pilot Project Mexico:* | | |
| **Latest possible date to submit to GEF:** 13 Dec. 2020 (including covid-19 extension) | | |
| **Latest possible CEO endorsement date:** *13 June 2021 (including covid-19 extension)* | | |
| **Planned start date: 16/10/2023** | **Planned end date: 27/02/2027** | |
| **Expected date of posting of Mid-Term Review to ERC: 27/02/2025** | **Expected date of posting Terminal evaluation report to ERC: 27/11/2026** | |

**Brief project description:** The Pacific Central American Coastal Large Marine Ecosystem (PACA) is a valuable source of natural resources and ecosystem services for Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Colombia and Ecuador. It extends from southern Mexico to the Gulf of Guayaquil encompassing a surface of ca., 1,996,659 km$^2$ of coastal and marine habitats. PACA integrates five marine ecoregions and high conservation value species like blue whales (*Balaenoptera musculus*) and humpback whales (*Megaptera novaeangliae*) and marine turtles. PACA´s ecosystems are key to sustain trans-equatorial migration of several birds like the Sabine's gull (*Xema sabini*) and the pink-footed shearwater (*Ardenna creatopus*).

About 245.4 million people live in the nine bordering countries, 59.8 million in the coastal provinces, and approximately 17.1 million people live in the 228 coastal municipalities that border PACA. This LME is fundamental for the blue economy of the region. Key blue sectors are fisheries, aquaculture, shipping and marine tourism. For example, there are important fisheries in the area, like small pelagic fish, shrimps, and the regional tuna fishery of Eastern Pacific Ocean. The estimated total catch in 2016 was 1.3 million tonnes with a value of USD 1.9 billion.

The Transboundary Waters Assessment Programme (TWAP) found that PACA´s overall risk factor is high. Biodiversity is threatened mainly by: (1) pollution, (2) degradation of coastal and marine ecosystems and habitats, (3) overuse of fishery resources, (4) direct impacts on fauna and flora, and (5) climate variability and climate change. The area is also impacted by the consequences of poverty, illegal drug trafficking, and illegal migration.

The regional project will focus on transboundary marine governance to address the existing inadequate ordering and management of shared resources which is one of the root causes. The core element of the proposed theory of change is that improved marine governance will contribute to construct sound seascape-level ecosystem-based management. The project will allocate GEF resources strategically to (1) develop a participatory process to generate an integrated diagnosis on the current situation of the large marine ecosystem(i.e., TDA) and a formal instrument adopted by the participating countries (i.e., SAP), (2) build human and social capital through training, communication and knowledge transfer, and (3) implement

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| some practical exercises to generate learning on key issues (billfish recreational fisheries, marine spatial planning, and whale watching).<br>The pilot project In Mexico, will focus on develop a Marine Ecological Management Programme for Mexico´s South Central Pacific Region as part of the Regional Project. | | |
| **FINANCING PLAN** | | |
| GEF Trust Fund – Mexico National activities (Pilot Project: Marine Ecological Management Programme for Mexico´s South Central Pacific Region) | | USD 348,450 |
| **(1) Total Budget administered by UNDP Mexico**[1] | | **USD 348,450** |
| **CONFIRMED CO-FINANCING** [2] | | |
| Mexico | CONANP | USD 500,000 |
| Mexico | LANCIS | USD 175,000 |
| Mexico | CONAPESCA | USD 4,548,000 |
| Mexico | PROFEPA | USD 30,465.54 |
| Mexico | SCT | USD 11,649,169.15 |
| Mexico | SEMAEDESO Oaxaca | USD 223,373.90 |
| Mexico | SEMAHN Chiapas | USD 199,404.38 |
| Mexico | SEMAR | USD 422,146.69 |
| Mexico | SEMARNAT Colima | USD 1,403.31 |
| Mexico | SEMARNAT Oaxaca | USD 690.61 |
| **(2) Total confirmed co-financing** | | **USD 17,749,653.58** |
| **(3) Grand-Total Pilot Project Financing (1)+(2)** | | **USD 18,098,103.58** |

**SIGNATURES**

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|---|---|---|
| **Signature:**<br><br>Dr. José Alfredo Galván Corona<br>Encargado del Despacho de la Dirección General de Operación de Proyectos en México. Con fundamento en lo dispuesto por el artículo 77 del RISRE y del oficio AMI/01571/2023 del 01/09/2023 | **Agreed by Government Development Coordination Authority**<br><br>Agencia Mexicana de Cooperación Internacional para el Desarrollo (AMEXCID) | **Date/Month/Year:**<br><br>**06/10/2023** |
| **Signature**<br><br>Dr. William Henry Lee Alardín<br>Coordinador de la Investigación Científica<br>Universidad Nacional Autónoma de México<br><br>Dra. Ana Elena Escalante Hernández<br>Directora del Instituto de Ecología | **Implementing Partner**<br><br>Instituto de Ecología de la Universidad Nacional Autónoma de México | **Date/Month/Year:**<br><br>06-Sep-2023 |

[1] Total GEF Grant is $7,147,209, this prodoc includes resources only for the implementation of Mexico pilot project.
[2] This co-financing represents Mexico co-financing to the project as a whole.

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|---|---|---|
| **Signature:**<br><br>Mtro. Iván Rico López<br>Subsecretario de Política Ambiental y Recursos Naturales. | **Agreed by National Lead Institution**<br><br>Ministry of Environment and Natural Resources. | **Date/Month/Year:**<br><br>18/09/23 |
| **Signature:**<br><br>Sr. Lorenzo Jiménez de Luis<br>Representante Residente. | **Agreed by UNDP**<br><br>United Nations Development Programme in Mexico. | **Date/Month/Year:**<br><br>14/09/23 |

[1] Total GEF Grant is $7,147,209, this prodoc includes resources only for the implementation of Mexico pilot project.
[2] This co-financing represents Mexico co-financing to the project as a whole.

**Key GEF Project Cycle Milestones:**
**Project document signature**: benchmark date for completion no later than 6 months from GEF CEO endorsement.
**First disbursement date**: To be achieved by no later than 18 months from GEF CEO endorsement, provided that the RR shall make all efforts to achieve this by a benchmark date of 8 months from GEF CEO endorsement.
**Inception workshop date**: to be held by a benchmark date of 2 months from the date of first disbursement
**Operational closure:** Operational closure must happen at the end date calculated by the approved duration after the Project Document signature or at the revised operational closure date as approved in the project extension.
**Financial closure:** within 6 months of operational closure or after the date of cancellation

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## Acronyms

| Acronym | Español | English |
|---|---|---|
| ARAP | Autoridad de los Recursos Acuáticos de Panamá | Panama´s Water Resources Authority |
| CBD | Convenio sobre la Diversidad Biológica | Convention on Biological Diversity |
| CCAD | Comisión Centroamericana de Ambiente y Desarrollo | Central American Commission for Environment and Development |
| CDR | Informe combinado | Combined delivery report |
| CENDEPESCA | Centro de Desarrollo de la Pesca y la Acuicultura (El Salvador) | Fisheries and Aquaculture Development Centre (El Salvador) |
| CMAR | Corredor Marino del Pacífico Este Tropical | Marine Corridor of the Eastern Tropical Pacific |
| CMSP | Ordenamiento espacial costero y marino | Coastal and marine spatial planning |
| CNP | Parque Nacional Coiba | Coiba National Park |
| CO | Oficina de país | Country office |
| COMMCA | Consejo de Ministras de la Mujer de Centroamérica y República Dominicana | Council of Ministers for Women of Central America and Dominican Republic |
| CONANP | Comisión Nacional de Áreas Naturales Protegidas (México) | National Commission of Natural Protected Areas (Mexico) |
| CONAPESCA | Comisión Nacional de Acuacultura y Pesca (México) | National Commission of Aquaculture and Fisheries (Mexico) |
| COVID-19 | Enfermedad del coronavirus 2019 | Coronavirus Disease 2019 |
| CPAP | Plan de acción del programa de país | Country programme action plan |
| CPPS | Comisión Permanente del Pacífico Sur | Permanent Commission for the South Pacific |
| DIGEPESCA | Dirección General de Pesca y Acuicultura (Honduras) | General Directorate of Fisheries and Aquaculture (Honduras) |
| DIPESCA | Dirección de Normatividad de la Pesca y Acuicultura (Guatemala) | Directorate for Fisheries and Aquaculture Regulations (Guatemala) |
| DIRNEA | Dirección Nacional de los Espacios Acuáticos (Ecuador) | National Directorate of Aquatic Spaces (Ecuador) |
| DPC | Costos directos de proyecto | Direct project costs |
| DPS | Servicios directos de proyecto | Direct project services |
| ECM | Especialista en comunicación | Communications specialist |
| EEZ | Zona Económica Exclusiva | Exclusive Economic Zone |
| EGP | Especialista en género y participación | Gender and participation specialist |
| EMC | Especialista en gestión del conocimiento | Knowledge management specialist |
| EME | Especialista en monitoreo y evaluación | Monitoring and evaluation specialist |
| EMR | Especialista en manejo de recursos marinos | Specialist in marine resources management |
| ENSO | El Niño oscilación del sur | El Niño southern oscillation |
| ERC | Centro de recursos de evaluación del PNUD | UNDP´s Evaluation Resource Centre |
| FAO | Organización de las Naciones Unidas para la Alimentación y la Agricultura | Food and Agriculture Organization of the United Nations |
| FECOP | Federación Costarricense de Pesca | Costa Rican Fishing Federation (FECOP) |
| GAPI | Indicador del Plan de Acción de Género | Gender Action Plan Indicator |
| GEF | Fondo para el Medio Ambiente Mundial | Global Environment Facility |
| GEF ID | Número de identificación de proyecto GEF | GEF project identification number |
| GEFSEC | Secretaría del Fondo para el Medio Ambiente Mundial | Global Environment Facility Secretariat |
| GRT-IEG | Grupo Regional de Trabajo de Igualdad y Equidad de Género en la pesca y acuicultura de OSPESCA | OSPESCA´s Regional Working Group on Gender Equality and Equity in fisheries and aquaculture |
| HACT | Enfoque armonizado para transferencias en efectivo | Harmonized approach to cash transfers |
| IATTC | Comisión Interamericana del Atún Tropical | Inter-American Tropical Tuna Commission |
| IDP | Política sobre divulgación de información del PNUD | UNDP information disclosure policy |
| INCOPESCA | Instituto Costarricense de Pesca y Acuicultura | Costa Rican Institute of Fisheries and Aquaculture |
| INOCAR | Instituto Oceanográfico y Antártico de la Armada (Ecuador) | Oceanographic and Antarctic Institute of the Navy (Ecuador) |
| INPI | Instituto Nacional de los Pueblos Indígenas (México) | National Institute of Indigenous Peoples (Mexico) |
| IOC/UNESCO | Comisión Oceanográfica Intergubernamental de la UNESCO | UNESCO's Intergovernmental Oceanographic Commission |
| IW:LEARN | Red de intercambio de aprendizaje y recursos de Aguas Internacionales del GEF. | GEF International Waters learning exchange and resource network. |
| IWC | Conferencia bienal de Aguas Internacionales del GEF | GEF biennial International Waters Conference |
| LANCIS | Laboratorio Nacional de Ciencias de la Sostenibilidad de UNAM | UNAM´s National Laboratory for Sustainability Sciences |
| LOA | Carta de acuerdo | Letter of agreement |
| M&E | Monitoreo y evaluación | Monitoring and evaluation |
| MAAE | Ministerio del Ambiente y Agua (Ecuador) | Ministry of Environment and Water (Ecuador) |
| MiAmbiente | Ministerio de Ambiente (Panamá) | Ministry of Environment (Panama) |
| MINAE | Ministerio de Ambiente y Energía (Costa Rica) | Ministry of Environment and Energy (Costa Rica) |
| MOOC | Curso En-línea Masivo y Abierto | Massive Open Online Course |
| MPAs | Áreas marinas y costeras protegidas | Coastal and marine protected areas |
| MRE | Ministerio de relaciones exteriores | Ministry of foreign affairs |

| | | |
|---|---|---|
| MSP | Ordenamiento espacial marino | Marine spatial planning |
| MTR | Examen de mitad de periodo | Midterm review |
| NIM | Modalidad de implementación nacional | National implementation modality |
| NOAA | Administración Nacional Oceánica y Atmosférica | National Oceanic and Atmospheric Administration |
| OPM | Gerente de operaciones | Operations manager |
| OPO | Océano Pacífico Oriental | Eastern Pacific Ocean |
| OSC | Organización de la sociedad civil | Civil society organization |
| OSPESCA | Organización del Sector Pesquero y Acuícola del Istmo Centroamericano | Organization of the Fisheries and Aquaculture Sector of the Central American Isthmus |
| PIP | Política sobre participación pública en los proyectos financiados por el Fondo ara el Medio Ambiente Mundial | Policy on public involvement in GEF projects |
| PIR | Informe de ejecución de proyecto GEF | GEF Project Implementation Report |
| POPP | Políticas y procedimientos de programa y operaciones de PNUD | UNDP programme and operations policies and procedures |
| PPD | Programa de pequeñas donaciones del GEF | GEF small grants programme |
| PPG | Subvención para preparación del proyecto | Project Preparation Grant |
| PRODOC | Documento de proyecto | Project document |
| PTA | Asesor técnico principal | Principal technical advisor |
| SAP | Programa de acción estratégico | Strategic action programme |
| SAPI | Indicador del plan de involucramiento de actores | Stakeholder Action Plan Indicator |
| SBAA | Acuerdo básico modelo de asistencia | Standard basic assistance agreement |
| SEMAR | Secretaría de Marina (México) | Secretariat of the Navy (Mexico) |
| SEMARNAT | Secretaría de Medio Ambiente y Recursos Naturales (México) | Secretariat of Environment and Natural Resources (Mexico) |
| SESP | Procedimiento de Diagnóstico social y ambiental de PNUD | UNDP's Social and Environmental Screening Procedure |
| SG-SICA | Secretaría General del SICA | SICA´s General Secretariat |
| SICA | Sistema de la Integración Centroamericana | Central American Integration System |
| SIG-SICA | Sistema de información geográfica del SICA | SICA´s geographic information system |
| SINAC | Sistema Nacional de Áreas de Conservación (Costa Rica) | National System of Conservation Areas (Costa Rica) |
| SRP | Subsecretaría de Recursos Pesqueros (Ecuador) | Undersecretary of fisheries resources (Ecuador) |
| STAP | Panel de Asesoramiento Técnico Científico del GEF | GEF Scientific Technical Advisory Panel |
| STAR | Sistema para la asignación transparente de recursos del GEF | GEF System for Transparent Allocation of Resources |
| STM-COMMCA | Secretaría Técnica de la Mujer del Consejo de Ministras de la Mujer de Centroamérica y República Dominicana | Technical Secretariat for Women of the Council of Ministers for Women of Central America and Dominican Republic |
| TDA | Análisis diagnóstico transfronterizo | Transboundary diagnostic analysis |
| TE | Evaluación final | Terminal evaluation |
| UNAM | Universidad Nacional Autónoma de México | National Autonomous University of Mexico |
| UNDAF | Marco de Cooperación para el Desarrollo de las Naciones Unidas | United Nations Development Assistance Framework |
| UNDP | Programa de las Naciones Unidas para el Desarrollo | United Nations Development Programme |
| UNEP | Programa de las Naciones Unidas para el Medio Ambiente | United Nations Environment Programme |
| UPL | Lista universal de precios | Universal price list |
| USD | Dólar de los Estados Unidos de América | United States dollar |

Development Challenge

Environmental context and global significance

1. The Pacific Central-American Coastal Large Marine Ecosystem (PACA) extends from southern Mexico[3] (about 22° north) to northern Peru (about 4° south) (Figure 1), encompassing a surface of ca., 199,665,900 ha (1,996,659 km2) of coastal and marine habitats (IOC-UNESCO & UNEP, 2015), and 20,853,000 ha of continental shelf[4] (208,530 $km^2$, ca., 10.4% of the total area). Nine countries share PACA (from North to South): Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panamá, Colombia, and Ecuador. This Large Marine Ecosystem (LME) has warmer conditions than the neighbouring Gulf of California LME and Humboldt current LME. The northern and southern extremes are transition areas with seasonal subtropical conditions caused by the influence of the California and Humboldt currents, respectively (Aquarone & Adams, 2009; Heileman, 2009; Heileman et al., 2009; Wilkinson et al., 2009).

2. PACA is very dynamic and diverse. It integrates five marine ecoregions (Spalding et al., 2007): Mexican Tropical Pacific (166), Chiapas-Nicaragua (167), Nicoya (168), Panama Bight (170) and Guayaquil (171) (Figure 2). Each with characteristic ecological and oceanographic features.

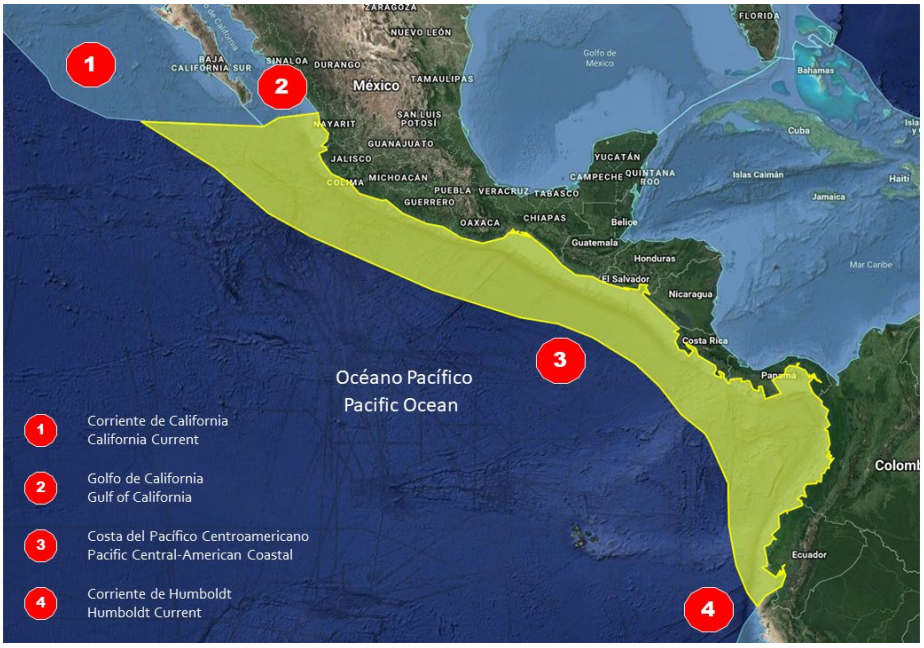



Figure 1. Pacific Central-American Coastal Large Marine Ecosystem (PACA). Source: www.seaaroundus.org.

3. PACA is a very productive LME (class 4[5]); the average primary productivity is 407 g C $m^{-2}$ $y^{-1}$. This is lower than the 502 g C $m^{-2}$ $y^{-1}$ in the Gulf of California LME (a class 5 LME), and higher than the 144 g C $m^{-2}$ $y^{-1}$ in the California current LME (class 2) and 281 g C $m^{-2}$ $y^{-1}$ in the Humboldt current LME (class 3). This high primary production is caused by coastal upwelling. In Central America, upwelling develops as a result of locally intense

3 Includes the Mexican Pacific Transition and Middle American Pacific regions (Wilkinson et al., 2009). It roughly starts in the border between the States of Sinaloa and Nayarit.

4 Source: http://www.seaaroundus.org

5 The productivity range was grouped into five classes, where 1 is the lowest and 5 is the highest (IOC-UNESCO & UNEP, 2016).

jets of wind blowing from high pressure systems in the Gulf of Mexico and the Caribbean towards the Pacific Ocean; wind jets flow through four passages (i) the isthmus of Tehuantepec, (ii) the Gulf of Fonseca, (iii) the Lake Nicaragua, and (iv) the Panama Canal (Barton et al., 1993; Trasviña et al., 1995; Martínez Díaz de León et al., 1999; Brenes et al., 2003; Belkin et al., 2003; Heileman, 2009).

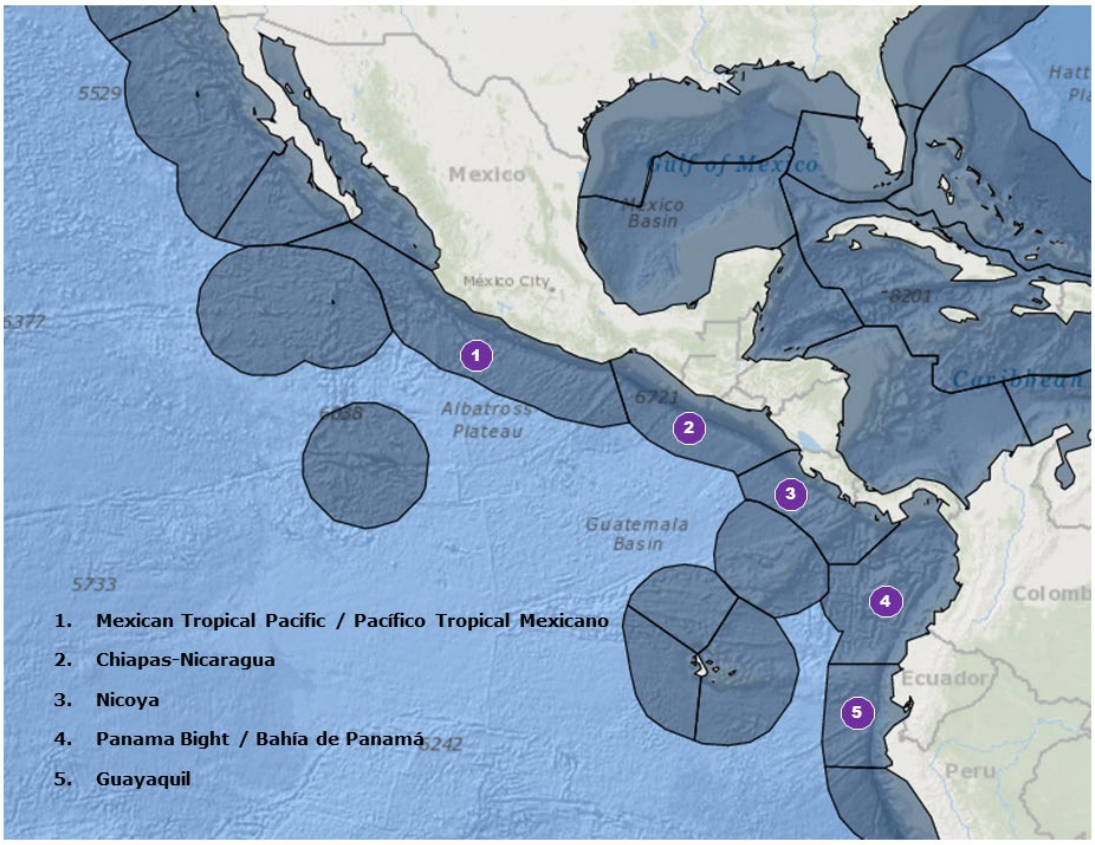



Figure 2. Marine ecoregions included in the Pacific Central-American Coastal Large Marine Ecosystem. Source: www.seaaroundus.org.

4. This LME has outstanding marine and coastal biodiversity. The One Shared Ocean project list 931 fish species and a rough estimate of 1,470 non-fish species. However, biological diversity is most certain much larger. Miloslavic et al., (2011) list 6,714 species only in the area between Costa Rica and Ecuador. They found that the most diverse taxa were polychaeta (1,894 species), fishes (1,212 species), crustaceans (863 species), and molluscs (875 species), these together accounted for 47.3% of the total known biota. In the Gulf of Tehuantepec (Mexico) alone, 24 species of cephalopods and 161 species of demersal fish have been reported (Tapia García, 1997; Alejo-Plata et al., 2014). Marine mammals are part of this outstanding biodiversity, including several charismatic species like the blue (*Balaenoptera musculus*) and humpback whales (*Megaptera novaeangliae*). Blue whales winter in the Costa Rican Thermal Convection Dome (Reilly & Thayer, 1990), and northern and southern hemisphere populations of humpback whales have wintering grounds in the warm waters between Baja California, in the north, to northern Peru, in the south (Rasmussen et al., 2007; Felix et al., 2009). Whale and dolphin watching is the basis for growing tourism activities along the coastline (Hoyt & Iñíguez, 2008).

5. High conservation value species are found in this LME. For example, there are major nesting beaches and feeding grounds of sea turtles along the coast, including the region´s largest nesting aggregations[6] of *Eretmochelys imbricata* (critically endangered in the IUCN Red List) in El Salvador (Liles et al., 2011), and *Dermochelys coriacea* (critically endangered in the IUCN Red List7) in Playa Grande in Costa Rica. The green turtle (*Chelonia mydas*) (endangered in the IUCN Red List) is fairly abundant in the eastern Pacific Ocean (OPO). The main nesting beaches are located in Colola and Maruata beaches in Michoacan (Mexico), Costa Rica, and the Galapagos archipelago (Ecuador). However, the southernmost recorded nesting site is in northern Peru (Forsberg et al., 2012; Kelez & Velez, 2014). The green turtle extensively uses the area between Mexico and Chile (about Valparaiso) for nesting and feeding (Seminoff et al., 2008; Velez-Zuazo et al., 2014). Amorocho et al., (2012) found that green turtles feeding in Gorgona Island (Colombia) had individuals from distant rookeries, including Mexico and Galapagos.

6. PACA´s ecosystems are key to sustain the populations of trans-equatorial migratory birds which move along the eastern Pacific coast like: Baird's sandpiper (*Calidris bairdii*), surfbird (*Calidris virgata*), western Sandpiper (*Calidris mauri*), ruddy turnstone (*Arenaria interpres*), and elegant tern (*Thalasseus elegans*). Two interesting species are the Sabine's gull (*Xema sabini*) and the pink-footed shearwater (*Ardenna creatopus*). Sabine´s gull breeds in the Artic and migrates to feeding grounds in two oceans: (i) between Panama and northern Peru, and (ii) in southwest Africa (Loftin, 1991; Alava & Haase, 2011; Davis et al., 2016; Eisermann & Avendaño, 2018). The pink-footed shearwater (listed Vulnerable in the IUCN Red List) only breeds in Juan Fernandez islands and Mocha Island off Chile and migrates north to waters off Baja California, Mexico and Canada (Reyes, 2015). These birds use mostly waters in USA, Mexico and Peru, and to less extent Chile, Canada and Ecuador (Felis et al., 2019).

7. The coverage of coastal and marine protected areas (MPAs) increased from 204 thousand hectares in 1983 to 2.9 million hectares in 2014 (ca., 1.5% MPA coverage) (IOC-UNESCO & UNEP, 2015). A major increase occurred in December 2016, when Mexico created the Deep Mexican Pacific Biosphere Reserve (Reserva de Biosfera Pacífico Mexicano Profundo) which covers the deep sea (from 800 m below sea level to the seafloor) and has a surface of 43.6 million hectares divided into four blocks; the reserve has 15 nucleus areas that comprise 18.7 million hectares.

8. Currently PACA contains 150 MPAs which cover 50,299,628 ha (502,996.28 km$^2$) and 1,891,054 ha (18,910.54 km$^2$) areas of marine and terrestrial areas, respectively (Table 1). About 25.1% of PACA´s surface is covered by the marine area of the MPAs.

Table 1. Coastal and marine protected areas in PACA until December 2019.

| **Country**<br>**País** | **Number**<br>**Número** | **Terrestrial area (ha)**<br>**Área terrestre (ha)** | **Marine area (ha)**<br>**Área marina (ha)** | **Total** | **Percentage marine area**<br>**Porcentaje área marina** |
|---|---|---|---|---|---|
| México | 23 | 328,361 | 44,888,637 | 45,216,998 | 99.3 |
| Guatemala | 6 | 31,150 | 1,960 | 33,110 | 5.9 |
| El Salvador | 10 | 68,333 | 24,300 | 92,633 | 26.2 |
| Honduras | 7 | 42,733 | 32,201 | 74,934 | 43.0 |
| Nicaragua | 2 | 15,347 | 10,190 | 25,538 | 39.9 |
| Costa Rica | 43 | 221,940 | 118,331 | 340,270 | 34.8 |

6 In the rest of the area only dispersed nesting of small number of individuals is found.

7 The East Pacific Ocean subpopulation is critically endangered, the population has declined about 97% during the past three generations (Wallace et al., 2013). There was a large nesting aggregation along the Mexican coast, but it almost disappeared (Pritchard, 1982; Spotilia et al., 2000). Playa Grande is the largest nesting colony of the eastern Pacific Ocean, but the population is rapidly declining (Spotilia et al., 2000; Santidrián et al., 2007).

| | | | | | |
|---|---|---|---|---|---|
| Panama | 29 | 214,193 | 936,286 | 1,150,479 | 81.4 |
| Colombia | 13 | 783,066 | 3,980,504 | 4,763,570 | 83.6 |
| Ecuador | 17 | 185,930 | 307,219 | 493,148 | 62.3 |
| Total | 150 | 1,891,054 | 50,299,628 | 52,190,681 | 96.4 |

Source: National lists, databases and maps of coastal and marine protected areas.

Note. Annex 2 has a map of the MPAs and a table with the details of each protected area.

9. PACA sustains important fisheries. The LME´s reported annual catch reached two peaks of about one million tonnes in 1985 and 1994. It declined afterwards, fluctuating between 600 thousand and 800 thousand during the 2000s (IOC-UNESCO & UNEP, 2015). The reconstructed annual catch is much larger, with a peak of ca., 3.1 million tonnes in 1985 and a secondary peak of ca., 1.9 million tonnes in 1996 (Sea Around Us). The reported catch in 2010 was 627,006 t (IOC-UNESCO & UNEP, 2015), and the reconstructed catch estimate was 1.2 million tonnes (Sea Around Us). In 2010, five countries accounted for 86% of the total catch: (i) Mexico (45.3%), (ii) Ecuador (22.9%), Panama (9.1%), Peru (6.1%) and El Salvador (2.5%) (Sea Around Us).

10. The most conspicuous fisheries are small pelagic fish, tunas and shrimp. Five species of small pelagic fish (*Sardinops sagax, Opisthonema* spp., *Engraulis ringens, Cetengraulis mysticet*us and *Scomber japonicus*) constituted, respectively, 37.2% and 38.5% of 2010 and 2014 total catch (Sea Around Us).

11. Tunas are a major fishery in the OPO, most of the capture is done by industrial purse-seine and longline vessels in oceanic areas, but there is also coastal capture by artisanal fleets, a few pole-and-line boats, and sport fishers. In 2010, the total catch of the three main tuna species (*Katsuwonus pelamis, Thunnus albacares*, and *Thunnus obesus*) in the OPO was 510,371 t, increasing to a peak of 690,142t in 2016 and then declining to 613,516 t in 2018 (IATTC, 2019). Between 1989 and 2018, the maximum catch was 831,578 t in 2003. The main fleets and processing capacity are based in Ecuador and Mexico. The tuna fleet also capture billfishes, mainly swordfish (*Xiphias gladius*) and blue marlin (*Makaira nigricans*). In 2017, the total capture of billfishes was 35,059 t; 80.3% of this was captured by the longline fleet (IATTC, 2019).

12. Large pelagic fish (LPF) are highly migratory species which are captured by artisanal fleets, industrial longline and sport fishers. There is a major commercial artisanal fishery for mahi mahi (*Coryphaena hippurus*) in the area. In 2012, the catch in the OPO was about 70,000 t of which Ecuador and Peru together capture about 85%. On the other hand, LPF are valuable resources for the recreational fisheries industry, mainly from Mexico to Panama. Mexico has reserved dorado, marlins, sailfish (*Istiophorus platypterus*), and swordfish for sport fisheries within the first 50 miles offshore. Guatemala reserves the sailfish only for sport fisheries. Similarly, Nicaragua reserve marlins and sailfish only for sport fisheries. Costa Rica declared marlins and sailfish as species of interest for sport fishing, and El Salvador declared marlins, sailfish, swordfish, dorado and tunas as objects for sport fishing.

13. Recreational fisheries for billfishes and tuna can generate very high value for the local economies. In Costa Rica, sport fishing contributes more than commercial fisheries to the gross domestic product (Soto, 2010). In Panama, sport fishing generated USD97 million in 2011 (Southwick et al., 2013). Martin et al., (2016) estimated that the oceanic Eastern Tropical Pacific (excluding the continental platform) produce about USD2.7 billion year$^{-1}$ in capture fisheries (10 most commercially fished species) and USD 1.2 billion year$^{-1}$ in sport fisheries (three popular destinations).

14. This LME is regularly affected by El Niño Southern Oscillation (ENSO) events. El Niño produce intense warming of sea surface temperature in the Panama bight and northern South America, intense rain in Ecuador and Peru, and severe drought in Mexico and Central America. ENSO conditions have strong impacts in the biodiversity, society and economy of the entire region. For example, the 1997 – 1998 El Niño, one of the strongest in record, produced USD7.5 billion in losses in five Andean countries (CAF, 2000a; CAF, 2000b; OPS, 2000).

Table 2. Population of the countries that share PACA.

| Total Population | | | | Population of coastal provinces/states /departments | | | Population of coastal municipalities | | |
|---|---|---|---|---|---|---|---|---|---|
| **Country** | **Men** | **Women** | **Total** | **Men** | **Women** | **Total** | **Men** | **Women** | **Total** |
| México | 62,276,319 | 64,915,507 | 127,191,826 | 14,026,592 | 14,681,627 | 28,708,219 | 2,117,599 | 2,171,750 | 4,289,349 |
| Guatemala | 8,837,850 | 9,217,175 | 18,055,025 | 1,968,727 | 2,062,021 | 4,030,748 | 337,823 | 341,043 | 678,866 |
| El Salvador | 3,080,833 | 3,520,578 | 6,601,411 | 1,572,379 | 1,770,202 | 3,342,581 | 377,474 | 425,197 | 802,671 |
| Honduras | 4,533,186 | 4,779,613 | 9,312,799 | 327,418 | 337,556 | 664,974 | 163,144 | 148,395 | 284,547 |
| Nicaragua | 3,216,478 | 3,302,005 | 6,518,483 | 1,333,096 | 1,402,545 | 2,735,641 | 328,694 | 339,912 | 668,606 |
| Costa Rica | 2,575,550 | 2,535,688 | 5,111,238 | 454,742 | 437,930 | 892,672 | 415,565 | 396,492 | 812,057 |
| Panamá | 2,144,802 | 2,133,698 | 4,278,500 | 1,761,370 | 1,753,616 | 3,514,986 | 1,370,461 | 1,373,007 | 2,743,468 |
| Colombia | 25,155,094 | 25,757,335 | 50,912,429 | 4,270,797 | 3,942,266 | 8,213,063 | 403,133 | 421,307 | 824,440 |
| Ecuador | 8,665,937 | 8,844,706 | 17,510,643 | 3,839,701 | 3,866,374 | 7,706,075 | 3,094,016 | 2,997,849 | 6,091,865 |
| **TOTAL** | **120,486,049** | **125,006,305** | **245,492,354** | **29,554,822** | **30,254,137** | **59,808,959** | **8,607,909** | **8,614,952** | **17,195,869** |

Data from the national statistics office, projections to 2020. Population of coastal municipalities of Guatemala and Honduras are projections to 2015 and 2018, respectively.

Social context

15. About 245.4 million people live in the nine bordering countries; Mexico has the largest population. All countries, except El Salvador and Ecuador, have coasts on two oceans.

16. IOC-UNESCO & UNEP (2015) estimated that in 2010:

1. About 50.3 million people lived within 100 km of the coast (i.e., coastal population) and that this number would almost double by 2100 (i.e., 97.9 million people).

2. About 21.9 million people were “coastal poor8” (43.7% of the coastal population).

3. For the Regional project it was calculated that about 17.1 million people live in the 228 coastal municipalities that border PACA, and are the population most related to the use of the natural resources of this LME (Table 2).

4. There are about twenty-eight indigenous peoples geographically located in the coastal states (Table 3). The countries with higher indigenous population are Mexico, Guatemala, Colombia and Ecuador. However, the countries that have more indigenous peoples proportionally to their total population, are Guatemala, Mexico and Panamá, with 41%, 15,1% and 12,3%, respectively.

5. All of these indigenous peoples -- despite being in the coastal states, provinces or departments of the countries – are not all direct users of PACA ecosystem resources. Coastal indigenous people have connections (food, culture, economy) with the marine environment that are vital for their livelihood. However, information about coastal indigenous people in PACA is scarce and scattered. There are no quantitative accounts of the groups that use coastal and marine resources for their subsistence.

6. The most conspicuous use is seafood for consumption and commerce. Indigenous fishers access marine resources like non-indigenous people. PACA countries do not recognise special marine territorial or use rights to indigenous people. Cisneros-Montemayor et al., (2016) made a rough estimate of indigenous subsistence

8 Defined as: number of coastal poor living below national poverty income level data available for the period 2008-2013. Source: onesharedocean.org/data.

catch and fish consumption. The results are summarised in Figure 3. There is no information for all PACA countries and a major limitation, highlighted by the authors, was information availability.

7. Other indigenous uses are not well documented. An interesting account is the use of the sea snail *Plicopurpura columellaris* (previously named *Plicopurpura pansa*), found on the rocky shores from Baja California to Ecuador. Mesoamerican indigenous people used the snail to dye fabrics that were used for ceremonial clothes (Turok, 2003; Payne, 2017). During colonial times the production of dyed fabrics escalated and caused overexploitation of snail populations in several locations (Del Barco, 1988; Turok, 2003; Payne, 2017). Currently, traditional production is only practiced by Mixe people in the State of Oaxaca (Mexico). The Mexican government recognises the cultural and biological value of the resource and has included it the list of native species under special protection (NOM-059-SEMARNAT-20109).

Table 3. Indigenous Peoples along the coast of the Pacific Central-American Coastal Large Marine Ecosystem.

| Country from North to South | Indigenous Peoples on the Pacific Coast | Total country indigenous population (number) | Total country indigenous population (%) |
|---|---|---|---|
| Mexico | Nahua, Mixteco, Amuzgo, Chatino, Zapoteco, Chontal de Oaxaca, Huave, Tseltal, Mam, Teko | 16,933,283 | 15.1% |
| Guatemala | Mam, Kiche, Kaqchiquel, Poqoman, Xinca | 5,881,009 | 41% |
| El Salvador | Nahua, Lenka | 14,408 | 0.2% |
| Honduras | Not present in the area | 536,541 | 7% |
| Nicaragua | Chorotega, Xiu, Nahoras | 518,104 | 8.9% |
| Costa Rica | Chorotega, Huetar, Brunka, Ngabe(Ngöbe) Bugle | 104,143 | 2.4% |
| Panama | Emberá, Wounaan | 417,559 | 12.3% |
| Colombia | Emberá, Waunana | 1,905,617 | 4.4% |
| Ecuador | Not present in the area | 1,018,176 | 7% |

Sources: CEPAL (2014), UICN (2017), and DANE (2018).

8. IOC-UNESCO & UNEP (2015) estimated a Human Development Index (HDI) of 0.6926 for this LME, which corresponds to medium human development. The average of the most recent data is 0.719 which corresponds to a high development category (Table 4). However, four countries have a medium level of human development.

9. Poverty, unemployment and inequality are important challenges in the region. Guatemala and Honduras face the highest levels of poverty and inequality (Table 4, Figure 4). Also, Colombia and Costa Rica, despite having a high HDI, have high levels of unemployment. This is particularly severe on the Pacific coast of these countries. The Colombian Pacific coast has severe limitations for development including the impact of the long internal conflict (Escobar, 2003; Ibañez & Moya, 2010; Ch et al., 2018) and most recently an increased activity

9 http://faolex.fao.org/docs/texts/mex99917.doc

of organized crime and illegal armed groups10 that is linked mainly to (i) cultivation, processing and transport of illegal drugs and (ii) illegal mining (Walcott, 2008; Anon, 2018; Villaverde, 2018; Idler, 2019). In Costa Rica the three Pacific planning regions (Chorotega, Pacific Central and Brunca) had higher poverty (20.26%, 29.79% and 30.35, respectively) than the national level (20.98%) in 2019 (INEC, 2019). These regions have severe limitations to generate employment. The sum of unemployment, underemployment and informal employment in the Chorotega, Pacific Central and Brunca regions was, respectively, 72.5%, 79.5% and 85.0% in the first trimester of 2020 (INEC, 2020).



Figure 3. Estimated indigenous people subsistence catch and fish consumption.

Table 4. Social indicators for countries that share PACA.

| Country from North to South | HDI (2018) | | | GDP per capita (USD) | Overall loss in HDI due to inequality (%) | Unemployment, total (% of labour force) | Population in multidimensional poverty - Headcount (%) [a] | Population living below income poverty line PPP USD1.90 a day (%) [a] |
|---|---|---|---|---|---|---|---|---|
| | Rank | Index | Category | | | | | |
| México | 76 | 0.767 | High | 18,102 | 22.5 | 3.3 | 6.6 | 1.7 |
| Guatemala | 126 | 0.651 | Medium | 7,509 | 27.4 | 2.7 | 28.9 | 8.7 |
| El Salvador | 124 | 0.667 | Medium | 7,393 | 21.9 | 4.4 | 7.9 | 1.5 |
| Honduras | 132 | 0.623 | Medium | 4,569 | 25.5 | 4.1 | 19.3* | 16.5* |
| Nicaragua | 126 | 0.651 | Medium | 4,910 | 23 | 4.5 | 16.3* | 3.2* |
| Costa Rica | 68 | 0.794 | High | 15,685 | 19.5 | 8.1 | -- | -- |
| Panama | 67 | 0.795 | High | 22,674 | 21.2 | 3.9 | -- | -- |
| Colombia | 79 | 0.761 | High | 13,333 | 23.1 | 9.1 | 4.8 | 4.1 |
| Ecuador | 85 | 0.758 | High | 10,412 | 19.9 | 3.9 | 4.6 | 3.3 |

Sources: UNDP (2019) and UNDP & OPHI (2020).

[a] Not all indicators were available for all countries, so caution should be used in cross-country comparisons. The countries were estimated based on surveys for 2014-2019, except the ones marked with asterisk (*), that are based on surveys from 2008-2013.

10 Including (i) militants of the now-demobilized Revolutionary Armed Forces of Colombia (FARC) and the existing National Liberation Army (ELN) armed groups and (ii) drug cartels and groups related to drug trafficking (Anon, 2018; Anon, 2018a; FIP. 2018a; FIP, 2018b).

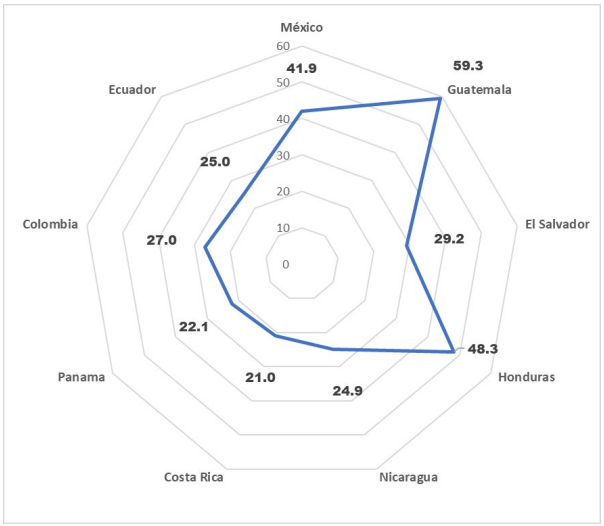



Figure 4. Poverty headcount ratio at national poverty lines (% of population) in PACA countries. Source: World Bank.

Table 5. Migration in PACA countries.

| Country from North to South | International Migrant Stock (total) [a] | Net Migration rate |
|---|---|---|
| México | 1,100,000 | -0.5 |
| Guatemala | 80,400 | -0.5 |
| El Salvador | 42,600 | -6.3 |
| Honduras | 38,900 | -0.7 |
| Nicaragua | 42,200 | -3.3 |
| Costa Rica | 417,800 | 0.8 |
| Panama | 185,100 | 2.7 |
| Colombia | 1,100,000 | 4.2 |
| Ecuador | 381,500 | 2.2 |

[a] Total number of international migrants at mid-year 2019. Source: Migration Portal Data. https://migrationdataportal,org/es?i=stock_abs_&t=2019

10. Poverty and insecurity are main causes that motivate migration in the region. The migration data reveal that there are countries with a large total flow of migration, including Colombia and Mexico with more than a million migrants in 2019 (Table 5). In 2019, El Salvador and Nicaragua had the highest emigration rates. It is estimated that about 265 thousand people per year leave Guatemala, Honduras and El Salvador (Meyer & Taft-Morales, 2019). The migration flows from Mesoamerica have continued to rise steadily since 2011 with an important portion of irregular migration. Most of the migration from these countries goes mainly to the USA.

11. The countries vary greatly in their degrees of prosperity, internal conflict, security, capacities of authorities to manage migration and vulnerability to natural disasters. But, despite the differences among countries of the region, in all of them, migrants, in particular children, women, indigenous people, temporary and domestic workers, extra-continental migrants, migrants with disabilities and migrants who were victims of crimes, present varying degrees of vulnerability. Specific migrant vulnerability becomes evident when available data is analysed. For example, in 2016, about 75% of trafficking victims in the USA were nationals of Latin America and the Caribbean (UNDOC, 2018). Another characteristic shared by migration flows in all countries of the region is the high incidence of immigrants in irregular situations, Irregular migrants are more vulnerable to discrimination, abuse, extortion, kidnapping, human trafficking, sexual violence, and other crimes.

Economic context

12. The blue economy is very important for all the coastal countries, they have in PACA well established blue economic sectors, mainly capture fisheries, coastal aquaculture, shipping & ports, marine and coastal tourism, and offshore oil and gas exploitation. Emerging sectors like marine aquaculture and marine renewable energy are still being explored.

Fisheries

13. As mentioned before (paragraph 99), capture fisheries and related wild seafood supply chains are very important for PACA countries. IOC-UNESCO & UNEP (2015) estimated that (i) the average annual landed value for the period 2001-2010 was ca., USD 672 million, and (ii) that fish from this LME contributed 6.9% (average) to animal protein consumption in the coastal countries. For 2014, Sea Around Us estimated:

    1. A landed value11 of USD 1,741 million. About half of this value was from industrial fisheries (52%), whereas artisanal, subsistence and recreational fisheries accounted for 46.2%, 1.5% and 0.3% of the landed value, respectively.

    2. About 83% of the landed value was generated by three fishing gears: various small-scale gears (34.4%), purse seine for tuna and small pelagic fish (24.7%) and bottom trawl mainly for shrimp (24.4%).

    3. About 87% of the landed value was generated by four countries: Mexico (51.2%), Ecuador (22.2%), Peru12 (7.3%) and Panama (6.5%).

14. The tuna fishery is a valuable source of income and affordable protein. In 2018, the retained landings of tunas and bonitos caught by purse seine vessels in the OPO was 596,015 t (IATTC, 2019). Ecuador, Mexico and Colombia, respectively, landed 60.9%, 20.9% and 5.4% of this total. Mexico uses most of its tuna landings for internal consumption. Ecuador is a major exporter of tuna products, in 2018 the country exported 158.916 t of tuna with a FOB value of USD 782.2 million.

Coastal aquaculture

15. Coastal aquaculture is also an established blue sector, the most conspicuous production is whiteleg shrimp (*Litopenaeus vannamei*), which is native from the eastern Pacific Ocean. In 2017, the countries produced 671,945 t (FAO, 2019). The main producers were Ecuador and Mexico. Shrimp farming and its processing supply chain are crucial for the Ecuadorian economy; exports of shrimp products have steadily increased from USD 849.7 million in 2010 to USD 3,890.6 million in 2019. Shorebirds have been found to use shrimp farms. In Central America, 54% of the 50 species of shorebirds recorded use shrimp farms (Morales et al., 2019).

11 Real landed value standardised for 2010. Sea Around Us includes information about Peru´s northern sea.

12 Sea Around Us includes information about Peru´s northern sea in PACA.

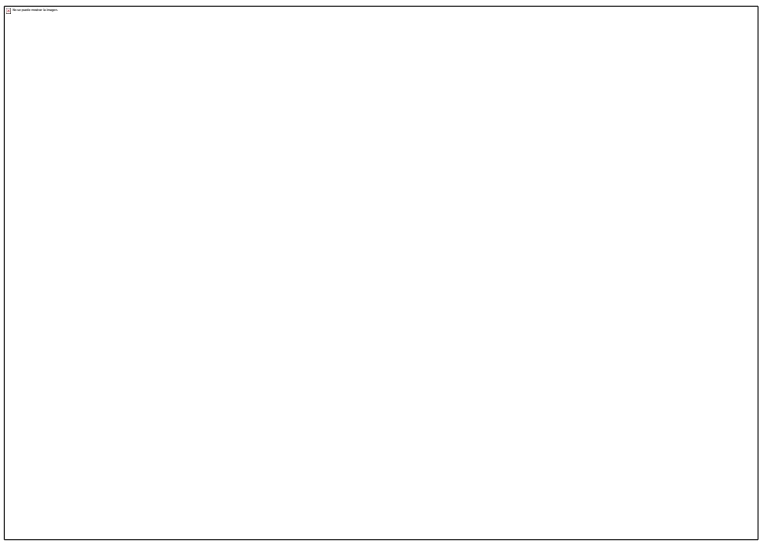


Figure 5. Total aquaculture production of whiteleg shrimp in PACA countries in 2017. Percentage produced by country. Source: FAO (2019).

Shipping & ports

16. PACA is crossed by main routes of global marine traffic due to the influence of the Panama Canal (Figure 6 and Figure 7). In 2019, the Panama Canal registered a total of 13,785 transits, transporting 252 million long tons of goods, and generating tolls that totalled USD 2,592 million. In addition, there are other main ports along PACA´s coast like Guayaquil (Ecuador), Buenaventura (Colombia), Puerto Caldera (Costa Rica), Puerto Corinto (Nicaragua), Puerto Acajutla (El Salvador), Puerto Quetzal (Guatemala), and Manzanillo and Lázaro Cárdenas in Mexico.

Marine and coastal tourism

17. All the countries have well developed and wide-ranging coastal and marine tourism industries. IOC-UNESCO & UNEP (2015) estimated that PACA´s coastal and marine tourism13 yearly average revenue for 2004-2013 was USD 48,482 million (on 2013 USD). Puerto Vallarta, which is the main tourist destination of Mexico´s Pacific coast, has about four million visitor per year and generate about USD695 million.

18. The range of tourism activities include sun and beach, recreational fishing (see paragraph 120), whale watching (see page 179179), diving, and cruise-ship tourism, among others.

19. In 2019, the four-leading central American ports for cruise ships were Puntarenas (Costa Rica), Quetzal (Guatemala), Quepos (Costa Rica) and Golfito (Costa Rica), they served, 70, 63, 59 and 54 cruise ships, respectively (Statista, 2020). In 2019, Puerto Vallarta (Mexico) served 181 cruise ships with 482,335 passengers.

13 National tourism GDP scaled to the 100 km coastal area.

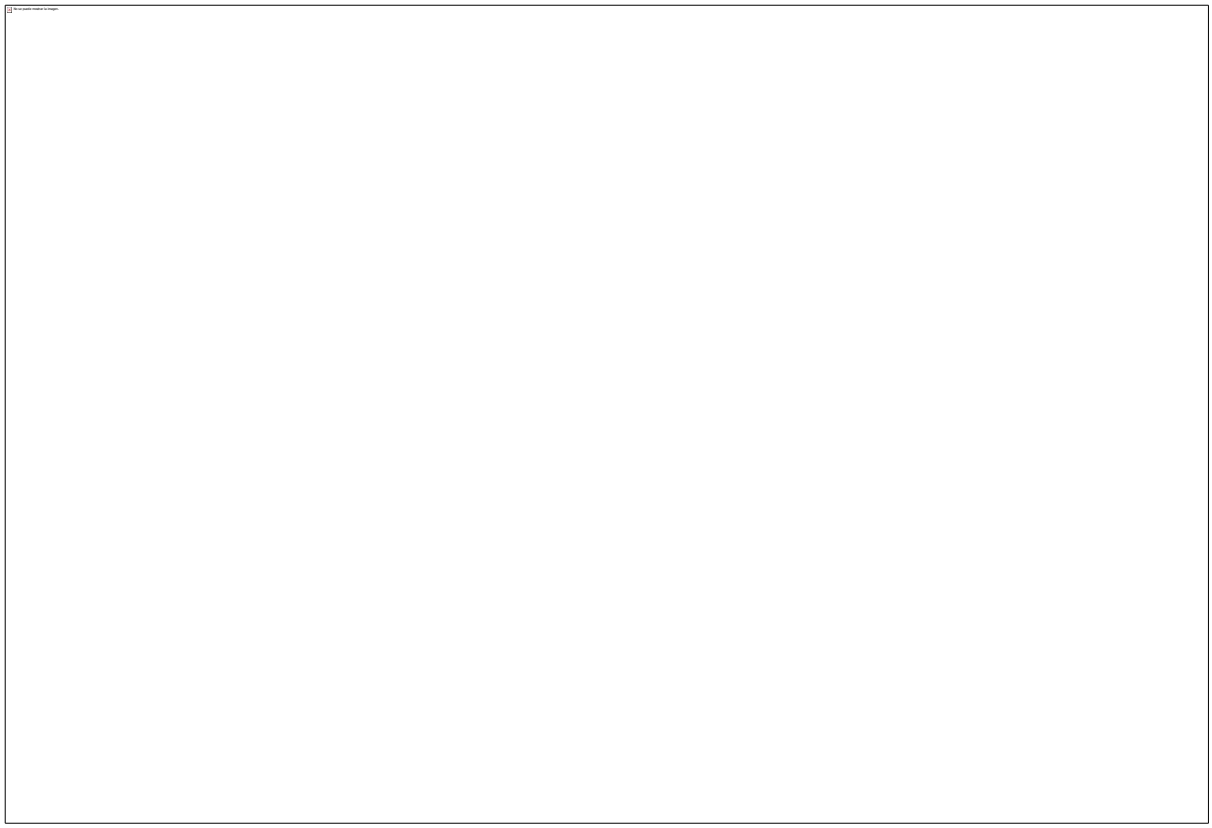


Figure 6. Main trade routes with traffic in the Panama Canal. Source: Georgia Tech Panama Logistics Innovation and Research Center.

Figure 7. Main shipping routes to and from the Panama Canal. Source: Ross Salazar et al., (2019).

Global environmental problems and root causes

20. The Transboundary Waters Assessment Programme (TWAP) found that PACA´s overall risk factor is high[14], based on a combined measure of the Human Development Index and the averaged indicators for (i) fish & fisheries and (ii) pollution & ecosystem health modules (IOC-UNESCO & UNEP, 2015). The biodiversity of this LME is threatened mainly by (1) pollution from land-based and marine sources, (2) degradation of coastal and marine habitats, (3) overuse of fishery resources, and (4) impacts of climate change.

21. Similar risk level and environmental issues affect adjacent areas such as the Gulf of California and Humboldt Current LMEs which due to their biological connections to PACA require a transregional management of its living marine resources. The Gulf of California LME is one of the five marine ecosystems with high productivity and one of the fastest warming LMEs (IOC-UNESCO & UNEP, 2016). It is considered that its fisheries resources are overexploited while an important portion of the eastern coast is subject to industrial, urban and agriculture pollution and unique and valuable habitats located in delta wetlands and marine areas are being altered by human activities. The Humboldt Current LME is one of the main upwelling systems of the world and is in the middle range of primary productivity (IOC-UNESCO & UNEP, 2016). It sustains the largest monospecific fishery of the world (anchoveta, *Engraulis ringens*) and large populations of seabirds and marine mammals.

22. PACA face multiple threats to biodiversity and the human population that depend on it. The countries have made significant efforts to advance towards collaborative action in a range of issues, however the situation is complex and requires a more comprehensive approach.

23. The root cause analysis was prepared and agreed with delegates from the participating countries during the regional project preparation (Figure 8 and Figure 11). The core problem is biodiversity loss, which is caused by five main anthropogenic causes: (1) pollution, (2) degradation of coastal and marine ecosystems and habitats, (3) overuse of fishery resources, (4) direct impacts on fauna and flora, and (5) climate variability and climate change (Figure 8). Behind these immediate causes are four root causes: (i) increased demand of seafood, (ii) increase in world commerce, (iii) increase of tourist demand, and (iv) inadequate ordering and management of resource uses. The first three are part of global dynamics, the fourth is regional and reveal the current limitations to comprehensively manage valuable shared resources which sustain blue economy sectors, like humpback whales, large pelagic fish, shorebirds, mangroves and coral reefs.

14 Using a five-point scale: very low, low, medium, high, and very high.

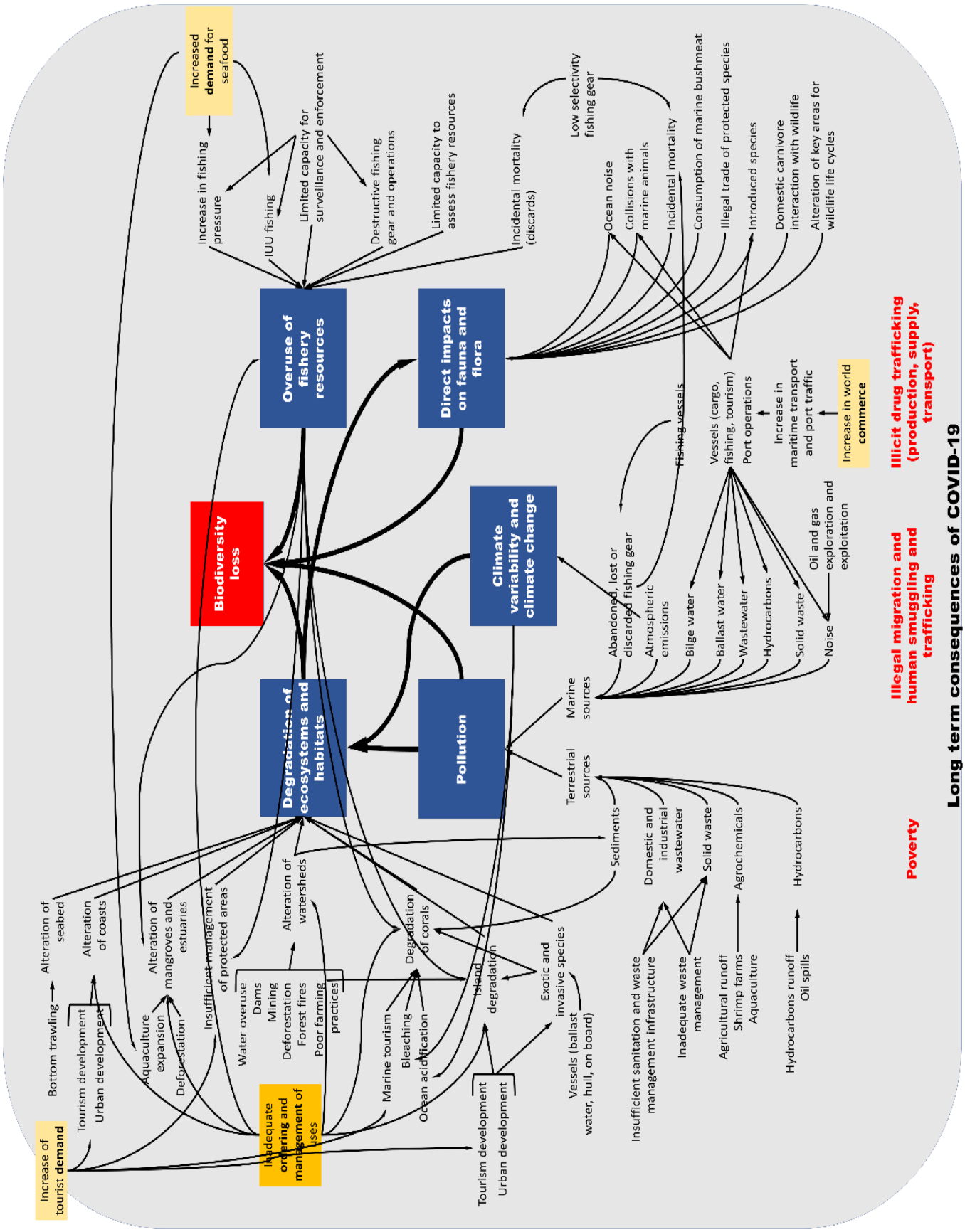



Figure 8. PACA root cause analysis.

24. The scenario is influenced by critical externalities:

1. Poverty affects social dynamics (see paragraph 23), makes people vulnerable, and contributes to exacerbate behaviours like preferring short-term gains, poaching and consumption of marine bushmeat.

2. Illegal drug trafficking is a major issue in the area. Colombia is the main world producer of cocaine; production almost quadrupled between 2013 and 2018 (UNODC, 2020). The main trafficking flow is from Colombia to the USA (known as the Pacific route). The drug flows (i) by sea (using speedboats and artisanal narco-submarines), from major production centres in Colombia or through Ecuador to Central America or to Mexico, or (ii) by land from Colombia through Central America towards Mexico (Ramírez & Bunker, 2015; UNODC, 2020). Mexican drug trafficking organizations produce illicit drugs (e.g., synthetic opioids, marijuana) and traffic them and South American cocaine into the USA. They also generate wide-spread insecurity and violence (Beittel, 2020; Goodwin, 2020). This undermines the social fabric and foster an illegal economy (e.g., provision of supplies and workforce, transportation of drugs).

3. Illegal migration which is linked to poverty and consequences of illegal drug trafficking like insecurity. Migrant smuggling by organized criminal groups is common in the region (Greenfield et al., 2019). Smuggled migrants are vulnerable to abuse and exploitation.

25. A recent and unforeseen externality is the Coronavirus Disease 2019 (COVID-19) pandemic and its future consequences. The pandemic has generated global health and socioeconomic crises. It has disrupted production systems and supply chains and produced societal impacts, exacerbating inequalities and increasing poverty (Ahmed et al., 2020; Alon et al., 2020; Sumner et al., 2020; Torales et al., 2020; Van Lancker & Parolin, 2020). Sumner et al. (2020) estimated that the pandemic would increase global poverty by as much as half a billion people.

26. On the short term, it is expected that Latin America and the Caribbean will have negative economic growth in 2020. The Inter-American Development Bank (IDB) estimated four scenarios (from moderate to extreme) for the potential impact of the global economic shocks on the growth of LAC during 2020 (IDB, 2020). It was estimated that LAC´s economic growth will range between -1.8% and -5.5%, corresponding to an estimated annual loss in the GDP between -2.1% and -4.8%.

27. The economic shock was massive. In addition to the disruption of domestic production, Latin American economies suffered from falling export volumes and prices, lost income from tourism and remittances, and large capital outflows. The Economic Commission for Latin America (CEPAL) has estimated that, in 2020, the value of exports will reduce in 14.8% and that the economy will contract in about 5.3% (CEPAL, 2020; CEPAL 2020a). This will in turn cause an increase of unemployment and poverty.

28. COVID-19 has disrupted key blue production sectors that are related to the root causes of the PACA scenario (Figure 8). For example, the seafood industry has been subject to several consequences such as (i) reduced fishing activity, (ii) changes in consumer and market demand (currently concentrating on canned and frozen products), (iii) disturbances along the supply chains, (iv) logistical problems and (v) more demanding working conditions along the value chains (Aodha, 2020; FAO, 2020; Feijoo, 2020; Saumweber et al., 2020). Likewise, the pandemic has devastated the tourism industry and disturbed maritime traffic and the shipping industry (Berti, 2020; Gössling et al., 2020).

29. The long-term consequences of the pandemic are still largely unknown. But there will be significant societal and economic consequences, both positive and negative. In the short term, it is expected to see some recovery of fish stocks and marine life, but also there are concerns of exacerbated illegal fishing (Saumweber et al., 2020). But, afterwards, the impacts and opportunities for blue growth will only become apparent with time.

Immediate causes

1. Pollution from land-based and marine sources

30. The main sources of pollution are (i) municipal waste (untreated wastewater and garbage), (ii) agriculture run-off, (iii) discharges from vessels and port operations, and (iv) industrial pollution from industry and oil operations.

31. Municipal discharges originate from insufficient basic infrastructure in localities along the coastal zone and the watersheds that drain into the Pacific Ocean. PNUMA (2001) estimated that domestic discharges introduced about 34.2 $10^3$ t of nitrogen and 4.1 $10^3$ of phosphorus every year into the area between Mexico and Colombia. Urban runoff also includes heavy metals and hydrocarbons. Defew et al., (2005) found accumulation of heavy metals in mangroves of Punta Mala Bay (close to Panama City), which is affected by untreated domestic sewage, storm water road run-off, and diffuse inputs from shipping and agricultural activities.

32. Agriculture run-offs (nutrients, sediments and pesticides) originate from large plantations of several crops, including export-oriented produce like bananas and melons, and limited capacity to control nonpoint source discharges. Seitzinger & Lee (2008) estimated that ca., 80% of the dissolved inorganic nitrogen load to PACA came from anthropogenic sources (mainly fertilizers and manure). IOC-UNESCO & UNEP (2016), classify PACA´s level of river nitrogen load as medium, in the five-point scale used in the TWAP. The run-off of sediments is known to be large, but there is no recent information. PNUMA (2001) reported that the discharge of suspended solids and total dissolved solids in 2000 in southwest Mexico was 259,540 t and 378,130 t, respectively. In 1999, the coastal areas from El Salvador to Panama discharged in the Pacific Ocean 116,270 t of suspended solids and 179,590 t of total suspended solids (PNUMA, 2001).

33. The Golfo de Nicoya (Costa Rica) is an example of the impact from municipal and agriculture run-off in this LME. The gulf receives the discharges from the río Grande de Tarcoles, Barranca and Tempisque rivers. The first, drain domestic, industrial and agriculture discharges from a 2,121 km2 watershed; including discharges from metropolitan San Jose, which concentrate ca., 50% of the country´s population. The Tempisque river, drain a 3,405 km2 watershed with large plantations of sugarcane and rice, melon and other export crops, and cattle production. As a consequence, accumulation of nutrients (mainly during the rainy season), heavy metals, hydrocarbons and pesticides have been found in several part of the estuary (De la Cruz, 1989; Wo Ching & Moreno, 2001; Kress et al., 2002; García-Cespedes et al., 2004; Acuña-González et al., 2004; Nielsen & Quesada, 2006; Pomerance, et al., 2012; Rodríguez et al., 2014; Cubero, 2014).

34. UNESCO & UNEP (2016), classify PACA´s level of Index of Coastal Eutrophication Potential as lowest (based on the five-point scale used in the TWAP). However, this may not truly reflect the local conditions. Nutrient over-enrichment has produced eutrophication in several areas of this LME, and harmful algal blooms (HABs) have become more frequent and intense.

35. Selman et al., (2008) identified seven eutrophic areas within PACA: Golfo de Nicoya and Golfo Dulce in Costa Rica, Golfo de Guayaquil in Ecuador, Jiquilisco Bay in El Salvador, Estero la Jagua (Gulf of Fonseca) in Honduras, Panama Bay in Panama, and Paita Bay in Peru. But there are many others, for example, Contreras et al., (1996) found that most coastal lagoons in southwest Mexico were eutrophic, with high concentrations of nitrites, nitrates and phosphorus.

36. The excess nutrient load creates favourable conditions for the development of HABs and algae growth which inhibit coral development. Harmful Algal Blooms are frequent along the coastal waters of the area. HABs have caused fish kills, death of marine turtles and other marine animals, seafood poisoning and deaths in local populations, and economic losses (Saldate et al., 1991; Band-Schmidt et al., 2011; Ochoa et al., 2002; Torres, 2011; IMARPE, 2012; Licea et al., 2013; Callejas et al., 2015; Calvo et al., 2016). Several bivalves have been

contaminated with toxins, including the mangrove clam *Anadara tuberculosa*, a valuable fishery resource all along PACA´s coastline (Ochoa et al., 2002; Callejas et al., 2015).

37. Marine debris is an additional problem, which generates from (i) insufficient waste management in coastal localities, (ii) run-off from watersheds, and (iii) disposal from ocean-based sources (e.g., commercial fishing, shipping). It is known that worldwide marine debris has direct impacts to marine biota (Gall & Thompson, 2015) and that plastic pollution is a major threat (Derraik, 2002; Eriksen et al., 2014; Seltenrich, 2015). However, there are no clear estimations of the amount of marine debris in PACA, and there is very limited information to calculate the discharge from land or ocean-based sources. IOC-UNESCO & UNEP (2015) classify PACA as an LME with relatively moderate levels of plastic concentration. However, the problem could be much more serious, but there is very limited quantitative and systematic information. Nonetheless, there are some indications that plastic pollution might be a grave issue.

38. During the 2015 international coastal clean-up, the amount of solid waste collected in Ecuador and El Salvador was 298 kg/km and 236.5 kg/km, respectively (Ocean Conservancy, 2016). In Ecuador, the three most common items were cigarette butts, plastic beverage bottles and food wrappers. In El Salvador, the three most common items were plastic beverage bottles, plastic bottle caps and food wrappers. In 2002, 58,000 t of solid waste was collected from beaches in southwest Mexico (UNEP, 2006).

39. In 2006, it was estimated that on the Pacific coasts of Panama, Colombia and Ecuador, the garbage from land-based sources with potential to become marine debris is in the range of 8,853 – 26,560 t / year (CPPS, 2007).

40. Plastics seem to be a major component of marine debris in the region. Figueroa et al., (2016) found in two Ecuadorian rocky reefs that (i) 95% of the submerged marine debris were plastic-derived items, and (ii) 63% of all items were fishing-related. Global reviews have found a high incidence of plastic ingestion in seabirds and marine turtles (Schuyler et al., 2014; Wilcox et al., 2015; Nelms et al., 2015). Schuyler et al., (2014) found that green and leatherback turtles were significantly more likely to ingest plastic debris; these are two key species in the Pacific Central-American Coastal LME. Rosas (2016) found that 12% of the stomachs of the giant squid (*Dosidicus gigas*) captured by artisanal fishermen had plastic remains, mainly fishing-related items (i.e., polyethylene fishing lines and polyvinyl chloride floats). Microplastic contamination of the marine food web and seafood supply chain is a serious threat (Lusher et al., 2017; Carbery et al., 2018; De la Torre, 2020).

41. Finally, shipping and port activities contribute to marine pollution. For example, in the vicinity of the port of Guayaquil, there is a low level but chronic hydrocarbon pollution (Rodriguez, 2006). The same occurs in Salina Cruz (located in the Golfo de Tehuantepec, Mexico) which has cargo and oil terminals (Botello et al., 1995; Rodriguez, 2006; González-Lozano et al., 2006; Gonzalez-Macias et al., 2007; Gonzalez-Macias et al., 2009).

2. Degradation of coastal and marine ecosystems and habitats.

42. Modification and degradation of natural habitats is caused by a range of human activities, mainly coastal development, tourism, aquaculture and fisheries. Key habitats are coastal wetlands (estuaries and lagoons), mangroves and coral communities. IOC-UNESCO & UNEP (2015) estimated that mangroves and coral reefs cover, respectively, 0.39% and 0.03% of this LME.

43. Mangroves are very valuable for coastal communities. There are important subsistence and commercial estuarine fisheries for the same groups of fish (e.g., *Centropomus* spp., *Lutjanus* spp., *Mugil* spp., *Cynoscion* spp.) and invertebrates (e.g., *Litopenaeus* spp., *Callinectes* spp., *Anadara* spp., *Ucides occidentalis*) all along PACA.

44. There are about 854,000 ha of mangroves along PACA´s coastline, mostly concentrated in Colombia, Panama, Mexico and Ecuador (Table 6). In the past decades, all countries have had significant loss of mangrove cover, mostly by conversion into shrimp farms. Some countries have managed to control mangrove deforestation, but in others illegal conversion persist. Shrimp farms have environmental and social impacts in local areas which

generate conflicts in a number of sites along PACA. For example, in the Honduran area within the Gulf of Fonseca there have been long and strong conflicts among local inhabitants and aquaculture companies (Benitez et al., 2000; Mestre, 2011).

45. Mangroves are also affected by urbanization and coastal development, cutting for firewood or construction material, pollution from land-based and ocean-based sources, and changes in water circulation patterns.

Table 6. Mangrove area in PACA.

| Country from North to South | Mangrove area (ha) | ear | Source |
|---|---|---|---|
| Mexico | 153,813[a] | 010 | Rodríguez-Zúñiga et al., (2012) |
| Guatemala | 17,670.56 | 012 | MARN (2013) |
| El Salvador | 40,000[b] | A | MARN (2014) |
| Honduras | 42,012 | 998 | Sanchez & Guevara (2000) |
| Nicaragua | 30,546.76[c] | 006 | MARENA (2010) |
| Costa Rica | 37,044 | 013 | SINAC (2014) |
| Panama | 154,427[d] | 007 | Spalding et al., (2010)<br>ANAM & ARAP (2013) |
| Colombia | 230,239.2 | 013 | INVEMAR (2014) |
| Ecuador | 148,230.23 | 006 | CLIRSEN (2007) |

NA = not available
[a] 7,030 ha disturbed.
[b] About 2,000 ha affected by deforestation and siltation.
[c] Assuming 46% is on the Pacific coast.
[d] Assuming 91% is on the Pacific coast.

46. PACA´s coral reefs have a risk category of medium (IOC-UNESCO & UNEP, 2016). However, the threat level is projected to increase considering thermal stress and ocean acidification. Currently, 7% of coral reef cover is under very high threat and 26% is under high threat. But it is projected that by 2030 and 2050, respectively, 39% and 42% of the coral reef cover will be under very high to critical level of threat (IOC-UNESCO & UNEP, 2015).

47. Coral reefs are naturally affected by strong ENSO events. In Costa Rica, the 1982-1983 El Niño produced extensive coral bleaching causing about 50% mortality of coral reefs at Isla del Caño and 90% at Isla del Coco (Garzón-Ferreira et al., 2000; Cortés et al., 2010). In 1998, La Niña caused about 70% mortality of coral reefs in Oaxaca (Mexico) (Kramer et al., 2000). Human activities produce direct and indirect damages to coral reefs. The main direct causes are (i) extraction of corals, (ii) nonregulated tourist activity, (iii) ship groundings, (iv) anchor damage and (v) eutrophication (Garzón-Ferreira, et al., 2000; Kramer et al., 2000; Glynn et al., 2016). The main indirect causes are: (i) coastal alteration, (ii) sedimentation, (iii) pollution (hydrocarbons, nutrients, pesticides) and (iv) plankton booms (Garzón-Ferreira, et al., 2000; Kramer et al., 2000; Glynn et al., 2016). Climate change will also impact coral reefs, considering that it is expected to have more intense and stronger ENSO events (Cai et al., 2014; Cai et al., 2015).

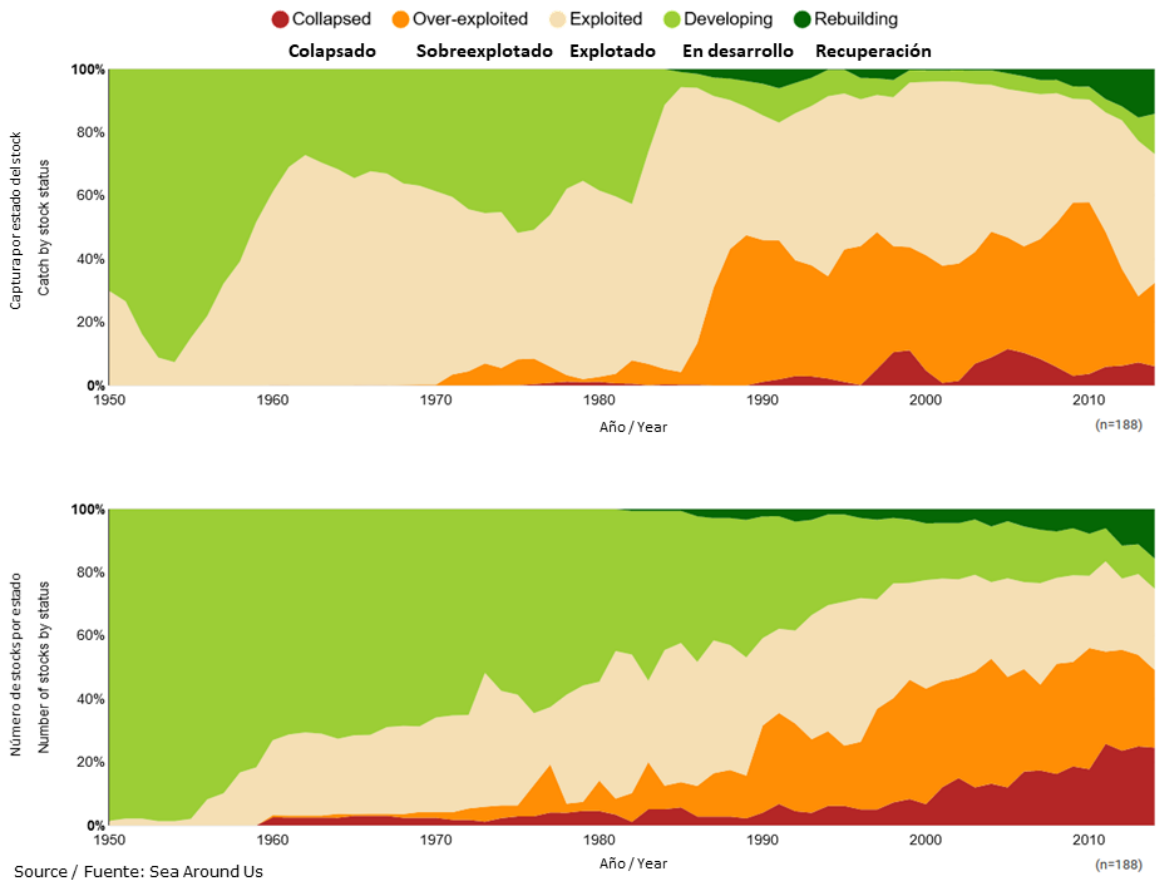



Figure 9. Number and capture by stock status (1950-2014).

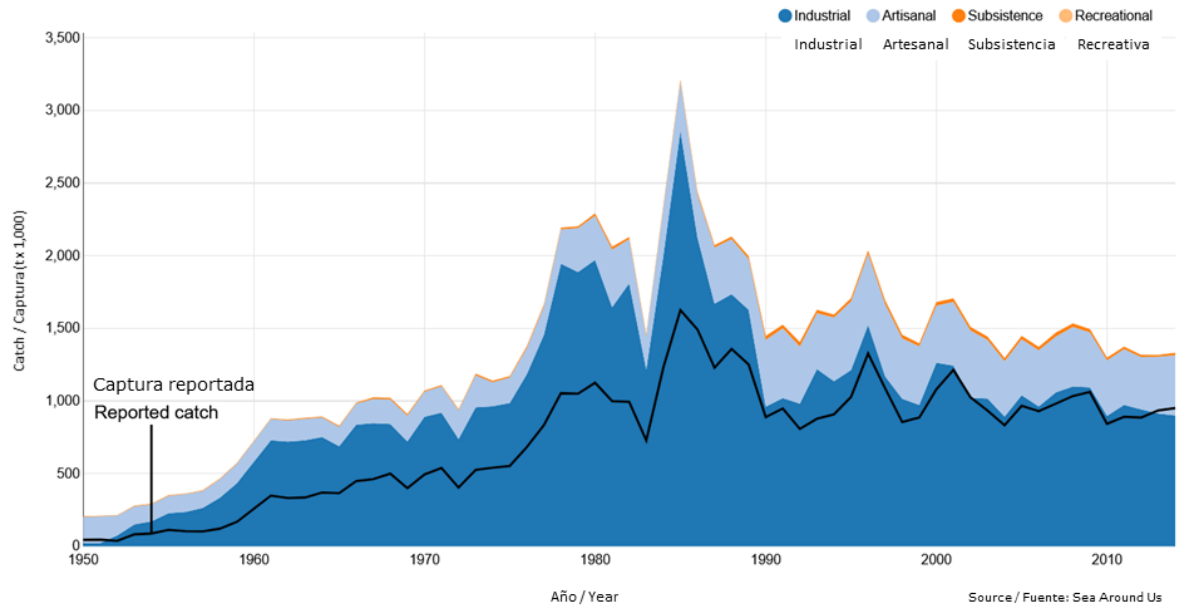



Figure 10. Total reported catch (line) and estimates of actual catch (reconstructed catch) by fishing sector.

3. Overuse of fishery resources.

48. The percentage of overexploited and collapsed stocks has steadily increased since 1990. The number of collapsed stocks increased from 4.0% in 1990, to 6.7% in 2000, to 17.8% in 2010, and to 24.6% in 2014(Sea

Around Us) (Figure 9). In 2014, 49.2% of the stocks were overexploited or collapsed. Since 1990, the percentage of the catch from overexploited stocks has fluctuated between 32.3% (1994) and 54.8% (2009). In 2014, 26.4% of the capture came from overexploited and collapsed stocks, 6.1% from exploited stocks and 27.7% from rebuilding stocks.

49. The increase in overuse of fishery resources is caused by (i) intense fishing pressure particularly in estuarine and coastal fisheries, (ii) limitations to monitor and administer small scale and artisanal fisheries, (iii) use of high-impact and destructive fishing practices, and (iv) illegal fishing.

50. It is known that fishing pressure from small-scale and artisanal fisheries has increased. However, these fisheries have a high level of informality and tend to be un-reported and not managed, leading to unsustainable practices that deplete the resources. For example, in the Gulf of Guayaquil (e.g, weakfishes, snooks, mullets) and coastal resources (e.g., groupers, octopus) are open access un-managed fishery resources.

51. According to the estimates of Sea Around Us, PACA´s reconstructed catch is about a third larger than the reported catch (Figure 10). The reconstructed catch estimates reflect discards, unrecorded / underestimated catches, and unreported catches (Pauly & Zeller, 2015; Pauly & Zeller, 2016). In general, important fisheries, mainly industrial (e.g., tuna, small pelagic fish) and export-oriented (e.g., lobsters), are monitored and have management systems. But, less valuable fisheries – mainly small scale, artisanal and subsistence fisheries -- tend to be un-reported and not managed.

52. Some fishing operations, like bottom trawling and long-lines, have high impact on non-target resources and valuable biodiversity. There are important levels of unrecorded discards that are not considered in decision making. For example, unreported discards from the Panamanian shrimp trawl fishery are about three times the landed catch (Harper et al., 2014). In the southernmost part of Mexico (called the Middle American Pacific) shrimp trawling has very high bycatch ratio, ranging from 1:16 to 1:41 (Wilkinson et al., 2009).

53. In addition, there are a number of shared resources that require regional coordination and harmonized regulations (e.g., *C. hippurus*, billfishes, sharks, small pelagic fish and *Anadara* spp.) A case are billfishes which are captured by commercial and recreational fisheries in the region, but countries have different management priorities. For example, Mexico and Central American countries give high priority to their use in catch-and-release sport fisheries. However, billfishes are a main target for overseas and national industrial long-line fleets. In Ecuador billfishes are a main target of artisanal fisheries. The IATTC has limitations to assess billfish stocks and formulate management strategies because of lack of information from domestic commercial and recreational captures.

4. Direct impacts on fauna and flora.

54. Fishing, aquaculture development, shipping, tourism, and other activities generate a range of direct impacts on key species like:

1. Incidental mortality of sharks, sea turtles and juvenile tuna in fish aggregating devices (FADs) of the tuna purse seine fishery (Hall & Roman, 2016; Eddy et al., 2016).

2. Alteration of benthic communities by shrimp trawling (de Guevara et al., 2014; Villalobos-Rojas, et al., 2017; Villalobos-Rojas, et al., 2020).

3. Entanglement in abandoned fishing gear and ingestion of marine debris by sea turtles and marine mammals (Felix et al., 2011; Duncan et al., 2017).

4. Alteration of reef communities by abandoned fishing gear and marine debris (Figueroa-Pico et al., 2016).

5. Injuries and mortality of cetaceans by vessel strikes (Waereebeek et al., 2007).

6. Stress and changes of individual and social behaviour caused by ocean noise (Peng et al., 2015).

7. Harassment of animals during whale watching (Capella Alzueta et al., 2001).

8. Consumption of marine bushmeat like sea turtle eggs and meat (Medina, 2014).

5. Climate change.

55. It is anticipated that climate change will strongly affect the conditions in this LME. So far it has been identified a general warming trend of air temperature and more intense rainfall events in Central America and northern South America (Aguilar et al., 2005). A slow warming trend of the sea surface temperature between 1957 and 2006 was reported by Belkin (2009).

56. Existing information indicate that corals reef could be affected by warming and ocean acidification, and that climate change could increase the occurrence and intensity of HABs (Gilbert et al., 2014; Wells et al., 2015). In addition, the coasts of Costa Rica, El Salvador, Honduras and Nicaragua are vulnerable to sea level rise. In El Salvador, it has been estimated that about 10% of its territory would be flooded if the sea level rises by 13 cm and up to 27.6% if it rises by one meter (UNEP, 2006).

57. Future changes in ENSO events are unclear. Bakun & Weeks (2008) proposed that they may be less intense; but Cai et al., (2014 and 2015) anticipated more intense and stronger events.

Root causes

58. Global trends influence the situation in PACA:

1. World demand for seafood is growing. FAO (2020a) reports that Global food fish consumption increased at an average annual rate of 3.1% from 1961 to 2017, a rate almost twice that of annual world population growth (1.6%) for the same period, and higher than that of all other animal protein foods which increased by 2.1% per year. Apparent per capita food fish consumption grew from 9.0 kg in 1961 to 20.5 kg in 2018. It is estimated that the world demand will further increase about 47 million tonnes by the early 2020s generating demand-supply gaps for fish, crustaceans and molluscs of 40%, 55% and 45%, respectively (Cai & Leung, 2017). The increase in global demand and seafood prices stimulates an increase in fishing pressure, illegal fishing practices and expansion / intensification of aquaculture ventures.

2. World tourism has steadily increased over the past decades. The number of international arrivals increased from 532.9 million in 1995 to 1,442 billion in 2018. Despite the global economic crisis, in 2017, 2018 and 2019 international tourist arrivals grew 7%, 6% and 3.8%, respectively (UNWTO, 2020). The pre-COVID forecast for 2020 was a growth between 3% and 4%. Marine and coastal tourism is one of the fastest growing areas of the industry. It includes wide range of activities like sun-and-beach, cruise ships, recreational fishing, whale watching and diving. The increase in tourist demand stimulates coastal development, visitors further pressure on habitats and species (e.g., sea turtle nesting beaches, coral reefs, diving with megafauna), increased demand for local seafood, and risk of introduction of invasive species, among others.

3. World merchandise trade volume increased 26% between 2008 and 2018. It increased 2.9% during 2018 and recorded a slight decline of 0.1% in 2019 (WTO, 2019; WTO, 2020). This has in turn produced a steep rise in marine traffic and port activity (Tournadre, 2014; Deloitte, 2017). UNCTAD (2019) estimated that marine trade will have an average annual growth rate of 3.5% over the 2019 - 2024 period. The increase in marine traffic can intensify (i) interaction with marine megafauna like cetacean, sharks and marine turtles (Pirotta et al., 2019), (ii) ocean noise which increase stress and alter the behaviour marine mammals and other species

(Williams et al., 2015; Kaplan & Solomon, 2016), and (iii) environmental impacts in ocean and coastal environments (Jägerbrand et al., 2019).

59. A fourth root cause is inadequate ordering and management of marine shared resources (Figure 8 and Figure 11), which in turn is originated by nine causes. The most crucial cause is that the countries do not have an intergovernmental body or agreed collaborative arrangements to address the range of issues that occur at the ecosystem level. Existing regional entities address specific topics15 (like IATTC and OSPESCA for fisheries) or geographic regions16, but not the full range of issues and geographic scope of the Pacific Central-American Coastal Large Marine Ecosystem. The Central American Integration System (SICA) is a comprehensive platform for regional collaboration, but it does not include Mexico, Colombia and Ecuador.

60. Other causes are:

1. Dissimilar regulatory frameworks among the nine countries.
2. Limited capacity for monitoring, surveillance and enforcement in coastal and marine areas.
3. Limited collaborative regional management of marine areas17.
4. Insufficient management of shared information.
5. Insufficient articulation of the forms of organisation of the various sectors.
6. Insufficient spaces for participation of non-public actors.

61. Regarding the last two points, intersectoral coordination is a major challenge because of the wide range of aspects that need to be addressed. In addition, multilevel collaboration is necessary to integrate action among national, subnational (states, provinces or departments) and local authorities. The countries have important coordination mechanisms for integrated coastal zone management, but these do not address marine matters. Representation of non-state stakeholders in regional processes is scarce. The most conspicuous voices are conservation NGOs, which can be very influential, but do not represent national societies. In addition, coordination among stakeholders is complex because of their different perspectives and usually competing needs. There are emerging initiatives like:

1. The national platforms for large pelagic fish in Costa Rica and small pelagic fish in Ecuador that are being developed with support of the global marine commodities project (GEF ID 5271). These platforms bring together private and public stakeholders of the seafood value chains to improve their sustainability; and
2. The Regional Committee for mahi mahi (COREMAHI) which group producers and processors of Costa Rica, Ecuador and Peru to promote sustainable and responsible management of the regional fishery of mahi mahi in the eastern Pacific Ocean.

15 Like IATTC and the Organization of the Fisheries and Aquaculture Sector of the Central American Isthmus (OSPESCA) for fisheries matters.

16 Like the Marine Corridor of the Eastern Tropical Pacific (CMAR) which only include marine world heritage sites of Costa Rica, Colombia, Ecuador and Panama, or the action plan for the South East Pacific implemented by the Permanent Commission for the South Pacific (CPPS) which only includes Panama, Colombia and Ecuador.

17 For example, there is no regional network of MPAs: (i) CMAR includes only five MPAs, (ii) Mexico is part of the North American Marine Protected Areas Network, and (iii) Panama, Colombia and Ecuador are part of the Regional Network of Coastal and Marine Protected Areas of the Southeast Pacific.

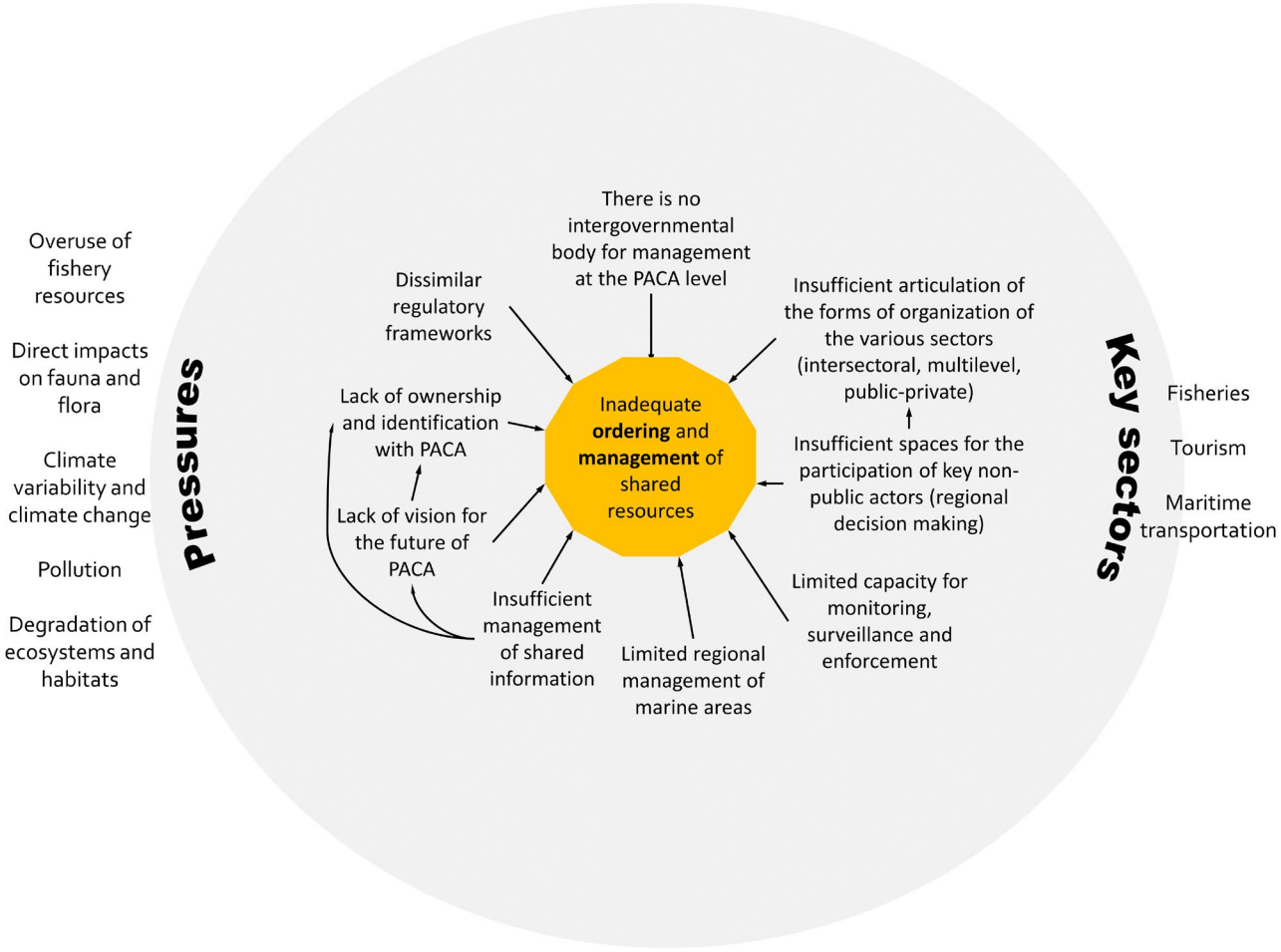



Figure 11. Causes of the inadequate ordering and management of shared resources.

3. To conclude, two last causes are lack of ownership of PACA and a vision for the future of this LME. This occurs because the "Pacific Central-American Coastal Large Marine Ecosystem" is an abstract technical concept that is difficult to visualise and grasp by most local people and stakeholders who normally know and relate to coastal or marine areas with which they interact. Probably the groups that better comprehend the scale and dynamics of this LME are marine scientists, fishers of tuna and migratory large pelagic fish and government officials of environment and maritime affairs.

Long-term solution

4. The current baseline scenario is complex (Figure 8 and Figure 11), PACA risk score is high (IOC-UNESCO & UNEP, 2016). It ranks 16[18] out of the 64 inhabited LMEs and has a higher risk level than the neighbouring LMEs

18 Ranks 1 to 13 correspond to the highest risk category, using a five-point scale: highest, high, medium, low, lowest.

of the region[19]. Also, the Ocean Health Index is very low (59.14[20]) indicating that this LME is not delivering adequate benefits to the local population (IOC-UNESCO & UNEP, 2015).

5. It is impossible to address all the causes of biodiversity loss at once. The most strategic approach is to develop regional collaboration mechanisms to articulate common action on agreed priorities at the LME level. The long-term solution is to build agreed regional actions and governance arrangements to address the main common problems that threaten coastal and marine biodiversity of the Pacific Central-American Coastal Large Marine Ecosystem and adjacent areas (i.e., Gulf of California and Humboldt Current LMEs).

6. Without an intervention to strengthen regional cooperation, it seems unlikely that seascape-level ecosystem-based management will advance in the near future. Key drivers like (i) population growth (expected to double by 2100), (ii) coastal development (motivated by growing urban and tourist demand), (iii) fishing pressure (driven by local needs for food and income and the expanding international demand for seafood) and (iv) discharge of pollutants (derived from an increasing demand of farm and aquaculture products, expanding tourist operations, increasing maritime transportation, and a growing population, among other factors), will continue deteriorating the biodiversity base of this LME.

Barriers that limit the solution of global problems

7. The main barriers that limit ecosystem-based management (EBM) of the Pacific Central-American Coastal Large Marine Ecosystem are:

Barrier 1. Incomplete information to support common management of key regional issues.

8. There are major information gaps about key problems, their causes and their consequences. Existing information is incomplete, dispersed and sectoral. For example, there is no hard data about the amounts of pollutants that enter into the ocean and their paths within the coastal and marine ecosystems. Also, there are major limitations in fisheries monitoring, mainly on small-scale and artisanal fisheries, by-catch and discards. There are also limitations for region-wide information sharing and analysis. Existing mechanisms focus on specific topics and do not involve all PACA countries.

9. PACA has been assessed by Heileman (2009), UNEP (2006)[21], UNEP (2006a)[22], IOC-UNESCO & UNEP (2015) and IOC-UNESCO & UNEP (2016). However, these reports reflect the existing information limitations

Barrier 2. Limited understanding of large-scale ecosystem-based management.

10. EBM has been incorporated at the national level and there have been efforts to advance multi-country collaborative management. However, stakeholders and the general public have incipient understanding of the benefits of EBM approaches at the LME scale. It has to be acknowledged that it is difficult to grasp a seascape perspective when stakeholders face pressing short-term and local issues.

Barrier 3. Limited experience on inter-sectoral seascape management.

19 Caribbean Sea ranks 17, Humboldt current ranks 24, and Gulf of California ranks 26. All these LMEs have a high TWAP risk score. The Gulf of Mexico ranks 32 and has a medium TWAP risk score.

20 The Guinea Current LME has the lowest OHI index (51.19) of all populated large marine ecosystems.

21 Includes information for the area between Mexico and Colombia.

22 Includes information for Ecuador and Peru.

11. The existing inter-sectoral experience is mostly site-specific. There have been major undertakings to advance multi-country inter-sectoral management[23] but they have not achieved collaborative EBM. It is common to have conflicts among interested parties for the use of coastal and marine areas.

Barrier 4. Nonexistence of collaborative arrangements to sustain ecosystem-based management of the large marine ecosystem.

12. As mentioned before, there is no regional cooperation framework in place that can support coordinated action to address key problems within this LME. There are a number of platforms, but they are either sectoral or do not include all PACA countries.

13. IOC-UNESCO & UNEP (2016) assessment of governance risk factors[24] was medium[25] for engagement, low for completeness, and very high for integration.

14. Existing platforms are:

1. The Inter-American Tropical Tuna Commission, a Regional Fisheries Management Organisation (RFMO) focused on tuna fisheries[26] in the OPO. IATTC is based on the Antigua Convention, which strengthened and replaced the 1949 agreement and entered into force in 2010. All PACA bordering countries participate on IATTC[27].

2. The Central American Fisheries and Aquaculture Organization an entity of SICA. OSPESCA focus on sustainable and coordinated fisheries and aquaculture development. Six PACA bordering countries are members of OSPESCA (i.e., Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama).

3. The Central American Commission on Environment and Development also an entity of SICA. CCAD focus on regional environmental cooperation and integration. In 2014. the council of environment ministers adopted the Framework Regional Environmental Strategy 2015-2020. This strategy includes interventions in climate change and coastal and marine conservation. Six PACA bordering countries are members of CCAD (i.e., Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama).

4. The Eastern Tropical Pacific Marine Corridor which is a regional initiative established in 2004 by a declaration of the Ministries of Environment of the four participating countries (i.e., San Jose Declaration). CMAR focus on a network of five core MPAs: Galápagos (Ecuador), Isla del Coco (Costa Rica), Coiba (Panama), Malpelo and Gorgona (Colombia).

23 For example, in the Gulf of Fonseca there have been some initiatives to promote integrated ecosystem management, like the PROGOLFO project (funded by DANIDA and executed by IUCN) and the regional GEF project 2688 (cancelled). Also, CMAR has promoted a seascape approach focusing on key protected areas in four countries.

24 The indicators are: (1) completeness of the structure of arrangements to address a given issue or issues, (2) integration of institutions involved in addressing the suite of identified transboundary issues within a given LME, and (3) engagement of countries participating in arrangements that address the identified transboundary issues within the LME.

25 In the five-point risk scale used in the TWAP: very low, low, medium, high, very high.

26 The Antigua Convention states that IATTC will concentrate on stocks of tunas and tuna-like species and other species of fish taken by vessels fishing for tunas and tuna -like species in the convention area.

27 All countries are parties to the convention, except Honduras which is Cooperating Non-Member of the IATTC.

5. The Permanent Commission for the South Pacific is a regional maritime organization established in 1952 and integrated by Chile, Colombia, Ecuador, Peru. CPPS administer and implement the South-East Pacific Action Plan (adopted in 1981) of UNEP´s Regional Seas Programme. Panama is a member of the action plan.

6. The convention for cooperation in the protection and sustainable development of the marine and coastal environment of the northeast Pacific (Antigua Convention) was signed in 2002 by Guatemala, El Salvador, Nicaragua, Honduras, Costa Rica and Panama. Its purpose is to establish a regional cooperation framework to encourage and facilitate the sustainable development of marine and coastal resources of the countries of the Northeast Pacific. The convention is to support the Regional Seas North-East Pacific Action Plan[28]. The action plan was adopted in 2002 but has not been implemented. The convention has not entered into force[29] and, apparently, there is no interest on reactivating this cooperation mechanism.

Strategy

7. To address some of these challenges, a regional project supported by the GEF has been prepared and is described below. Solving the range of issues occurring in the Pacific Central-American Coastal Large Marine Ecosystem is beyond the means of the present regional project considering the scope of interventions which will be needed. However, the present GEF regional project can assist the countries to set the foundation for collaborative transboundary management of this large marine ecosystem.

8. The regional project will focus on transboundary marine governance to address the existing inadequate ordering and management of shared resources which is one of the root causes (Figure 12 and Figure 13). This is done in the understanding that improved marine governance will contribute to construct sound seascape-level ecosystem-based management. As mentioned before, there are a range of interconnected causes of biodiversity loss (Figure 8), but the basis of this regional project is that improved transboundary marine governance will catalyse a range of improvements along the causal chain.

9. The main tool will be the Transboundary Diagnostic Analysis (TDA) and Strategic Action Programme (SAP) development approach (TDA/SAP process) (GEF IW:LEARN, 2013; UNDP, 2017; GEF IW:LEARN, 2018). An exercise of deep collaborative and inclusive analysis and strategic planning will warrant the mainstreaming of fundamental elements such as common understanding of the challenges and opportunities, LME identity, governance, participation and representation (Figure 12Figure 12 and Figure 13). The aim will be to have a formal instrument (the SAP) that has an adequate balance between the technical, social-gender and political dimensions of transboundary LME management. In addition, it is envisioned that the SAP will be the basis for future actions at the local, national and regional levels.

10. To complement the TDA/SAP process, the regional project will develop:

    1. Some training of key stakeholders on ecosystem-based management of large marine ecosystems and blue growth.

28 Plan of Action for the Protection and Sustainable Development of the Marine and Coastal Areas of the North-East Pacific.

29 The Antigua Convention established that it will entry into force after the deposit of four instruments of ratification. The instrument was open for signature of all coastal countries from Mexico (in the north) to Colombia (in the south), but was signed only by Guatemala, El Salvador, Nicaragua, Honduras, Costa Rica and Panama. So far, only Panama has ratified this convention.

2. Some pilot interventions to generate learning on key issues of the LME.

3. A collaborative information system for long-term monitoring and reporting of PACA´s condition.

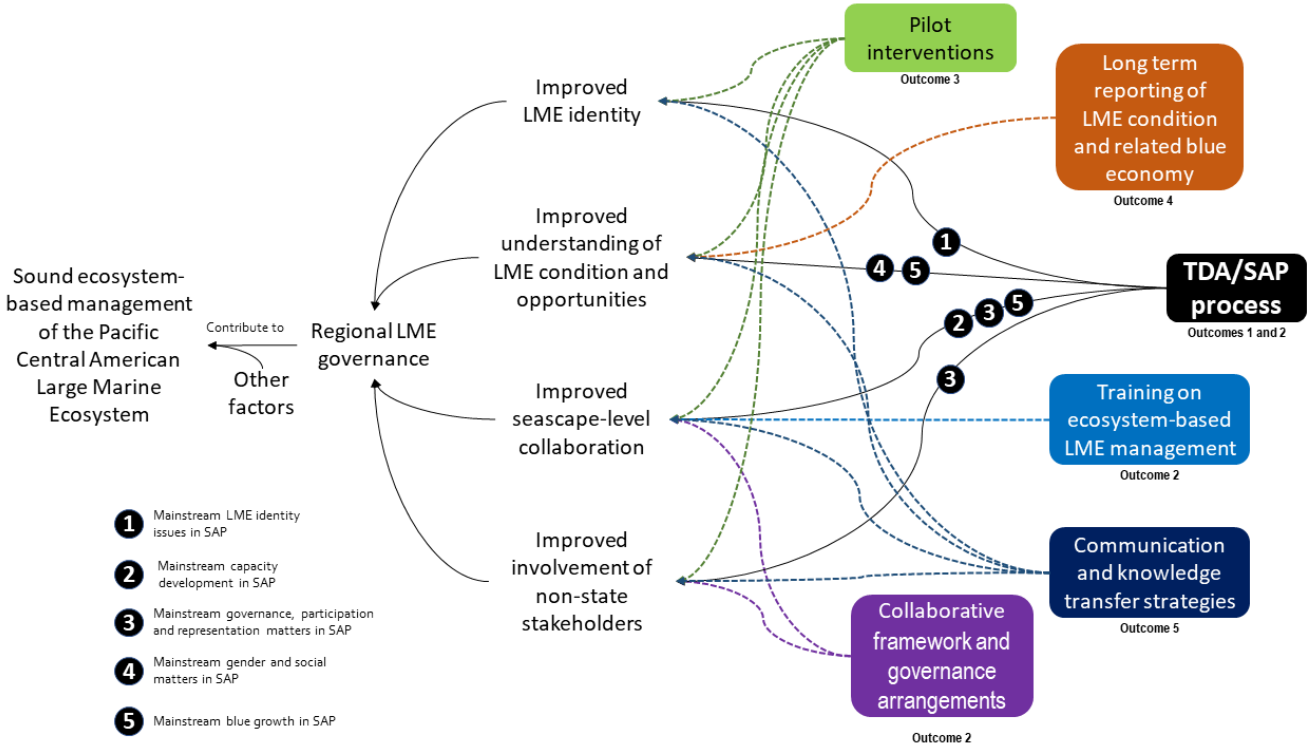



**Figure 12. Theory of change for the PACA regional project**.

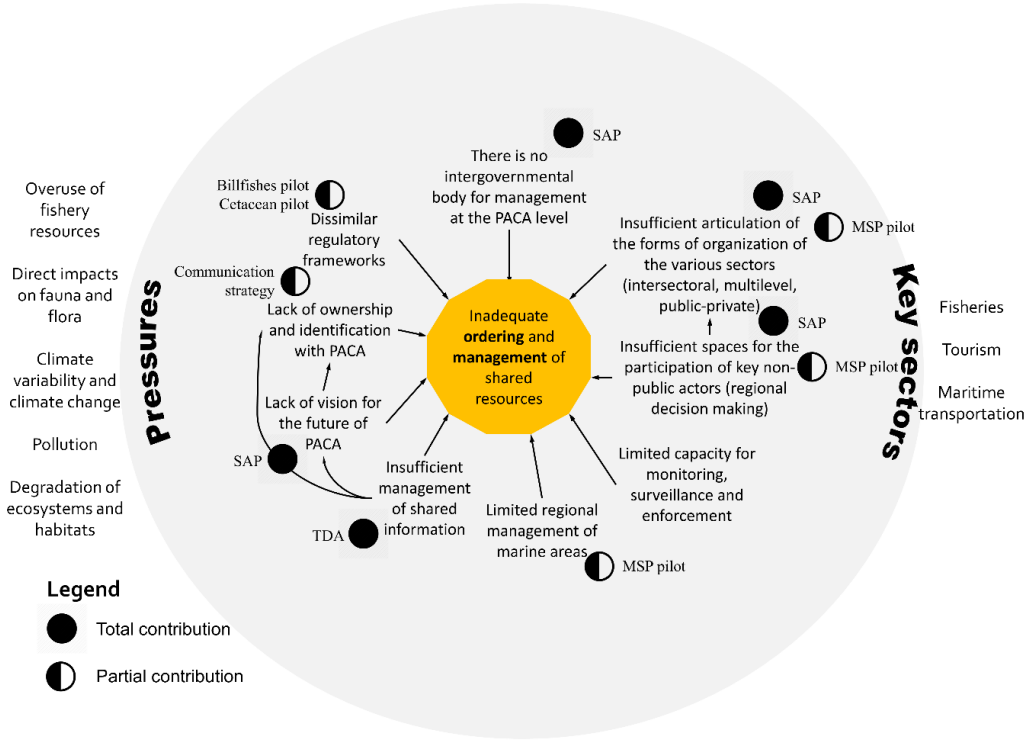



Figure
13.Contribution of the regional project interventions to address the causes of the inadequate ordering and management of shared resources.

11. As part of this regional project, the present national initiative in Mexico is derived to support the implementation of a pilot that will help the development of marine spatial planning. this is described in the following sections.

## Results and Partnerships

### Expected results

12. The objective of the regional project is to promote ecosystem-based management of the Pacific Central American Large Marine Ecosystem through the strengthening of regional governance. The regional project is organized in three components and five outcomes. In total, ten outputs will be generated (Table 7). The three components are:

1. Component 1 will develop the regional governance instruments for joint management of PACA. This includes generating common understanding of the current situation of the LME (i.e, the Transboundary Diagnostic Analysis) and the necessary collaborative arrangements and tools (i.e., the Strategic Action Programme).

2. Component 2 will generate on the ground learning to address three common key issues: (i) conservation and management of billfishes, (ii) marine spatial planning, and (iii) cetacean conservation.

3. Component 3 will focus on generating and sharing lessons and practical experience.

Table 7. Regional Project outcomes and outputs.

| **Outcomes** | **Outputs** |
|---|---|
| Outcome 1. Common understanding of the regional LME challenges and opportunities supported by the participant countries. | 1.1. Transboundary Diagnostic Analysis (TDA) of the Pacific Central American Coastal Large Marine Ecosystem prioritizes threats to LME, their immediate and root causes and opportunities sustainable development |
| Outcome 2. Collaborative framework and governance arrangements adopted by the participating countries to implement PACA´s Strategic Action Programme. | 2.1 Strategic Action Programme (SAP) of legal, policy and institutional reforms, and needed investments, for sustainable utilization of the Pacific Central American Coastal large marine ecosystem endorsed by participating countries at ministerial level. |
| | 2.2 Collaborative framework and governance arrangements to implement PACA´s SAP endorsed by participating countries. |
| | 2.3. Strategy for awareness raising, participation and articulation among key decision-makers and stakeholders. |
| | 2.4. Training of key stakeholders (public and private) on ecosystem-based management of large marine ecosystems. |
| Outcome 3. Tangible impacts generated in demonstrative pilot interventions implemented to contribute to the development and buy-in of the SAP and to decision making on prioritized topics in the region. | 3.1. Three pilot interventions on common key issues of the Pacific Central American Coastal Large Marine Ecosystem implemented.<br>3.1.1. Conservation and management of billfishes<br>3.1.2. Marine spatial planning.<br>3.1.3. Cetacean conservation |
| | 3.2. Best practice and lessons from the pilots systematized, accessible and available to all stakeholders in the region |
| Outcome 4. Collaborative information system developed with key indicators on PACA´s condition and SAP implementation | 4.1. Development and adoption of a suite of International Waters process, stress reduction and environmental/socioeconomic status indicators and implementation mechanisms to monitor PACA´s condition and SAP implementation. |

| Outcomes | Outputs |
|---|---|
| Outcome 5. Lessons on collaborative actions to manage PACA shared in the region and worldwide (south-south cooperation). | 5.1. Website for dissemination of lessons and best practice, linked to partners´ portals and IW: LEARN.<br><br>5.2. Project lessons documented and disseminated. |

Component 1. Governance instruments improved at regional level for joint management of PACA

4. This component focus on developing regional governance arrangements for collaborative ecosystem management. It has two outcomes: (i) common understanding of the situation in PACA, and (ii) concerted arrangements to implement an agreed strategy.

5. The core of this component will be applying the Transboundary Diagnostic Analysis and Strategic Action Programme development approach (TDA/SAP process) for the management of PACA large marine ecosystem (GEF IW:LEARN, 2013; UNDP, 2017; GEF IW:LEARN, 2018). The TDA will consider the impacts of the COVID-19 pandemic on PACA´s blue economy and the SAP will integrate, as much as possible, the countries´ recovery strategies related to blue growth.

6. The Regional project actions and budget to undertake the TDA/SAP process include the seven participating countries and provisions to include an additional country in case that Colombia or Nicaragua decide to participate in this regional process.

7. The EMR will be responsible for the technical implementation of the TDA/SAP process and the EGP will ensure that (i) the process is participatory and inclusive and (ii) that key aspects like participation, representation and gender are addressed in the TDA/SAP process.

Outcome 1. Common understanding of the regional LME challenges and opportunities supported by the participant countries.

8. The Regional project will complete a comprehensive analysis of the situation in PACA, that is the identification of (i) the transboundary and shared problems and (ii) the challenges and opportunities for regional blue growth. The output will be Transboundary Diagnostic Analysis (TDA) which will be built through a participatory process (Figure 14).

9. The construction of the Transboundary Diagnostic Analysis will be based mainly on existing information. There is good amount of material that has been generated over the years by a range of entities. In addition, there are some ongoing projects that will produce valuable inputs for the TDA. Finally, the participating countries will bring their previous experience with the preparation of the TDAs of the Gulf of Mexico and the Caribbean large marine ecosystems.

10. The standard GEF methodology will be used to develop the TDA/SAP process (GEF IW: LEARN, 2013; GEF IW: LEARN, 2018). However, the TDA process was adapted during the Regional project preparation (Figure 14). The main adaptations are:

1. The Regional project will contact entities that that can provide information and knowledge, and have long-term commitments for data collection and reporting like the Inter-American Tropical Tuna Commission (IATTC), the Food and Agriculture Organization of the United Nations (FAO), the National Oceanic and Atmospheric Administration (NOAA), the Intergovernmental Oceanographic Commission of UNESCO (IOC/UNESCO), the Smithsonian Tropical Research Institute, among others. Collaboration agreements will be negotiated, it is expected that these organizations will become strategic allies and will facilitate information

and inputs for the TDA and the future long-term reporting mechanism (output 4.1), and experience for SAP development (output 2.1).

2. The TDA development team will have (i) three formal delegates from each participating country, and (ii) a delegate from OSPESCA´s Regional Working Group on Gender Equality and Equity in fisheries and aquaculture (GRT-IEG).

3. There will be a minimum level of participation of persons from non-state entities (>30%) and women (>30%) in the TDA development team.

4. There will be a consultant (senior advisor for TDA development) which will provide guidance and technical support to the TDA development team in the process to prepare the TDA. This person will oversee the preparation of the national analyses (see below) and will draft the TDA document. Through the process, this person, will ensure that the conservation value and contribution to blue growth of critical habitats and MPAs is addressed.

5. There will be national diagnostic analyses based on a common set of terms of reference to be prepared by the senior advisor for TDA development and agreed by the TDA development team. Three core elements of the diagnostics will be (i) to identify current and future blue growth sectors and their trends, (ii) the probable impacts of climate change in the marine environment and blue economy sectors, and (iii) an identification of coastal indigenous people that use the resources of PACA. The allocations for the national analyses were agreed during the Regional project preparation and are included in the Regional project budget. On each country the consultant team will be selected through a national contest and contracted by the implementing partner.

6. Each national diagnostic analysis will document (i) the impacts of the COVID-19 pandemic on coastal populations and key blue economic sectors such as fisheries, aquaculture and coastal and marine tourism, and (ii) adopted post-crisis recovery strategies.

7. Each consultant team that will prepare the national diagnostic analysis will include a person specialised in social and gender issues. Each national analysis will include a section about women´s participation and contributions in the fisheries and coastal / marine tourism supply chains. Afterwards a consultant will process the national gender studies to prepare a regional analysis that will be included into the TDA (activity 1.1.14 in Annex 3).

8. On each country, the preliminary results of each national analysis will be presented in a one-day workshop with key stakeholder to validate information and receive feedback.

9. The TDA development team will hold workshops to draw regional findings from the national reports (e.g., transboundary problems, causal chain analysis, leverage points for blue growth) and to review the draft TDA.

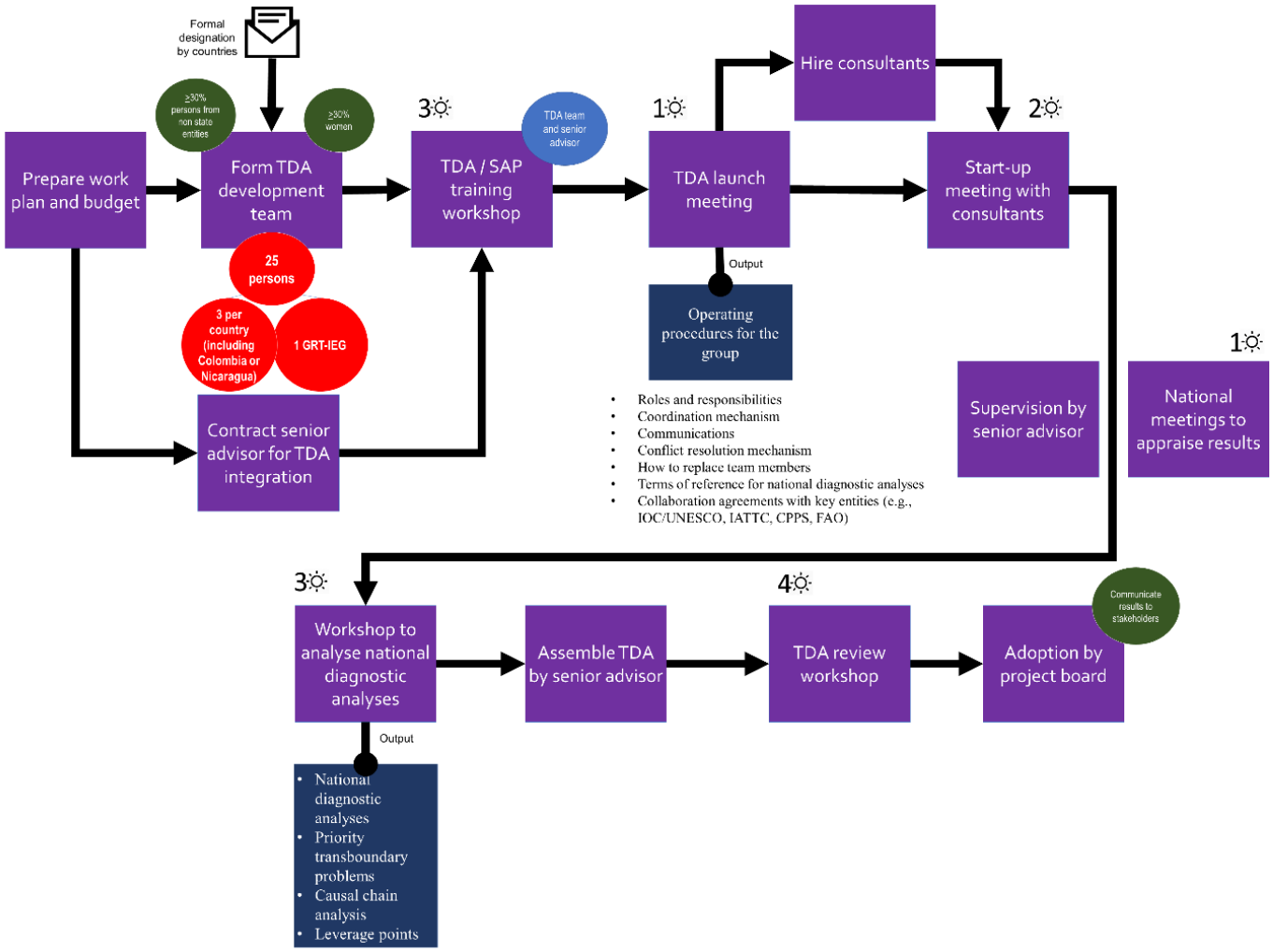



Figure 14. Road map for the development of the Transboundary Diagnostic Analysis.

10. The TDA will be adopted by the Regional Project Board and then edited into Spanish and English high-quality PDF documents for wide distribution. As part of the communication strategy, briefs will be prepared to succinctly inform decision makers in the region about the core findings of the transboundary analysis and the opportunities for regional collaboration and blue growth. Similarly, five dissemination versions of the TDA will be prepared for specific audiences of the four main blue economy sectors (i.e., fisheries, coastal and marine tourism, aquaculture, and shipping) and for local governments.

11. Finally, the TDA will be disseminated through the IW: LEARN platform and will be uploaded to the web portal for long-term reporting (see page 68 ) once it is operational.

Outcome 2. Collaborative framework and governance arrangements adopted by the participating countries to implement PACA´s SAP.

12. Four interlinked outputs will contribute to construct the regional collaborative and governance arrangements to advance the management of the large marine ecosystem (Table 7). The SAP (output 2.1) will be the agreed strategy for managing the large marine ecosystem and to promote blue growth. Complementarily, to sustain SAP implementation a regional collaborative agreement will be drafted and negotiated among the participating countries (output 2.2). Finally, to support SAP preparation and implementation, the Regional

project will execute actions for awareness raising (output 2.3) and training on ecosystem-based management of large marine ecosystems (output 2.4).

13. During the Regional project preparation, it was agreed that regional governance will be built upon the framework of the Central American Integration System (SICA).

Output 2.1 Strategic Action Programme (SAP) of legal, policy and institutional reforms, and needed investments, for sustainable utilization of the Pacific Central American Coastal large marine ecosystem endorsed at ministerial level by participating countries.

14. A core group will be established to prepare the Strategic Action Programme (i.e., SAP development team). The ministries of foreign affairs will have a fundamental role to facilitate negotiations and outlining the pertinent diplomatic procedures and instruments for regional collaboration. The EGP will ensure that the process is participatory and inclusive, and that social and gender issues are mainstreamed into the SAP. The EMR will ensure that regional blue growth strategic approaches are analysed during the process.

15. The SAP process was adapted during the Regional project preparation (Figure 15). The main adaptations are:

1. The SAP development team will have (i) three formal delegates from each participating country, and (ii) a delegate from OSPESCA´s Regional Working Group on Gender Equality and Equity in fisheries and aquaculture.

2. There will be a minimum level of participation of women (>30%) in the SAP development team.

3. There will be a consultant (senior advisor for SAP development) which will provide guidance and technical support to the SAP development team in the process to prepare the Strategic Action Programme. This person will make sure that the conservation value and contribution to blue growth of critical habitats and MPAs is addressed during SAP development. This consultant will draft the SAP and will ensure that the document: (i) includes a blue growth strategic approach, (ii) address the possible impacts of global climate change on the LME and related blue economy sectors (in line, as much as possible, with the Nationally Determined Contributions (NDCs) of the participating countries), and (iii) that it connects with pertinent post-COVID recover strategies.

4. To have two moments for national consultation. The first with key stakeholders, and the second with key government entities (e.g., ministries of the economy, cabinet council).

5. Once a first rough draft of the SAP is ready, it will be subject to stakeholder consultation on each country. Two one-day consultation workshops will be held on each country. The first, will serve (i) to provide basic information and relevant background, (ii) to present the draft SAP, and (ii) to receive initial comments. The second workshop will provide space to receive detailed comments, recommendations, and contributions. A professional facilitation team will run each consultation workshop in close coordination with the EMR, the EGP and the senior advisor for SAP development. The workshops will be designed to facilitate participation of women and men, mutual respect, and collective decision-making. In all meetings the Regional project team will ensure the participation of pertinent stakeholders, including direct user groups and indigenous peoples as appropriate. This México´s Pilot Project will be aligned with the regional strategy.

6. The inputs from the national consultation with key stakeholders will serve to assemble the SAP. This document will be subject to consultation with high level government officials from the participating countries (e.g., ministry of the economy, ministry of national planning). This will serve (i) to build political support, (ii) to ensure that the SAP is linked to national priorities, and (iii) to secure firm commitments in support of SAP implementation.

7. The SAP will be formally endorsed at the highest possible ministerial level on each country and then edited into Spanish and English high-quality PDF documents for wide distribution. It will be disseminated through the

IW: LEARN platform, and uploaded to the web portal for long-term reporting (see page 68) once it is operational. Finally, the SAP will be communicated to the Central American Commission for Environment and Development (CCAD) and the Council of Ministers of OSPESCA for their consideration.

8. As part of the communication strategy, briefs will be prepared to succinctly inform decision makers in the region about the contents of the SAP and the agreed collaborative framework for its implementation (output 2.2). Similarly, five dissemination versions of the SAP will be prepared for specific audiences of the four main blue economy sectors (i.e., fisheries, coastal and marine tourism, aquaculture, and shipping) and for local governments.

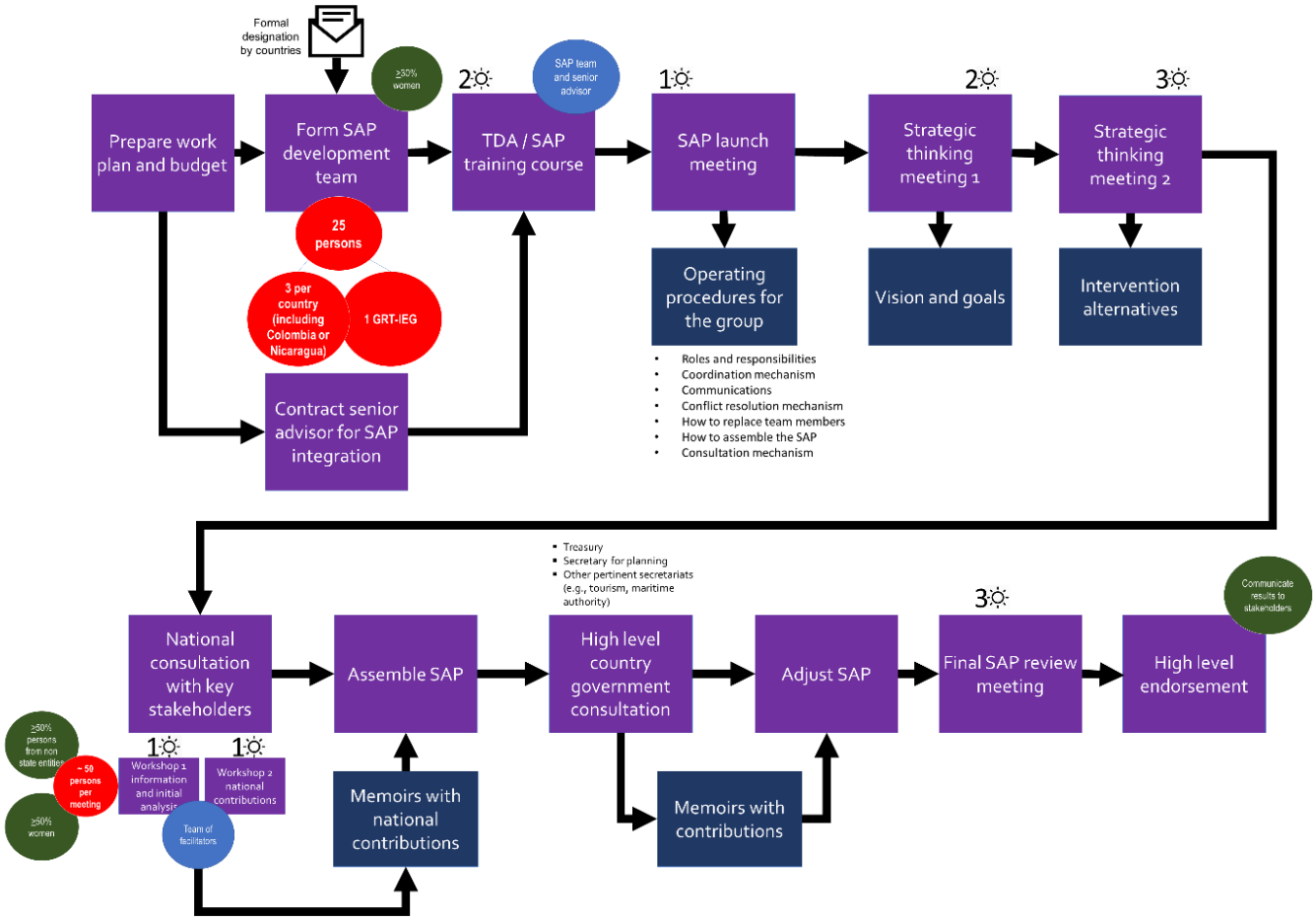



Figure 15. Road map for the development of the Strategic Action Programme.

Output 2.2 Collaborative framework and governance arrangements to implement PACA´s SAP endorsed by participating countries.

9. During SAP preparation, the principal technical advisor in collaboration with members of the technical committee will draft a regional collaboration agreement for SAP implementation within the framework of SICA.

10. The proposed agreement will be reviewed on the high-level country government consultation meetings (Figure 15) and its final version will be submitted to SICA´s General Secretariat (SG-SICA) to facilitate

negotiation among the participating countries. It is envisioned that the regional agreement will be signed by the parties towards the end of the third year of the Regional project implementation.

Output 2.3. Strategy for awareness raising participation and articulation among key decision-makers and stakeholders.

11. In the second quarter of the Regional project implementation, the EGP and the communications specialist (ECM) will prepare a strategy for awareness raising, participation and articulation among key decision-makers and stakeholders. The aim of this strategy will be to facilitate understanding of the need of regional action and to promote engagement, dialogue and collaboration among interested parties to support the TDA/SAP process (outputs 1.1 and 2.1) and the construction of the collaborative arrangements for SAP implementation and long-term monitoring (outputs 2.3 and 4.1). During the implementation of this strategy the EGP will document the experience on women participation.

12. On the second quarter of year 3, the EGP will organise a technical workshop of the GRT-IEG to analyse the experience from the TDA/SAP process and the pilot interventions to outline key ideas to strengthen participation of women in the governance of PACA. Next, the EGP and a core group of the GRT-IEG will prepare draft regional guidelines that will be open for analysis and comments of the Regional project partners. Later, the guidelines will be reviewed in a two-day regional meeting. Finally, the guidelines will be formally presented to the Council of Ministers for Women of Central America and Dominican Republic (COMMCA). It is envisioned that COMMCA will eventually adopt the guidelines.

Output 2.4. Training of key stakeholders (public and private) on ecosystem-based management of large marine ecosystems.

13. To contribute to develop capacities in support of LME management the Regional project will take advantage of the range of related Massive Open Online Courses (MOOCs) that are available. Five main courses have been identified, but this will be adjusted at Regional project start:

    1. The Blue Economy - Sustainability, Innovation and our Ocean, provided by the University of Seychelles and the Commonwealth of Learning.

    2. Transboundary Marine Spatial Planning and Sustainable Blue Economy Course provided by CAP-NET.

    3. Training in massive open online course on Marine Litter provided by UNEP and the Open Universiteit of the Netherlands

    4. Training in Large Marine Ecosystems: Assessment and Management provided by COURSERA.

    5. Online seminars on marine spatial planning organised by IOC UNESCO.

14. The EMR will identify key private and public stakeholders that will benefit from training through MOOCs and prepare a training plan. The EGP will ensure that this plan includes gender and social considerations. Trainees will be monitored and followed-up to assess the impact of the courses.

Component 2. Initial on the ground pilot active actions to address common key issues and to advance collaborative work and replication

Outcome 3. Tangible impacts generated in demonstrative pilot interventions implemented to contribute to the development and buy-in of the SAP and to decision making on prioritized topics in the region.

15. This component focus on generating practical lessons through three pilot intervention on key issues: (i) conservation and management of billfishes, (ii) marine spatial planning (MSP) and (iii) cetacean conservation (Table 8). The experience and lessons from the pilots will provide inputs to the TDA/SAP process and will serve to prepare three regional instruments:

1. regional plan for the management of sailfish and marlin recreational fisheries (family Istiophoridae),
2. regional guidelines for marine spatial planning in PACA, and
3. regional guidelines for whale watching in PACA.
4. The COVID-19 pandemic had a wide range of impacts on coastal populations and the blue economy. The pilots will document pertinent impacts on each case to provide inputs to the TDA/SAP process.

Table 8. Pilot interventions and their products.

| Pilots | Participating countries (from North to South) | Duration (months) | Products | Responsible parties |
|---|---|---|---|---|
| Conservation and management of sailfish and marlin recreational fisheries | Mexico, Guatemala, El Salvador, Costa Rica, Panama, Colombia, Ecuador | 14 | Regional plan for the management of sailfish and marlin recreational fisheries (family Istiophoridae) | OSPESCA |
| Marine spatial planning in PACA | Mexico, Guatemala, El Salvador, Honduras, Costa Rica, Panama, Ecuador | Not applicable | Regional guidelines for marine spatial planning in PACA | Project management unit |
| | **Site 1. Mexico** | **14** | **Marine Ecological Management Programme for Mexico´s South Central Pacific Region** | **Instituto de Ecología de la Universidad Nacional Autónoma de México** |
| | Site 2. Costa Rica | 14 | Management plan including spatial planning for surface long-line and greenstick fishery for large pelagic fish (tuna, mahi mahi and swordfish) by the medium-scale and advanced commercial fleets. | INCOPESCA |
| | Site 3. Panama | 12 | Marine spatial planning plan for the area of influence of the Coiba National Park and the Special Zone of Marine Protection. | MarViva |
| | Site 4. Ecuador | 18 | Beach management plans and marine area management strategies for the Pedernales, Jama and San Vicente municipalities. | CI-Ecuador |
| Cetacean conservation | Panama | 12 | Characterization of the marine acoustic landscape of five sites of ecological importance for whales and dolphins in Panama | MiAmbiente |
| | Mexico, Guatemala, El Salvador, Honduras, Costa Rica, Panama, Ecuador | Not applicable | Regional guidelines for whale watching in PACA | Project management unit |

Output 3.1. Three pilot interventions on common key issues of the Pacific Central American Coastal Large Marine Ecosystem implemented.

Pilot 1. Conservation and management of sailfish and marlin recreational fisheries.

5. Billfishes are oceanic highly migratory fish which are a key element of the pelagic ecosystem, they are apex predators that balance marine food chains. The family Isthiophoridae contains the marlins (also called spearfishes) and the sailfish. Four species are the most conspicuous:

1. Blue marlin (*Makaira nigricans*) (listed vulnerable in the IUCN red list). The latest assessment for the Pacific Ocean (data up to 2011) estimated that the population was fully exploited (ISC, 2016; Kapur et al., 2017; IATTC, 2019).

2. Black marlin (*Istiompax indica*) (listed data deficient in the IUCN red list). The population status has not been assessed.

3. Striped marlin (*Kajikia audax*) (listed near threatened in the IUCN red list). The latest population assessment for north-eastern Pacific stock found that it is no overfished (IATTC, 2019).

4. Sailfish (*Istiophorus platypterus*) (listed least concern in the IUCN red list). The population status has not been assessed because of deficient data (apparent high levels of unreported catch), though relative abundance has shown a declining trend (IATTC, 2019).

5. In the eastern tropical Pacific Ocean, these fish are captured by (i) industrial longline fleets, (ii) artisanal fisheries using longline and gillnets, (iii) recreational fisheries, and (iii) as bycatch of purse-seiners targeting tropical tunas (IATTC, 2019). There are no regional conservation and management measures, except for IATTC´s Resolution C-04-05 which require fishermen on purse-seine vessels to release billfishes and other non-target species. The IATTC monitor the effects of the tuna fisheries on the blue marlin, stripped marlin, and sailfish, and estimate catches of billfishes in the OPO (IATTC, 2019; IAATC, 2019a). However, fish stock assessments are difficult to undertake due to lack of catch and landing information from all the fleets. In addition, there is large misidentification of billfishes which hamper catch reports. Williams et al., (2018) found that the black marlin is mostly reported as blue marlin (77%) and striped marlin (2%).

6. Billfishes are iconic priced trophies of recreational fisheries. These fisheries are linked to a tourism value chain which generates high value and significant diversified employment opportunities. The total annual expenditure on recreational fisheries worldwide for 2009 was estimated in USD 190 billion (Kelleher et al., 2012). The value of billfish recreational fisheries in Puerto Rico and Bahamas has been estimated in USD 33 million $year^{-1}$ and USD 228 million $year^{-1}$, respectively (Ditton & Stoll, 2003; Southwick et al., 2016).

7. In PACA, the availability of billfishes to recreational fisheries is high, ranging between 3 and 10 billfishes per $boat^{-1}$ fishing $day^{-1}$ (Ehrhardt & Fitchett, 2008; Brown, 2019). Mexico, Guatemala, Costa Rica, and Panama are the main sport fishing destinations. The value of billfish recreational fisheries on the Pacific coast of Costa Rica and Mexico was estimated in USD31.8 million and USD44.1 million, respectively (Ditton & Stoll, 2003).

8. Catch-and-release billfish recreational fisheries and the related tourism can generate much larger income than equivalent commercial fisheries and reduce fishing mortality rates of apex predators (Kitchell et al., 2006; Gentner, 2016). For example, in Guatemala and Costa Rica the value of a billfish landed by commercial fishing is USD60 compared to USD1,000 of a billfish from a catch-and-release operation. Therefore, this activity can make a significant contribution towards blue growth in the region. Recreational fisheries, like other elements of coastal and marine tourism, were severely affected by the COVID-19 pandemic. However, it is foreseen that it will recover once demand raises again within 2021.

9. This pilot will generate knowledge to support decision making regarding the development of billfish recreational fisheries in the region. The current situation is that:

    1. There is an apparent decline in billfish resources. Ehrhardt & Fitchett (2006) reported that during the period 1970–1995, the average sailfish relative abundance decreased 82% while trophy size decreased by over 35%.

    2. Information from recreational fisheries are not readily available. In general, national fisheries authorities do not include this data in their statistics.

    3. The value of billfish recreational fisheries and related tourism is unknown in most countries.

    4. There are no regional management regulations. Some countries have specific national regulations, including prohibition of commercial fishing and mandatory catch and release for billfish.

    5. Recreational fisheries halted during 2020 due to COVID restrictions on international travel.

10. The pilot will document the billfish recreational fisheries occurring in the area between Jalisco state in Mexico to the Gulf of Guayaquil in Ecuador. OSPESCA will coordinate the work with the national fisheries authorities and sport fishing organizations of the countries. There will be close collaboration with the International Game Fish Association (IGFA) and the Billfish Foundation. The Regional project will support data collection in all countries and will organise national and regional workshops to consolidate and analyse information.

11. Four lines of work will be developed during 14 months:

1. Consolidate information about fishing areas. Information from published research (billfish tagging, oceanography, and meteorology) and data from satellite tagging will be processed to identify movement patterns and habitat utilization (including marine protected areas). Data from the Billfish Foundation's Satellite Tagging Programme will be used for the analysis. In addition, information from sport fishing logbooks will be processed to map the main fishing areas.

2. Consolidate information about fishing fleets and related tourism facilities. Censuses and surveys will be used to:

    1. Prepare a record of recreational and commercial fishing vessels that capture billfishes.

    2. Estimate temporal and spatial fishing effort of these fleets.

    3. Estimate the number of sex-disaggregated fishers and related jobs.

    4. Prepare a record of related tourism facilities: marinas, piers, accommodation, fuelling stations, and vessel repair and maintenance facilities.

    5. Estimate direct and indirect sex-disaggregated employment related to billfish recreational fishing and related tourism.

    6. Document the impact of the COVID-19 pandemic on the billfish recreational fishing and related tourism value chain.

3. Comparative analysis of fishing regulations related to billfishes in the area.

4. Draft a regional plan for the conservation and management of sailfish and marlin recreational fisheries through a participatory process. It will be ensured that the discussions recognise the value of critical habitats and MPAs for the conservation of billfish populations. The experience from the GEF-sponsored Caribbean Billfish Project and the preparation of the Caribbean Billfish Management and Conservation Plan (Bealey et al., 2019) will be used to support this process. The plan will also include as appropriate, pertinent post COVID-19 recovery.

5. OSPESCA will present the proposed plan to (i) the national fisheries authorities of the participating countries and (ii) its decision-making bodies.

6. As part of the gender action plan, sex-disaggregated data will be analysed to document women´s participation and contributions in the billfishes recreational fishing and related tourism supply chain. The analysis will provide inputs to the TDA/SAP process, the long-term reporting mechanism (output 4.1) and the regional guidelines to strengthen women´s participation in PACA´s governance (output 2.3).

7. Finally, a regional workshop will be held to systematise lessons from the preparation of the regional plan for the management of sailfish and marlin fisheries (output 3.2)

Pilot 2. Marine spatial planning in PACA.

8. Marine spatial planning is an important tool for blue growth. It can facilitate the development of ocean dependent sectors (e.g., fishing, marine aquaculture, shipping, seabed mining, protected areas) in a context of increasing competition for space and limited biodiversity resources. There has been a worldwide increase of MSP planning initiatives and it is foreseen that by 2030 about a third of the surface area of the world's exclusive economic zones could have government-approved marine spatial plans (Ehler, 2017). The widely used definition by UNESCO is that "MSP is a public process of analysing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social

objectives that usually have been specified through a political process. Characteristics of marine spatial planning include ecosystem-based, area-based, integrated, adaptive, strategic and participatory."

9. MSP will be a fundamental tool for PACA´s collaborative management. However, the countries have limited experience with this tool. Some countries have policy instruments related to MSP -- like Costa Rica´s National Marine Policy (Executive Decree 38014) and Ecuador´s National Oceanic and Coastal Policies (Resolution 001-PCIMAR-2014) --, and most have undertaken local pilot exercises. Mexico is the only country which has:
    1. legislation that mandates MSP, which is called Marine Ecological Planning (General Law of Ecological Balance and Environmental Protection), and
    2. established procedures for its development (chapter 5 of the regulation of the general law of ecological balance and protection of the environment in the matter of ecological planning, published in 2003 and SEMARNAT 2006).

    Currently none of the participating countries have government-approved marine spatial plans in the area of PACA.
10. Key challenges to advance MSP in PACA will be: (i) consolidation with integrated coastal management which is well developed in all countries, and (ii) mainstreaming transboundary considerations into national MSP plans taking into account the differences in institutional and legal systems and national priorities.
11. The purpose of this pilot is to generate practical experience on marine spatial planning to support decision making about its application in the region. Ultimately the pilot will generate a set of regional guidelines for marine spatial planning in PACA (Table 8). Close coordination will be sought with IOC/UNESCO Marine Spatial Planning Programme and the MSPglobal project, in particular with the pilot that is being implemented in the Gulf of Guayaquil which will develop recommendations for cross-border MSP and Sustainable Blue Economy in that area. Also, relevant technical guidance, like Ehler & Douvere (2009) and Ehler (2014), will be used during pilot implementation.
12. The pilot project will be implemented in four sites with different situations and characteristics:
    1. Mexico. To undertake the process of preparing a proposal for a Marine Ecological Management Programme for the South-Central Pacific Region.
    2. Costa Rica. To prepare the management plan, including spatial planning, to operationalise the zoning for fishing of tuna and tuna-like species.
    3. Panama. To prepare the marine spatial plan for the area of influence of Coiba National Park and its Special Zone of Marine Protection.
    4. Ecuador. To prepare integrated coastal management plans and management plans for the sea beach and adjacent strip for three municipalities.
13. The pilot will start with a regional workshop to: (1) exchange MSP experience and methods among participating countries, (ii) share information about the impacts of the COVID-19 pandemic and possible implications for MSP, and (iii) share workplans and coordinate actions among the four sites. After that, on each site, there will be a start-up meeting to coordinate actions with local partners and key stakeholders. On the seventh month there will be exchange visits; two key stakeholders from each site will visit the others to have first-hand experience of the ongoing processes.
14. As part of the gender action plan, sex-disaggregated data about women participation in the four MSP processes will be recorded during implementation. This information will be analysed to document women´s participation and their contributions to decision making in marine spatial planning processes. The analysis will provide inputs to the TDA/SAP process, the long-term reporting mechanism (output 4.1) and the regional guidelines to strengthen women´s participation in PACA´s governance (output 2.3).
15. The experience documented in (i) the initial regional workshop, (ii) the site interventions, and (iii) the analysis about women participation in MSP processes will be used to draft regional guidelines for MSP in PACA. The draft guidelines will be analysed in a regional meeting and then submitted for endorsement of the Regional Project Board. Finally, the guidelines will be presented to SICA´s Central American Commission

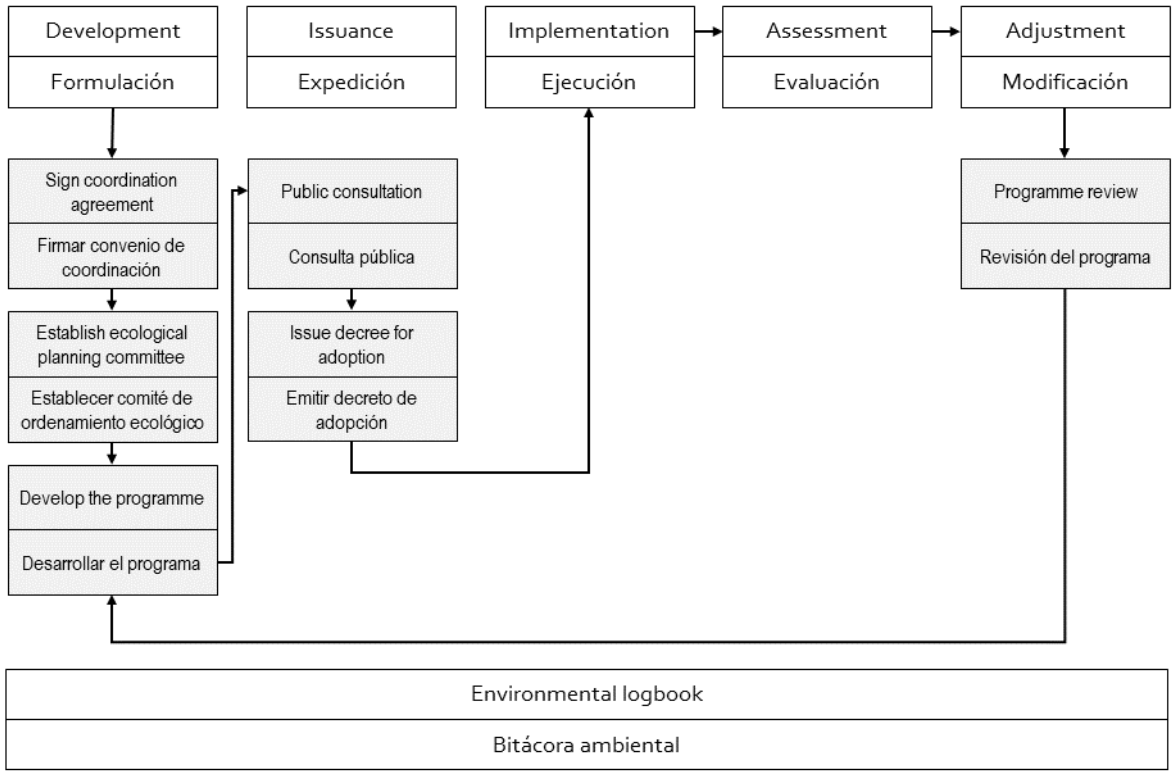
for Environment and Development (CCAD) and the pertinent national authorities in the participating countries.

16. The interventions on each site will be as follows:

**Site 1. Mexico. Proposal for a Marine Ecological Management Programme for the South-Central Pacific Region.**

17. In Mexico, Territorial Ecological Zoning (TEZ) is a public policy tool to manage land use and productive activities to foster environmental protection and the sustainable use of natural resources. The 2003 regulation of the general law of ecological balance and protection of the environment in the matter of ecological planning defines TEZ as a "territory planning process that seeks to achieve a balance between productive activities and the protection of natural resources, by linking the three levels of government, the active participation of society and transparent environmental management". The TEZ process is summarised in Figure 16, a detailed account is found in SEMARNAT (2006).
18. The National Strategy for Ecological Zoning of the Territory in Seas and Coasts (SEMARNAT, 2007) established four marine regions for ecological zoning (Figure 17). Three of them already have Marine Ecological Management Programmes: Gulf of California (adopted in 2006), Gulf of Mexico and Caribbean Sea (adopted in 2012) and North Pacific (adopted in 2018).
19. In 2011 the TEZ process was initiated in the South-Central Pacific Region30. The coordination agreement was signed on 24 March 2010. This instrument was signed by pertinent federal entities (e.g., SEMARNAT, Secretariat of Economy, Secretariat of Agriculture and Rural Development) and the governors of the six bordering states (i.e., Jalisco, Colima, Michoacan, Guerrero, Oaxaca, and Chiapas). The ecological planning committee was established on 10 October 2011. It is formed by representatives from pertinent federal entities (11 members), from the state governments (6 members) and civil society organizations (10 members). During 2012 and 2013 the baseline analyses were prepared (Torres-Navarrete et al., 2013) and validated. After that the process did not continue due to financial restrictions.
20. The present Mexico´s Pilot Project project will allow to continue the zoning process and to prepare a proposal for a Marine Ecological Management Programme for the South-Central Pacific Region to be submitted to public consultation and government endorsement afterwards (Figure 16).
21. The South-Central Pacific Region has a surface of 1.2 million square kilometres of federal marine area. Six states and 78 municipalities border this marine region. The coastal population is about 20.5 million people (48.7% are women).

30 The logbook of the process in found in the following link: https://www.gob.mx/semarnat/acciones-y-programas/bitacora-ambiental-del-programa-de-ordenamiento-ecologico-marino-y-regional-del-pacifico-centro-sur.




Modified from / modificado de: PNUD (2018)

Figure 16. Territorial Ecological Zoning process in Mexico.



Figure 17. Marine regions for ecological zoning in Mexico. Modified from SEMARNAT.

22. The ecological management programme will cover public federal territory: the EEZ and the Federal Maritime Terrestrial Zone. The last is a strip of 20 m wide from the hightide line which is administered by SEMARNAT; on this area temporary concessions / permits can be issued for uses like food stands and tourist facilities.
23. Four states have indigenous population in coastal areas: Colima, Michoacán, Guerrero and Oaxaca (INPI, 2018). However, these groups do not hold territory in the South-Central Pacific Region. Part of this population are fishers and will participate in the zoning process as such. A particular case is Mixe people in the State of Oaxaca who milk the glands of the sea snail *Plicopurpura columellaris* (found on the rocky shores) to obtain a purple dye to colour hand-woven textiles (Nash, 1967; Klein 1997).
24. Four lines of work will be developed for 14 months:

1. Review and update the existing baseline analyses (Torres-Navarrete et al., 2013) with emphasis on the analysis of aptitudes and conflicts that will be constructed through meetings with key stakeholders. The update will document the main impacts of the COVID-19 pandemic on the key coastal and marine sectors and the corresponding recovery strategies and plans.
2. Prepare forecast scenarios through workshops with key stakeholders and analyse the scenarios with the ecological planning committee. The scenarios will include, as appropriate, post COVID-19 recovery measures.
3. Prepare the territorial ecological zoning model and corresponding ecological management programme. This will ensure that the value of critical habitats and MPAs is recognised to safeguard what is most ecologically important, biologically diverse, or vulnerable.
4. Present the proposal to the ecological planning committee for analysis and endorsement.
5. After pilot closure, SEMARNAT and the ecological planning committee will undertake the following phase of the TEZ process. It is foreseen that the Marine Ecological Management Programme for the South-Central Pacific Region might be formally adopted by the government towards after the end of the project or immediately afterwards. For this, a Presidential Decree and a Secretarial Agreement will be issued to adopt and to issue the programme, respectively.

Site 2. Costa Rica. Management Plan and spatial planning for the exploitation of tuna and tuna-like species in the Exclusive Economic Zone of the Costa Rican Pacific Ocean.

6. In 2014, Decree 38681 (modified in 2016 and 2018) established management measures for the exploitation of tuna and tuna-like species[31] in Costa Rica´s Pacific Ocean EEZ, including spatial planning. Four areas (polygons) were established for exclusive use of Costa Rican fleets (Figure 18). Fishing with purse seiners is prohibited in polygons A, B, C, and D. In polygon A, medium-scale, advanced and semi-industrial commercial fishing and tourist fishing[32] are allowed. In polygons C and D only advanced commercial fishing using long-line is allowed. Hook and line, fishing rod and trolling are allowed if circular hooks are used.
7. This regulation was promoted by the Costa Rican Fishing Federation (FECOP) and the Chamber of Long-liners to expel purse seiners from coastal waters and to reserve areas for their operation. FECOP represent recreational fishers which capture mainly billfish and tuna; recreational fisheries and related tourism are important for the national economy, they generate about USD499 million year$^{-1}$ – USD520 million year$^{-1}$ (Chacon & Marin, 2019).

31 Decree 38681 MAG-MINAE indicates that tuna-like species are those indicated in article I of the Antigua Convention of 2003. The convention does not define tuna-like species. It is understood that these include bullet and frigate tunas (*Auxis* spp.), bonitos (*Sarda* spp.), billfishes, wahoo (*Acanthocybium solandri*), and sierras (*Scomberomorus* spp.) (Majkowski, 2007).

32 Recreational fisheries have to categories: sport-fishing (use their own vessels) and tourist fishing (those that hire for charter).

The Chamber of Long-liners represent commercial fishers that capture large pelagic fish. The tuna purse seiners that operate in Costa Rica are foreign vessels which pay fishing licences. Since 2016 the capture from these vessels must be landed in Costa Rica to supply the local canning industry represented by the Tuna Chamber of Costa Rica (CATUN). In 2019, Decree 41635 modified the methodology to assign tuna fishing licenses which now is open to public bid.

8. Recreational and commercial fishers have promoted the use of greenstick (a modified longline) in tuna fisheries. This fishing technique greatly reduces the bycatch. Alpizar et al., (2019) documented 98.5% capture of yellowfin tuna, the rest were mahi mahi (*Coryphaena hippurus*), blue marlin, olive ridley turtle (*Lepidochelys olivacea*), and brown booby (*Sula leucogaster*). The use of greenstick by medium-scale and advanced commercial vessels and tourist fishing boats was approved on March 2018 (INCOPESCA Agreement AJDIP/165-2018, modified by Agreement AJDIP/566-2019). This gear has been authorised to capture yellowfin tuna, bigeye tuna (*Thunnus obesus*), skipjack tuna (*Katsuwonus pelamis*), swordfish (*Xiphias gladius*) and mahi mahi.
9. Tuna fishing regulations have generated tension among interest groups (Anon, 2014; Arias, 2016; Anon, 2019; Anon, 2019a; Garcia, 2019; Staley, 2019; Anon, 2020; Cambronero, 2020). On the one hand, CATUN oppose the zoning scheme and further regulations to purse seine fishing. On the other hand, FECOP and the Chamber of Long-liners oppose the new licencing scheme for purse seiners (Cambronero, 2020).
10. In 2019, a governance mechanism for marine areas was established (Decree 41775 of June 2019, modified by Decree 41967 of September 2019). The purpose of this mechanism is to consolidate interinstitutional coordination. It established:

1. The Commission for Marine Governance, formed by representatives of the Ministry of Environment and Energy (MINAE), the Ministry of Agriculture and Livestock, Ministry of Public Security, Ministry of Public Works and Transport, and the Costa Rican Tourism Institute. The commission cannot take decisions about fishing matters, because this is a faculty of INCOPESCA.
2. Units of Marine Governance, each will have a Marine Committee and a Marine Master Plan. The purpose of these units is to ensure coordination among public entities and users of marine resources. The Marine Committees are responsible for the development and implementation of the Marine Master Plans and ensuring participation of pertinent communities and users of marine resources. They are formed by public and private representatives including fishers and universities.

The Decree 41775 determined that the Commission for Marine Governance will delimit and establish the Units of Marine Governance during the five months after its issuance.

3. Fishers have opposed the governance mechanism (Umaña, 2019; Valverde, 2019); a main concern was that fisheries administration will be handed to MINAE. The government issued the Decree 41967 which provided clarifications, ratifying that the competences of INCOPESCA and MINAE will not change (Bravo, 2019).
4. There has been a weak implementation of the marine zoning for tuna fishing (Decree 38681) mainly because of technical and political difficulties to issue regulations for the operation of the commercial fishing fleets. For example, the management regulations for polygons A and D and the long-line observer programme have not been developed. In addition, as mentioned before, there are conflicting interests among users of tuna and large pelagic fish. In addition, the new governance mechanism is not yet operational at the local level.
5. This project will contribute to advance spatial planning to operationalise the zoning for fishing of tuna and tuna-like species and the marine governance mechanism. The pilot will generate:
6. a management plan (including zoning) for surface long-line and greenstick fishery for large pelagic fish (tuna, mahi mahi and swordfish) by the medium-scale and advanced commercial fleets, and
7. a participation and consultation mechanism for the management of the fishery based on the governance mechanism for marine areas was established (Decree 41775).
8. The pilot will build upon the experience and results of the Global Marine Commodities project (GEF ID 5271) which developed a national Platform for Sustainable Large Pelagics Fisheries and the National Action Plan for Large Pelagics Fisheries 2018-2030.

9. Three lines of work will be developed during 14 months:
    1. Develop the participation and consultation mechanism for collaborative management of the fishery. It is envisaged that an advisory management committee will be established. The bylaws will be drafted and submitted to INCOPESCA for approval. It is envisioned that this committee will be the basis for negotiating and agreeing the management plan.
    2. Prepare a situation analysis of the surface long-line and greenstick fishery including: (a) sex-disaggregated social and economic information, (b) biological and oceanographic information, and (c) document the impacts of the COVID-19 pandemic and recovery strategies and plans being applied. The analysis will be built and validated with local stakeholders.
    3. Participatory process to prepare the management plan with private and public stakeholders. It will be ensured that the discussions recognise the value of critical habitats and MPAs for the conservation of fish populations. This includes:
        1. Agreeing on the objectives (short, medium and long-term).
        2. Agreeing on the intervention strategy.
        3. Validate the draft plan with key stakeholders.
        4. Formal approval of the plan by INCOPESCA´s board.

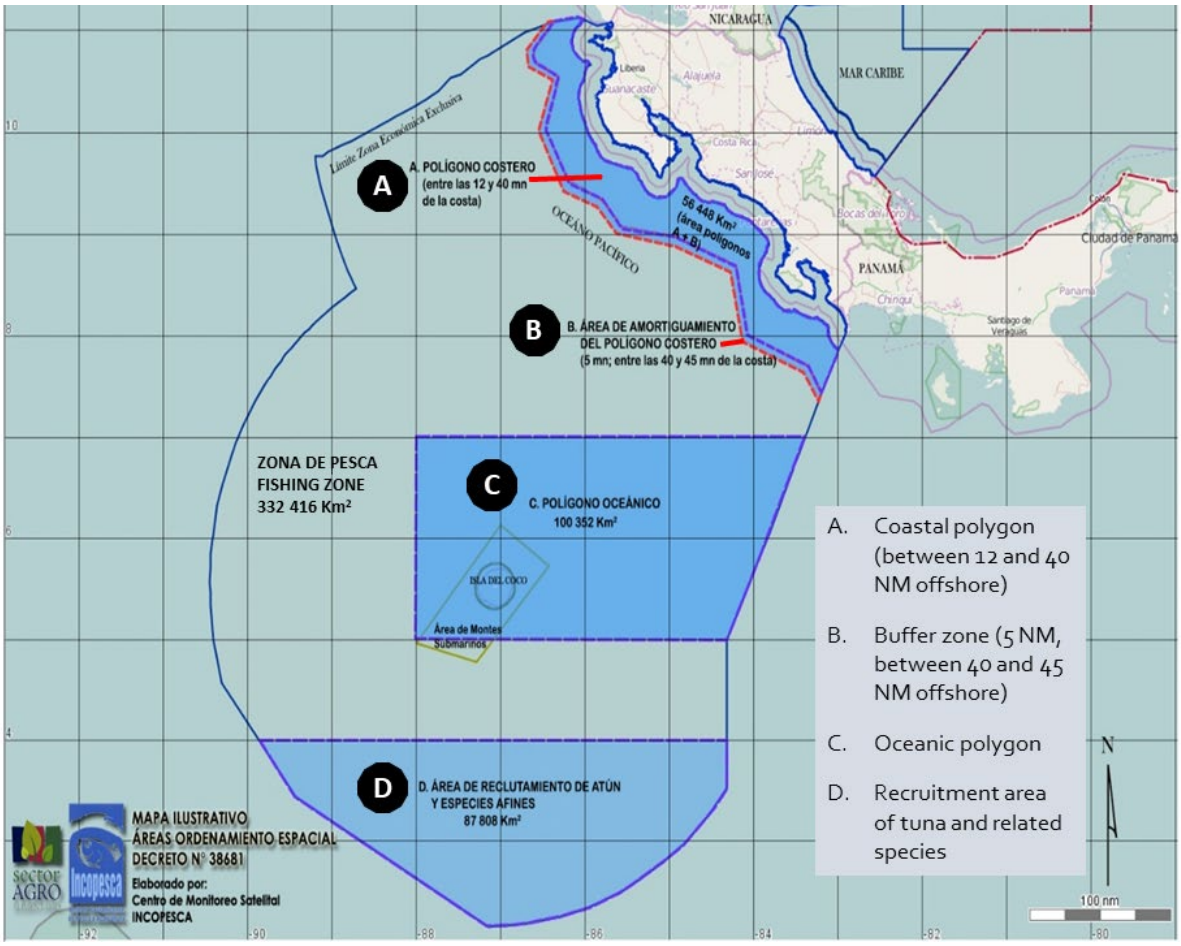



Figure 18. Zoning for fishing of tuna and tuna-like species in Costa Rica´s Pacific Ocean Exclusive Economic Zone according to Decree 38681-MAG-MINAE of 2014.

Site 3. Panama. Marine spatial plan for the area of influence of Coiba National Park and its Special Zone of Marine Protection.

4. The Gulf of Chiriqui extends from Punta Burica in the North to punta Mariato in the South, along the coastal zone of the Chiriqui and Veraguas provinces (Figure 19). It covers about 12,224 km$^2$. The Azuero Peninsula separate it from the Gulf of Panama. The two areas have contrasting oceanographic conditions, the non-upwelling Gulf of Chiriqui and the upwelling Gulf of Panama. Because of warmer stable conditions, the Gulf of Chiriqui has extensive coral reef development.
5. The Gulf of Chiriqui has high conservation value biodiversity like mangroves, coral reefs, and sea turtle nesting beaches. The gulf is a breeding area for humpback whales (*Megaptera novaeangliae*) which concentrate mostly in the area between Islas Paridas, Islas Ladrones, and Islas Secas (Rasmussen & Palacios, 2013). Seven internationally significant Key Biodiversity Areas are in the gulf: Quebrada Mellicita-Charco Azul, David mangroves, Bahía Honda, Golfo de Montijo Wetlands, Cébaco Island, Coiba National Park and Cerro Hoya National Park.
6. The gulf is an important fishing ground for artisanal, industrial and recreational fisheries. Artisanal fisheries mainly use longline and gillnets and focus on shrimp, snappers, croakers, mahi mahi, lobsters and cambute / Eastern Pacific giant conch (*Titanostrombus galeatus*) (Mate, 2006; Vega et al., 2016). Sharks are an important component of the longline bycatch, 14 species have been recorded but the most common is the scalloped hammerhead (*Sphyrna lewini*, listed Critically Endangered). Industrial fisheries focus on shrimps and small pelagic fish (mainly *Cetengraulis mysticetus*, *Opisthonema* spp. and *Chloroscombrus orqueta*). Finally, recreational fisheries focus mostly on large pelagic fish. Hannibal bank is a major recreational fishing spot for yellowfin tuna, blue and black marlins, sailfish and mahi mahi, but also for commercial fishers. This bank is a flat top seamount, which ranges in depth from 53 m to 416 m and has an area of 76 km$^2$ (Cunningham et al., 2013).

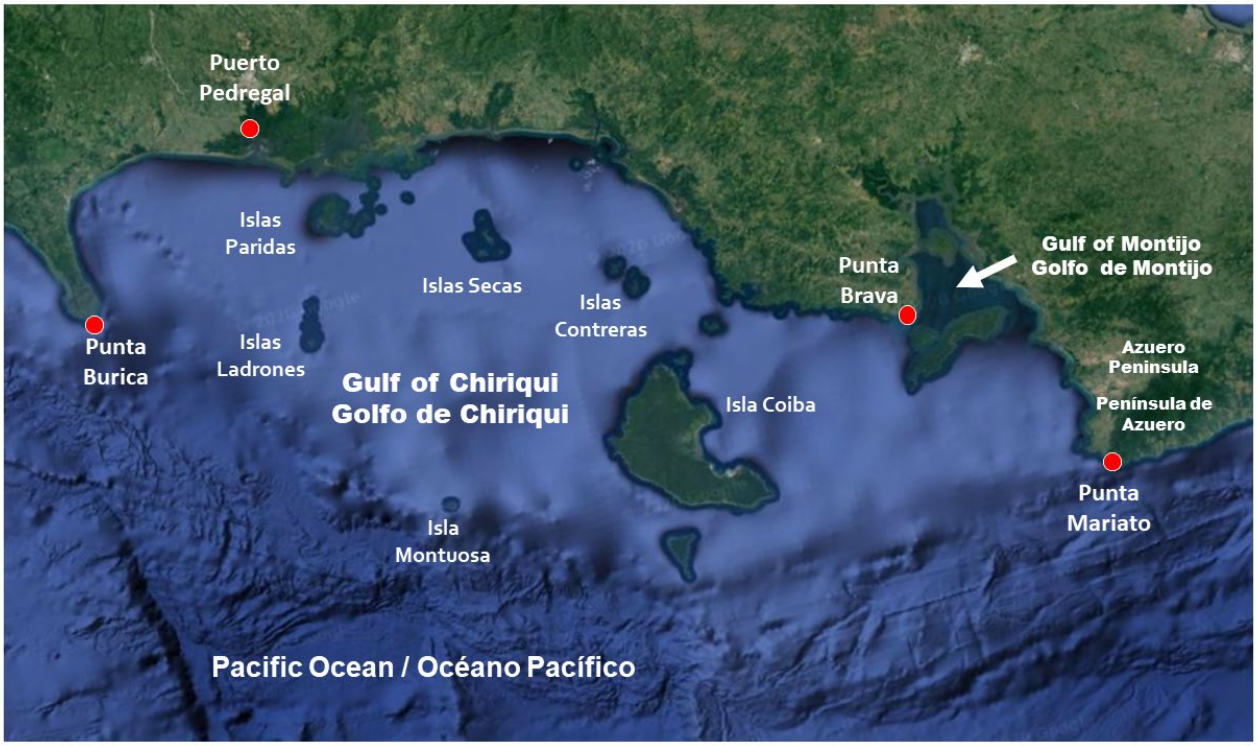



Figure 19. Gulf of Chiriqui in Panama.

7. In the gulf, there are 11 marine areas with different levels of protection (from North to South): (1) Wildlife Reserve Playa de La Barqueta Agrícola, (2) Protected Zone Mangroves of the David District Coast, (3) Marine National Park Gulf of Chiriqui, (4) Wildlife Refuge Boca Vieja Beach, (5) Coiba National Park, (6) Special Zone of Marine Protection of Coiba National Park, (7) Wildlife Refuge Isla Montuosa, (8) Marine Reserve Zone of Isla

Montuosa, (9) Habitat Protection Zone of Hannibal Bank, (10) Ramsar site Golfo de Montijo, and (11) Special Zone of Marine-Coastal Management in the South Zone of Veraguas.

8. Coiba National Park (CNP) has particular conditions. It contains the largest coral reef in the eastern Pacific Ocean (17 km$^2$) and high endemism (66 species and 24 subspecies) (Pinto & Yee, 2011). Four species of sea turtles nest in the park: leatherback (*Dermochelys coriacea*, listed Vulnerable in IUCN Red List), olive ridley (*Lepidochelys olivacea*, listed Vulnerable), green turtle (*Chelonia mydas*, listed Endangered), and hawksbill turtle (*Eretmochelys imbricata*, listed Critically Endangered) (MiAmbiente, 2017). Coiba is one of the most important foraging sites for hawksbill sea turtles in the eastern Pacific Ocean (Llamas et al., 2017).
9. The CNP was founded in 1991 by a Resolution of the National Institute of Natural and Renewable Resources (the predecessor of ARAP). Afterwards to provide a more solid basis, Law 44 of 2004 of established the national park and a complementary Special Zone of Marine Protection (SZMP) which included Isla Montuosa and Hannibal Bank. This law also created:

1. A co-management mechanism, the Directive Council with 12 members representing public entities, adjacent municipalities, fishers' organizations, environmental NGOs and the University of Panama.
2. The Commission for Sustainable Management of the SZMP, to establish fishing regulations and to assess their implementation. The commission is formed by representatives of MiAmbiente, ARAP, National Secretariat for Science, Technology and Innovation, University of Panama, fishers' organizations (artisanal, industrial, recreational), Smithsonian Tropical Research Institute, and environmental NGOs.

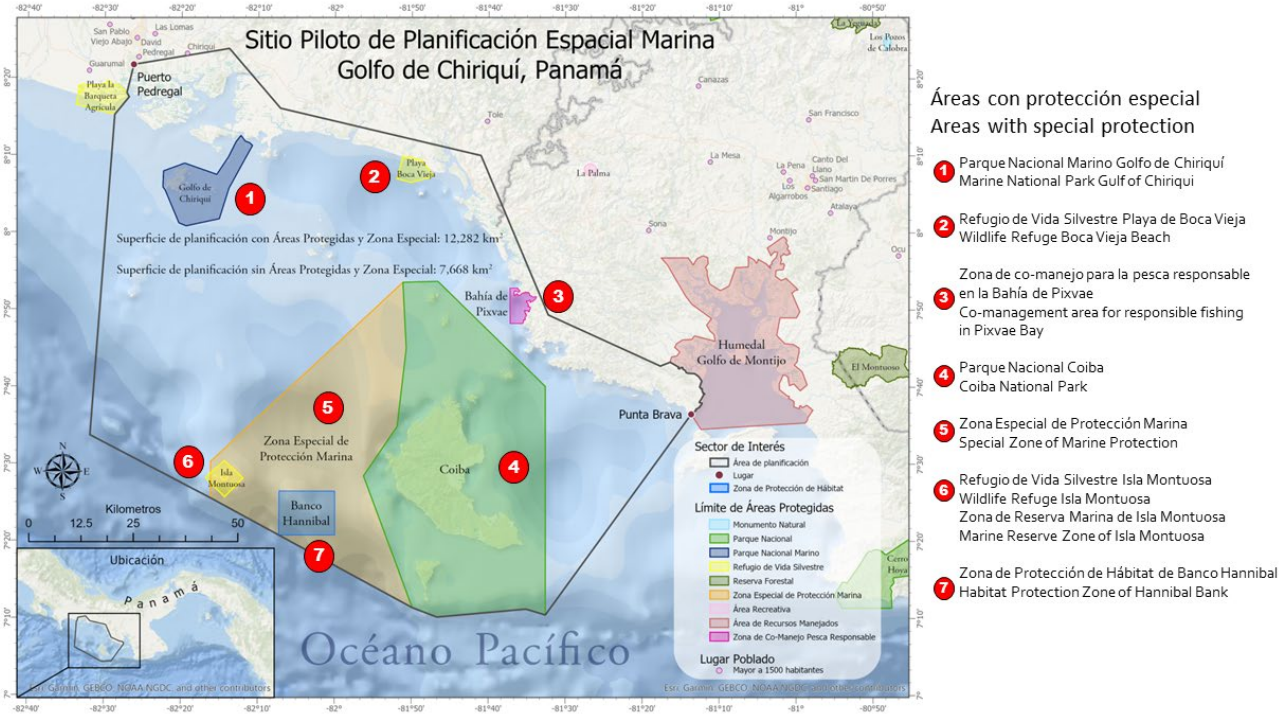



Figure 20. Area for the marine spatial planning exercise in the Gulf of Chiriqui (Panama).

3. Currently, the SZMP contain: (i) the Wildlife Refuge Isla Montuosa which is surrounded by the Marine Reserve Zone of Isla Montuosa (which is a no-take zone), and (ii) the Habitat Protection Zone of Hannibal Bank, which were established afterwards (Figure 20, Table 9).
4. The CNP and its SZMP have very diverse reef fauna (clownfishes, groupers, parrotfishes) and congregate a variety of pelagic species like yellowfin tuna, billfishes, sharks and mantas. There are seasonal aggregations of whale sharks (*Rhincodon typus* listed Endangered) which are a main tourist attraction for diving tourism. A

whale shark tagged in Coiba, travelled to the Mariana Trench in 841 days, passing through Cocos Island, Galapagos, Clipperton, Hawaii, and the Marshal Islands (Guzman et al., 2018). Also, there have been recorded (a) reproductive aggregations of the Cortez rainbow wrasse (*Thalassoma lucasanum*), Pacific red snapper (*Lutjanus peru*) and spotted rose snapper (*L. guttatus*), (b) reproduction of whitetip reef shark (*Triaenodon obesus*), and (c) cleaning stations (Vega et al., 2015; Vega et al., 2019).

5. The CNP and its SZMP were inscribed in the World Heritage List in 2005. Despite important efforts to strengthen its management, the IUCN´s 2017 Conservation Outlook of the site is "significant concern". The most critical threats are unregulated fishing and poor enforcement of existing regulations, and increased pressure from tourism development. Fishing impact high-value conservations biodiversity, for example, the artisanal longlines capture olive ridley and green turtle and the gillnets capture hawksbill turtles (Vega et al., 2015a). The fisheries management plan for the CNP (approved in 2013) has not been fully implemented and is outdated. The SZMP has no management system in place and, in general, surveillance and enforcement are insufficient.
6. Despite important efforts to strengthen the management of the CNP and its SZMP, The World Heritage Committee has called for strengthening the fisheries regulations for the SZMP and the surveillance and control in all the area (Decision 43 COM 7B.28 of 2019). Among the measures to be undertaken MiAmbiente has included a Strategic Environmental Assessment (SEA) of the area of socioeconomic influence, that is the coastal zone from where most activities originate and the marine area where these activities operate (e.g., fishing, dive tourism, whale watching). The “area of socioeconomic influence” extends along the coast from Puerto Pedregal to the southwest coast of the Gulf of Montijo (including Punta Brava), and seawards to the border of the continental shelf where the limits of the CNP and SZMP are (Figure 20). MiAmbiente has informed the World Heritage Committee that the SEA is being contracted, the results will be available during the first semester of 2021 (MiAmbiente, 2020).

Table 9. Protected areas included in the zone for the marine spatial planning exercise.

| | **Área protegida**<br>**Protected area** | **Año de creación**<br>**Year of establishment** | **Superficie**<br>**Surface** |
|---|---|---|---|
| 1 | Parque Nacional Marino Golfo de Chiriquí<br>Marine National Park Gulf of Chiriqui | 1994 | 212.2 km$^2$ (195.02 km$^2$ marina / marine) |
| 2 | Refugio de Vida Silvestre Playa de Boca Vieja<br>Wildlife Refuge Boca Vieja Beach | 1994 | 34.38 km$^2$ (6.91 km$^2$ marina / marine) |
| 3 | Zona de co-manejo para la pesca responsable en la Bahía de Pixvae<br>Co-management area for responsible fishing in Pixvae Bay | 2019 | 34.11 km$^2$ |
| 4 | Parque Nacional Coiba<br>Coiba National Park | 1991 | 2,701.3 km$^2$ (2,165.43 km$^2$ marina / marine) |
| 5 | Zona Especial de Protección Marina<br>Special Zone of Marine Protection | 2004 | 1,783.3 km$^2$ |
| 6 | Refugio de Vida Silvestre Isla Montuosa<br>Wildlife Refuge Isla Montuosa | 2008 | 1.36 km$^2$ tierra / land + 0.003704 km$^2$ marina / marine |
| | Zona de Reserva Marina de Isla Montuosa<br>Marine Reserve Zone of Isla Montuosa | 2018 | 37.75 km$^2$ |
| 7 | Zona de Protección de Hábitat de Banco Hannibal<br>Habitat Protection Zone of Hannibal Bank | 2018 | 143.17 km$^2$ |

7. The Regional project will use the results of the SEA to develop a zoning scheme for the marine waters of the area of socioeconomic influence of the CNP and its SZMP (Figure 20). The participatory process to be

undertaken will contribute to facilitate multi-stakeholder dialogue and agreements to reduce conflict and to protect biodiversity resources.

8. Three lines of work will be developed for 14 months:
    1. Strengthen participative governance for the area. This includes:
        1. Map and analyse the key stakeholders related to the use of the area, like fishers, tourist developers and operators, community-based production groups, academia, and scientists.
        2. Train stakeholders (public entities and civil society) on key concepts and tools for marine governance like legal framework, governance mechanisms, participation tools, public and private funding mechanisms, transparent decision-making processes.
        3. Facilitate the establishment of an Inter-Institutional Coordination Platform (IICP).
    2. Develop a participatory process to define the zoning scheme for the area of socioeconomic influence of the CNP and its SZMP. This includes:
        1. Train the most relevant stakeholders (public entities and civil society) on key concepts and tools for the process like participatory mapping of marine uses, negotiation, and basic communication.
        2. Outline spatial information and stational and long-term trends with stakeholders like habitats, fish aggregation sites, diving spots, bathymetry, tourist sites, future marine aquaculture development. As part of the participatory process document the impact of the COVID-19 pandemic on the blue economy sectors like tourism and fisheries and the recovery measures being applied.
        3. Compile and process information from scientific and technical sources like bathymetry maps, current patterns, biodiversity maps, shipping routes and economic and demographic data.
        4. Prepare a multi-sectoral analysis of conflicts and compatibilities and analyse it with stakeholders to reach agreements on joint vision, common future, and spatial uses.
        5. Prepare the zoning plan for the area of socioeconomic influence of the CNP and its SZMP. This zoning will ensure that the value of critical habitats and MPAs is recognised to safeguard what is most ecologically important, biologically diverse, or vulnerable.
        6. Draft a marine spatial plan for the area based on agreements among stakeholders like administrative structure, decision-making process, assessment, and review process.
        7. Prepare a proposal for financial strategy to sustain management actions in the area and review it with stakeholders.
        8. Consolidate the marine spatial plan for the area and submit it for government endorsement.
    3. Promote communication, scalability, and replication. This includes:
        1. Establish a communications forum to facilitate interaction among public entities and civil society to strengthen awareness, interaction and teamwork among institutions and civil society, in partnership with the Inter-Institutional Coordination Platform.
        2. Inform stakeholders and the general public about the pilot purpose and activities, including initiation and closing events.
        3. Document pilot results and lessons learned and disseminate them through a range of channels (e.g., social media, infographics).

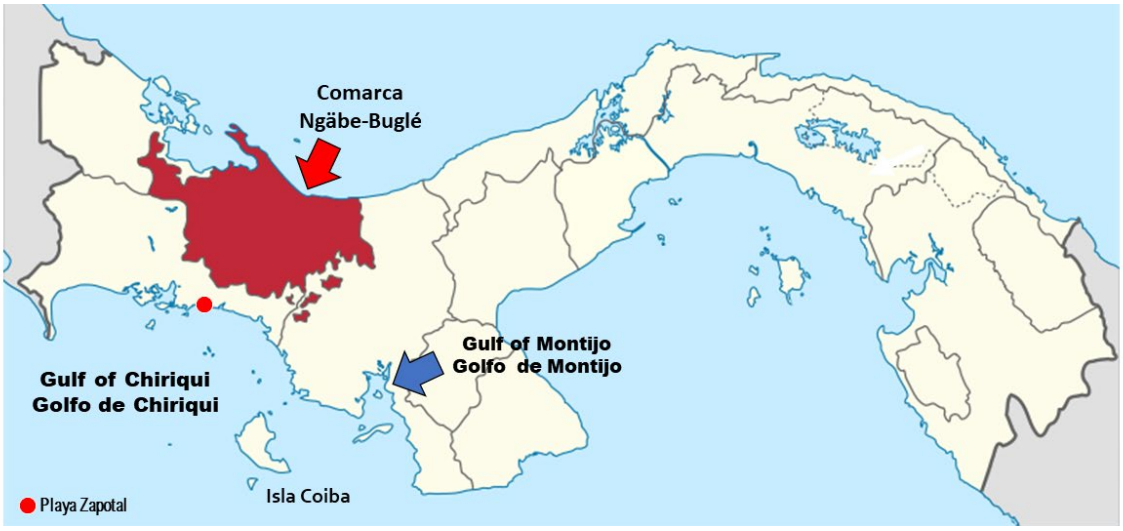


Figure 21. Location of the Ngäbe – Buglé comarca in Panama.

Site 4. Ecuador. Develop an ecosystem-based management model to strengthen governance in the internal waters and the sea beach and adjacent strip.

9. Ecuador was a pioneer in the development and application of integrated coastal zone management (ICZM). The Coastal Resources Management Programme developed initial concepts and management strategies in special management areas, and then fostered that coastal municipalities voluntarily internalise ICZM and issue coastal management ordinances. The programme was eliminated in 2008 and the mandate to develop ICZM was transferred to the Ministry of Environment (now Ministry of Environment and Water).
10. In 2017, the Organic Code on the Environment (COA) was issued (it came into force on 12 April 2018). This high-level legal instrument made mandatory that coastal municipalities issue integrated coastal management plans and management plans for the sea beach and adjacent strip to complement their development plans and land use planning. On 12 June 2019, COA´s regulation (RCOA) was issued therefore establishing the procedures to make COA operational.

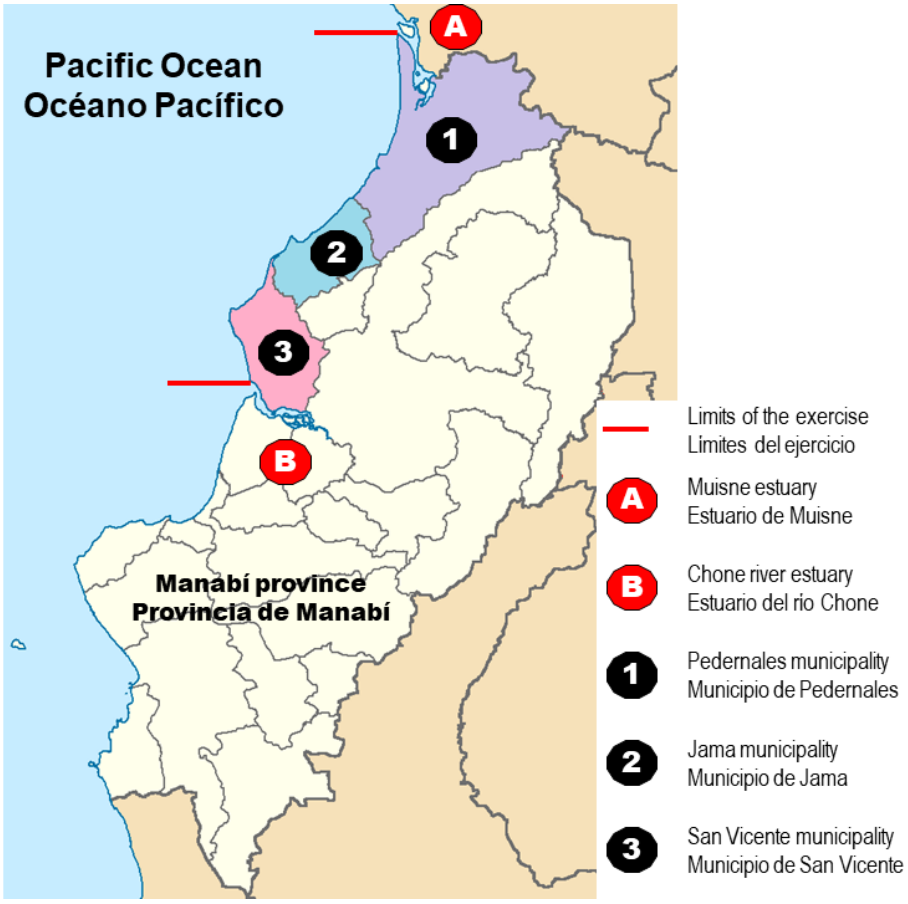


Figure 22. Area for the marine spatial planning exercise in Ecuador.

11. These instruments state that:
    1. The “coastal marine zone” extends three nautical miles offshore and one kilometre inland from the high tide line. The offshore strip is part of the Ecuadorian internal waters as defined in the United Nations Convention on the Law of the Sea.
    2. The “sea beach” is a public access national asset. It is the intertidal zone that extends from the mean low- water to the mean high-water spring tides calculated in a nodal cycle of 18.61 years.
    3. The “adjacent strip” is a national asset that can be used via concessions. It is a one-kilometre wide strip inland from the high-water spring tide. The municipalities may expand inland the width of this zone.
    4. Coastal municipalities must develop and adopt (a) an integrated coastal management plan (ICMP) for the coastal marine zone, and (b) a management plan for the sea beach and adjacent strip (MPBAS). The ICMPs must include the ecosystem approach and coastal and maritime planning.
    5. These plans will be developed through a joint effort of the environment authority and the municipality, and their implementation will be done by the local government.
12. The preparation of these plans, in particular the ICMP, is a challenging endeavour. There is no previous experience in the application of these new legal instruments, and municipalities do not have jurisdiction on coastal waters. Therefore, interagency cooperation and agreements will be fundamental.
13. The pilot project will allow to prepare the first Ecuadorian ICMP and MPBAS. This will facilitate to gain experience and generate lessons for future developments.
14. The pilot intervention will build upon former experience. The Ministry of Environment and Water (MAAE) has been exploring methodologies to apply MSP in the country. With Conservation International a planning exercise was done in a sector of the Gulf of Guayaquil. With the Coastal Fisheries Initiative- Latin America

project (GEF ID 9124) the NOAA methodology is being applied in an MSP exercise in the northern part of the Gulf of Guayaquil. With GIZ the Adaptive Management of vulnerability and Risk at Conservation sites methodology (MARISCO) was applied in the coastal zone of El Oro province (UTPL & GIZ, 2018). Finally, with the MSPglobal project the IOC/UNESCO methodology will be tested in the transboundary area of the Gulf of Guayaquil.

15. ICMP and MPBAS plans will be developed in three municipalities of the Manabí province (six plans in total): Pedernales, Jama and San Vicente (Figure 22). The ICMP exercise will cover the ocean front of these municipalities from the south border of the Muisne estuary to the north border of the Chone river estuary. The inner parts of these estuaries will not be included in the MSP exercise. The MPBAS will be prepared for selected beaches, one on each municipality.
16. MAAE will use the exercise to raise awareness and mainstream the gender perspective into the planning processes. Women have fundamental roles in the socioeconomic dynamics of the coastal zone, which are not always acknowledged.
17. The following lines of work will be developed for 18 months:
    1. Develop a participatory process to draft the management plan for the ocean strip (a single planning unit). This includes:
        1. Install an interagency core group to develop the planning exercise on the ocean strip. This will be an interdisciplinary interagency group which integrates public and private selected key stakeholders (e.g., fisheries authority, tourism organisations). The members of the core group will be trained on key concepts and tools for MSP and marine governance.
        2. Compile and process information of the ocean strip like bathymetry maps, habitats, sea turtle nesting beaches, current patterns, fishing areas.
        3. Map current uses and trends with key stakeholders, like seasonal fishing grounds, whale-watching areas, impacts of the COVID-19 pandemic and recovery measures under implementation.
        4. Participatory planning workshops to identify key issues and conflicting uses, agree a future vision and objectives, develop a zoning scheme, and outline governance and management arrangements. The zoning will ensure that the value of critical habitats and MPAs is recognised to safeguard what is most ecologically important, biologically diverse, or vulnerable. Incorporate, as appropriate, considerations for post COVID-19 recovery of blue activities like coastal and marine tourism and fisheries.
        5. Prepare the marine spatial plan for the ocean strip and divide it into integrated coastal management plans for each municipality.
        6. Validate individual plans with local stakeholders on each municipality.
        7. Prepare and sign at least two interagency agreements to implement actions on the ocean strip.
        8. Throughout the process inform interested parties about advances and achievements.
    2. Develop a participatory process to prepare the management plan for the sea beach and adjacent strip for each municipality. This includes, for each selected beach:
        1. Identify key stakeholders and form a planning committee. The stakeholders and interested parties will be informed about the MPBAS planning process and the members of the committee will be trained on basic concepts and tools for the process like legal framework, negotiation, decision-making process.
        2. Compile and process existing information of the beach (e.g., technical reports, oceanographic information), make a beach topography map, prepare participatory maps of coastal uses and features (e.g., erosion sites, sea turtle nesting, conflicts) and document impacts of the COVID-19 pandemic and recovery measures under implementation.
        3. Assemble and analyse the information to identify critical areas and uses (e.g, sensitive habitats), conflicts and opportunities for development.

4. Validate the analysis and participatively develop a zoning scheme for the beach. The zoning scheme will ensure that the value of critical habitats and MPAs are safeguarded. Include, as appropriate, post COVID-19 recovery measures.
5. Draft the MPBAS and analyse the proposal with the stakeholders. Ensure that the MPBAS is articulated with the corresponding development plan and land use planning.
6. Submit the MPBAS for endorsement of the municipal council.
7. Throughout the process inform interested parties about advances and achievements.
8. Mainstream gender considerations into the planning processes. This includes:
    1. Start-up concise training in gender issues and gender-inclusive language to the people that execute the pilot, key personnel of each municipality, the interagency core group and the planning committees.
    2. Provide basic gender awareness raising and training to selected stakeholders of the beaches through open dialogue and group discussions with participants on their gender perceptions.
    3. Make gender visible when it is relevant in the press material and news to inform the interested parties of the advances and achievements of the planning process.
    4. Ensure that:

1. All meetings will be designed to facilitate participation of women and men, mutual respect, and collective decision-making.
2. All communications, press materials, documents and plans use inclusive and gender-inclusive language.

Pilot 3. Cetacean conservation.

3. Marine mammals are an important component of PACA´s biodiversity. The most notable species are the blue whale (*Balaenoptera musculus*, listed Endangered) and the humpback whale (*Megaptera novaeangliae*, listed Least Concern). In the Eastern Tropical Pacific Ocean, blue whales are found mainly in upwelling areas like Baja California, the Costa Rica Dome, the Galápagos Islands, and off southern Ecuador and northern Peru (Reilly & Thayer, 1990; Felix & Falconi, 2007; Buchan et al., 2015). The humpback whales migrate along the coast of the Eastern Pacific from the high latitude feeding grounds in the extreme North and South of the continent, to the breeding areas located in the warm waters from Mexico to Ecuador (von Ziegesar et al., 2000; Rasmussen et al., 2007; Quintana-Rizzo, 2019). Panacetacea, a Panamanian NGO, reported that a humpback whale seen in the Gulf of Chiriqui in 2012 was spotted in the Amundsen Sea in 202033. Also, De Weerdt et al., (2020) reported sightings of Southern Hemisphere humpback whales in Nicaragua. The waters of Costa Rica and Panama is the only area used by humpback whales from the north and south populations to breed and nurse calves. Whales from the north and south populations are seen between December and April and July and October, respectively (Rasmussen, 2006; Rasmussen et al., 2007).
4. Humpback whales are the main attraction of whale-watching operations which are an important activity for coastal communities along PACA´s shore (Hoyt & Iñiguez, 2008). Worldwide whale watching has developed as a major tourism activity. In 1981, three countries had commercial whale-watching operations that generated a total expenditure of USD14 million. This expanded to 87 countries and USD 1.0 billion in 1998, and then to 119 countries and USD 2.1 billion in 2008 (O´Connor et al., 2009; Hoyt & Parsons, 2014), more recent figures are not available. Whale watching is a popular segment of the marine tourism industry which has positive economic impact in coastal communities and can be an important element of PACA´s blue growth. For example, in 2007, eight Costa Rican whale watching ports generated a direct expenditure of USD 5.1 million (Rodríguez-Fonseca & Fischel-Quirós, 2007). In addition, whale watching is seen as an educational vehicle to raise awareness and educate tourists about marine conservation (IFAW, 1997; Lopez & Pearson, 2017).

33 https://happywhale.com/individual/35501;enc=104734

5. However, migrating whales are threatened by entanglement in fishing gear (e.g., longlines, gillnets, buoys), marine pollution, anthropogenic underwater noise (e.g., high shipping traffic areas, sonar, oil drilling), and vessel strikes (Croll et al., 2001; Félix & Van Waerebeek, 2005; Felix et al., 2011; Alava et al., 2012; Rolland et al., 2012; Guzman et al., 2013). Also, uncontrolled whale watching and long-term disturbance is detrimental to target species (whales and dolphins). It has been found that boat noise and harassing produce changes in behaviour, direct mortality, injuries, and may generate stress, reduced reproductive rates and emigration from the areas targeted by tourism (Weinrich & Corbelli, 2009; Parsons, 2012; New et al., 2015).
6. PACA bordering countries have rules that protect whales and regulate whale-watching, like Mexican NOM-131-SEMARNAT-2010, Guatemalan Resolution 05-21-2011, Costa Rican Decree 32495 of 2005, Panama´s Resolution DM-0530-2017, and the Ecuadorian Inter-ministerial Agreement 20140004 of 2014. However, bad practices of guides and tour operators, illegal operations, scarce scientific information (e.g., population dynamics, carrying capacity, impacts of tourist operations), and insufficient control and enforcement jeopardise whale watching operations and can have damaging impacts on whales and other cetaceans. In addition, it has to be taken into account the probable impacts of climate change on the cetacean populations, like decline in prey availability (Nicol et al., 2008; Tulloch et al., 2019) and climate-driven changes in human activities (Alter et al., 2010).
7. This pilot will generate information to improve whale watching operations in Panama; these activities will be funded with GEF STAR resources. This information, together with knowledge from the other participating countries will be used to formulate regional guidelines for whale watching in PACA (Table 8). Because of the migratory patterns of humpback whales, transboundary management strategies are needed to protect them and other cetaceans. It is envisaged that this exercise will motivate discussions about regional measures to protect whales along their migratory routes and collaboration with neighbouring regions which already have conservation strategies (CPPS, 1992; CEC, 2005).
8. In Panama whale watching initiated in the late 1990s and rapidly expanded generating important benefits to coastal communities. In 2006 it was estimated that whale watching generated USD3.1 million of direct expenditure in the country, 18% was generated on the Pacific coast (three locations) (Hoyt & Iñíguez, 2008). Until 2014, there were 11 coastal communities that operated whale watching tours on Panama´s Pacific coast (Figure 23). Growth has been disorganised, with manifest incidents of repeated harassment of animals and apparent surpass of carrying capacity in certain sites; a similar situation has been documented for dolphin-watching in Bocas del Toro (Sitar et al., 2016; Sitar & Parsons, 2019). On the one hand, there is no official record of whale watching operators, and control and enforcement of current regulations is very limited (Resolution DM-0530-2017). On the other hand, tour operators are not aware of the impact they cause and are not acquainted with existing regulations and best practice like MarViva (2012).
9. The purpose of this pilot is to generate information about the underwater soundscape in whale watching areas and to strengthen awareness and information of tourist operators:
    1. Assessing the marine soundscape will allow to understand the biological and anthropogenic composition of each site, like the presence of humpback whales and other cetacean and anthropogenic sounds like vessel noise. This will be done in four whale watching sites: Islas Secas, Coiba, Isla Iguana, and Las Perlas (Figure 19 and Figure 24) in collaboration with the communities that do whale watching in those sites: (1) Boca Chica, (2) Montijo, (3) Pedasi, and (4) Isla Contadora (Figure 23). This collaborative approach is expected to contribute to community awareness.
    2. A training course for boat captains, guides and tour operators will be developed and validated with persons from two communities: Boca Chica and Isla Contadora. Boca Chica is a small fishing community which has about 30 boat captains. It was the first community to organise a Whale Festival on October 2018 (a second edition was celebrated on September 2019). Isla Contadora is a main tourist destination with about 25 whale watching boats. It is the site with most reports of whale watching malpractice. It is planned to train 100 persons and to guide them through the process of obtaining their accreditation with MiAmbiente.




Figure 23. Localities that operate whale watching on the Pacific coast of Panama.

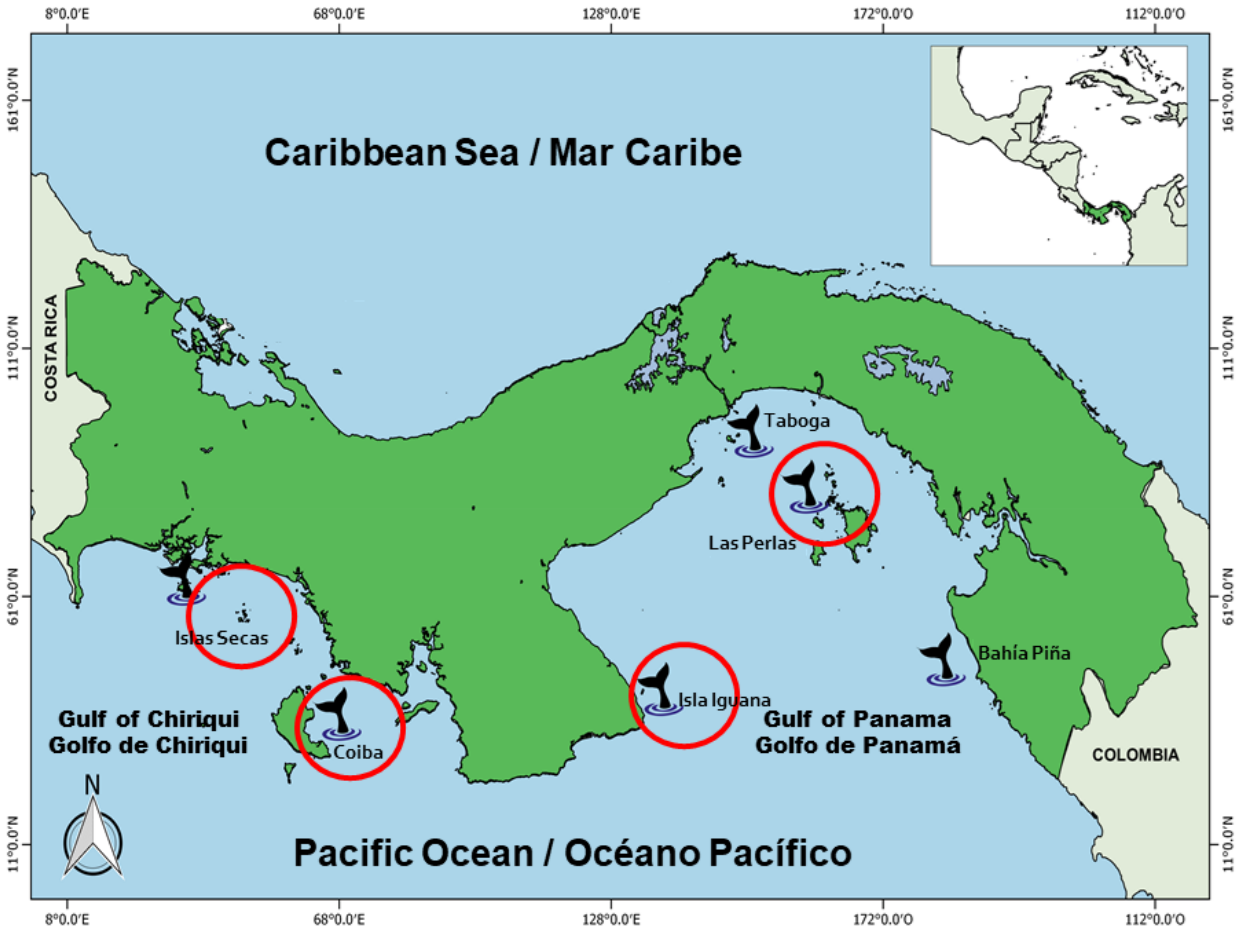



Figure 24. Whale watching sites to assess the marine soundscape.

10. The roles and contributions of women are not visible in the Panamanian whale watching supply chain. At sea boat captains are male and few guides are women; though it is known that women participate in related tourism activities. The pilot will document women´s participation and contributions in the whale watching

and related tourism supply chain in Boca Chica and Isla Contadora to provide inputs to the TDA/SAP process, the long-term reporting mechanism (output 4.1) and the regional guidelines to strengthen women´s participation in PACA´s governance (output 2.3).

11. The following lines of work will be developed during 12 months:

    1. Inform local communities about the pilot purpose and achievements, this includes an initiation event on each locality (Boca Chica, Montijo, Pedasi and Isla Contadora) and a closing event to present results.

    2. Characterise the marine soundscape in four sites with high conservation value that are used for whale watching (Figure 24). A network of synchronised hydrophones will be installed for continuous full day recording during a year (Lammers et al., 2008). Data will be processed in the ARBIMON web-based platform (Aide et al., 2013) and acoustic biodiversity indexes will be calculated. Complementarily, whale watching activity will be monitored and assessed to correlate with the recordings. This includes:

        1. Documenting direct and indirect sex-disaggregated employment related to whale watching and related tourism on each locality, and

        2. Recording COVID-19 pandemic impacts on whale watching and related tourism and recovery measures under implementation.

    3. Increase local capacity for marine soundscape studies. Three research students will be contracted for field work and data processing. An open call will be made to Panamanian universities to identify candidates from bachelor or master careers. It is expected that at least one of the three persons will be a female researcher. It is envisaged that the research students develop their theses using marine soundscape information.

    4. Strengthen awareness and information of tourist operators:

        1. The project unit will organise a regional workshop to exchange best practice for responsible whale watching. The meeting will also serve to exchange information about the impacts of the COVID-19 pandemic and recovery measures being undertaken. The report of the workshop will be published as an online document and widely disseminated to interested parties.

        2. Based on the results of the workshop, the existing whale watching guide will be revised and updated. As appropriate, post COVID-19 recovery measures will be mainstreamed into the guidelines. Then a practical training course for captains, guides and tourist operators will be developed and tested before whale watching season. It is envisaged to train at least 100 persons of Boca Chica and Isla Contadora. Women participation will be encouraged, it is expected that at least 30 women take the training course. Course materials will use inclusive and the training sessions will be designed to facilitate participation on women and men. Based on the assessment of the course the curriculum and materials will be improved. It is foreseen that MiAmbiente will use the course for training in other locations of the country.

        3. In parallel, communication and press materials will be prepared and disseminated.

Output 3.2. Best practice and lessons from the pilots systematized, accessible and available to all stakeholders in the region.

12. The specialist in marine resources management and the knowledge management specialist will ensure that experience and lessons are captured and documented. In addition, the gender and participation specialist will ensure that the process capture gender and social aspects.

13. The EMC will organise onsite meetings with local key stakeholders to capture their lessons during pilot implementation (see paragraph 214).

Women contributions

14. Under the supervision of the EGP, three consultants will simultaneously undertake the following tasks:

    1. Analyse the sex-disaggregated information collected during pilot implementation to generate a report about women´s participation and contributions in the billfishes recreational fishing supply chain.

    2. Process and analyse the information about women participation in the four MSP pilot sites to generate a report about women´s participation and contributions in marine spatial planning processes.

    3. Analyse the sex-disaggregated information collected during pilot implementation to generate a report about women´s participation and contributions in the whale watching value chain.

15. These reports will be published as an online documents and widely distributed to interested parties. Also, the reports will provide ideas for the preparation of the regional guidelines to strengthen participation of women in the governance of PACA (see paragraph 113).

Pilot 1. Conservation and management of sailfish and marlin recreational fisheries.

16. During the third quarter of year 3 the EMR will organise a regional workshop to systematise lessons from the preparation of the regional plan for the management of sailfish and marlin recreational fisheries. The report of the workshop will be published as an online document and widely disseminated to interested parties.

Pilot 2. Marine spatial planning in PACA.

17. At the end of year 2, under the supervision of the EMR, a consultant will consolidate and analyse the experience from the four pilot sites and will draft regional guidelines for marine spatial planning in PACA. The draft guidelines will be open for comments of project partners and strategic allies (e.g., IOC/UNESCO, NOAA) and then reviewed in a regional workshop. The final guidelines will be submitted for endorsement of the Regional Project Board. Finally, the guidelines will be formally presented to (i) CCAD, (ii) the Council of Ministers of OSPESCA, and (iii) pertinent national authorities of the participating countries for their consideration.

Pilot 3. Cetacean conservation.

18. At the end of year 2, under the supervision of the EMR, a consultant will analyse the results of the initial regional workshop (see paragraph 186), the Panamanian updated guidelines (see paragraph 186), and national and international guidelines to draft regional guidelines for whale watching in PACA. The draft guidelines will be open for comments of the Regional project partners and interested parties and then reviewed in a regional workshop. The final guidelines will be submitted for endorsement of the Regional Project Board. Finally, the guidelines will be formally presented to CCAD and pertinent national authorities of the participating countries for their consideration.

Component 3. Knowledge management

19. This component will focus on developing a collaborative information system to sustain long-term reporting of PACA´s situation, and to document and share Regional project lessons.

Outcome 4. Collaborative information system developed with key indicators on PACA´s condition and SAP implementation

Output 4.1. Development and adoption of a suite of International Waters process, stress reduction and environmental/socioeconomic status indicators and implementation mechanisms to monitor PACA´s condition and SAP implementation.

20. During year 1, in parallel to the development of collaboration agreements with relevant entities (paragraph 99), a consultant will identify and systematise the availability and sources (national, regional, global) of core indicators of PACA´s condition and the related blue economy. The starting point will be (i) the indicators already used by the countries in their national information systems and reports (e.g., Convention on Biological Diversity, United Nations Framework Convention on Climate Change), and (ii) the suite of common indicators relevant for LMEs (GEF LME: LEARN, 2018; GEF LME: LEARN, 2019). In addition, other key sources will be analysed like the indicators developed by the SPINAM project (IOC & CPPS, 2015), gender-responsive indicators like Miletto et al., (2019), pertinent SDG indicators (UN, 2017), Human Development Index, Gender Development Index, blue economy indicators in use (Patil et al., 2016; Plan Bleu, 2017; EC, 2020), and the experience of the CLME+ project on the development of the long-term reporting mechanism.

21. The proposed suite of PACA´s core indicators will be revised in a regional workshop with the Regional project´s technical committee and collaborating entities. The agreed set of indicators will be used during the preparation of the national diagnostic analyses and the TDA.

22. Towards the end of year 2, when TDA is complete, the Regional project team together with the TDA development team and collaborating entities will revise the set of indicators and make adjustments based on the current experience. The final set of core indicators will be open for comments of the Regional project partners and interested parties.

23. The PTA will draft a proposal for a collaborative framework for long-term monitoring and reporting of PACA´s condition. The proposed framework and collaborative arrangements will include the provision of information to feed the portal that will present the state of PACA (paragraph 209). The proposal will be discussed, adjusted and negotiated with key partners (probably IOC/UNESCO, IATTC, OSPESCA, FAO, NOAA, UNCTAD). Lastly, the final set of core indicators, the mechanism for long-term reporting, and a standard collaboration agreement will be presented to the Regional Project Board for endorsement.

24. To end, the long-term reporting mechanism will be formally communicated to cooperating partners and, in parallel, collaboration agreements will be negotiated and subscribed.

Outcome 5. Lessons on collaborative actions to manage PACA shared in the region and worldwide (south-south cooperation).

25. This outcome focuses on documenting and sharing the lessons from the Regional project. Two lines of work will be developed:

    1. Facilitate communication and information flow among key project stakeholders and disseminate achievements and lessons.

    2. Document and disseminate project lessons.

26. At least 1% of GEF financing will support IW: LEARN activities such as setting and hosting a Regional project website (see paragraph 207), share project achievements and lessons (output 5.2) and support participation in relevant events and GEF biennial international waters conferences (IWC) (see paragraph 221).

Output 5.1. Website for dissemination of lessons and best practice, linked to partners´ portals and IW: LEARN.

Regional Project communication strategy

27. At the Regional project start, the ECM will establish a workgroup with the communication officers of the project partners. Each partner entity will designate a delegate that will integrate the workgroup and that will be the channel for the flow of information and communication materials. This workgroup will prepare and agree:

1. annual work plans that will be jointly implemented and evaluated, and

2. protocols and procedures for collaboration and joint actions.

3. The ECM will prepare press materials and news, but their dissemination will be done through the channels and social networks of the Regional project partners (e.g., YouTube, Instagram, Twitter). These channels will be the main means to conduct the messages of the awareness raising and knowledge transfer strategies (outputs 2.3 and 5.2).

4. In the second quarter of Regional project implementation, the ECM will prepare:

1. A detailed communications strategy. The purpose of this strategy will be to transmit vital information about the project throughout its implementation and why PACA needs transboundary collaborative management. It will be focused on (i) actors and interested parties (with a clear focus on assisting the TDA/SAP process), and (ii) pilot intervention sites. It will include actions for wide dissemination of the core ideas of the TDA and the SAP, as well as the main project learning. The strategy will be analysed with the communication teams and it will be executed through annual joint work plans. At the end of each year, the workgroup will evaluate achievements and performance of the project´s communication strategy and it will make relevant adjustments.

2. Four guidelines about:

1. Organization of sustainable events (UNEP, 2009; UNEP, 2012).

2. Guidelines for in-person meetings under COVID-19 scenario based on advice from the World Health Organization or the US Centres for Disease Control and Prevention (CDC)34.

3. Behaviour and use of inclusive language with gender perspective35.

4. Organization of inclusive events with gender perspective.

The guidelines will be agreed with the partners and implemented in all project actions.

5. The ECM, in coordination with the workgroup of communication officers, will prepare communication materials to implement the project´s communication strategy.

6. A quarterly digital bulletin with news and information of the project will be prepared, which will be distributed to all the target audiences of the project.

Regional Project website

34https://www.cdc.gov/coronavirus/2019-ncov/community/large-events/considerations-for-events-gatherings.html

35 A useful source will be the guidelines for an inclusive gender approach in communication products that was developed by the Global Marine Commodities project (GMC, 2020).

7. The Knowledge Management Specialist (EMC) will be responsible for developing and managing the Regional project website that will be linked to the websites of the project partners, UNDP and IW: LEARN.

8. If necessary, accounts will be created and maintained in virtual platforms and social networks (e.g., Facebook, Twitter, YouTube, Instagram) that are accessible to the target audiences of the project. However, the priority will be that information flows through the partner channels and networks.

Collaborative web portal for long-term reporting mechanism

9. Based on the adopted core indicators and the agreed collaboration framework (output 4.1). The EMC will develop a portal to host the report on the state of PACA´s marine environment and related blue economy. PACA´s TDA will be presented in the portal and will constitute the baseline to compare future developments.

10. The portal will present information and trends of the core indicators in amiable formats for the public, like maps, diagrams, infographics and tables. The portal´s software will allow to access data from cooperating parties and to input information and documents to facilitate updating the report on PACA´s condition. The EMC will explore opportunities to take advantage of tools already in use in the region and other LMEs, like the Caribbean Marine Atlas.

11. During the final year the administration of the portal will be transferred to a project partner, to be decide by the Regional Project Board based on the signed collaboration agreements.

Output 5.2. Regional Project lessons documented and disseminated.

12. In the second quarter of project implementation, the EMC will prepare the project strategy for knowledge transfer. The purpose of this strategy will be to capture project knowledge, transfer it to pertinent key stakeholders and to make it available to interested parties worldwide. This strategy will have synergy with (i) the awareness raising and communication strategies, and (ii) the stakeholders engagement plan.

13. In line with the knowledge transfer strategy, the EMC will establish both methods and procedures for the project team to systematically document the experience of the project and finally prepare documents that present the project learning. The EMC will guide in the practice the project team so that they can adequately document experiences, good practices and the interventions performed. The EGP will ensure that these actions capture social and gender aspects.

14. Mid-term and final onsite meetings for self-assessment and reflection with be organised with local key stakeholders and direct beneficiaries of each pilot interventions (Table 8). The mid-term meetings will facilitate thinking about the challenges they might be facing and documenting learning. The final meetings will allow to distil and document core lessons. A key element of these sessions will be to examine women´s contributions and perspectives. The reports of these meetings will be systematized, analysed with the technical committee, and presented to the project board. Key findings will be informed in the annual reports to the GEF.

15. The project´s mid-term review will serve as an opportunity for learning. The key findings and lessons from the mid-term review will be analysed with the technical committee and shared with all project partners.

16. At the beginning of the final year, the EMC and the EGP will organise a regional meeting to identify gender lessons from project implementation. The findings of this meeting will feed the project learning documents (see below). The report will be published as an online document and widely distributed to interested parties.

17. At the start of year 4, it is expected to prepare three documents that systematise the project experience. The provisional titles are:

1. Application of the TDA / SAP process in the Pacific Central American Coastal Large Marine Ecosystem.

2. Advancing regional collaboration for blue growth in the Pacific Central American Coastal Large Marine Ecosystem.

3. The role of women in transboundary LME governance and the blue economy.

4. These documents will have a dissemination format to be accessible to a broad audience. Each document (i) will have an executive summary in in Spanish and English, and (ii) will be in high-quality PDF format to be downloaded from the Web.

5. For project closure, a memoir that summarise the project experience will be prepared in a simple and very graphic format. The memoir will have executive summaries in Spanish and English, and will be distributed mainly in PDF format through electronic means. In addition, three short videos will be prepared. These will summarise the project achievements and lessons, including testimonies of key stakeholders and beneficiaries. The short videos will be made available through IW: LEARN, the project partners websites and YouTube.

6. The formal closure will be performed on the second quarter of the fourth year. A public event will be organized in each country with broad participation of beneficiaries, key stakeholders and project partners.

7. To support dissemination of advances and lessons, GEF resources will be invested to support participation in the international waters' conferences of 2022 and 2024.

Partnerships

8. The Regional project partners are listed in Table 10Table 10. In addition, the Sistema de la Integración Centroamericana is a key partner and most probably will be the basis for the future joint management of PACA. SICA´s Secretary General will be part of the Regional Project Board.

9. SICA is the institutional framework for regional integration of Central America. It was established in 1991 by the Tegucigalpa Protocol36. The purpose of SICA is to achieve the integration of Central America in order for the Isthmus to become a region of peace, freedom, democracy and development.

10. Currently, SICA member states are: Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua and Panama. The integration system includes observer states and organizations; Colombia (agreement signed on 26 September 2013), Ecuador (agreement signed on 1 March 2013) and Mexico (agreement signed on 11 November 2004) are formal observers.

11. The main bodies of the SICA structure are:

    1. the Meeting of Presidents which is the highest decision-making level,

    2. the Council of Ministers of Foreign Affairs which ensures implementation of the decisions adopted by the presidents, and

    3. the General Secretariat (SG-SICA) which is the executive body that implement decisions, manage international cooperation and promote participation of civil society, among other responsibilities.

12. SICA encompass a range of institutions like the Technical Secretariat for Women of the Council of Ministers for Women of Central America and Dominican Republic (STM-COMMCA), the Secretariat of the Central American Commission for Environment and Development (CCAD), and the Secretariat for Central American Tourism Integration (SITCA), and specialised institutions like the Central American Bank for Economic

36 Tegucigalpa Protocol to the Charter of the Organization of Central American States (ODECA).

Integration, and the Organization of the Fisheries and Aquaculture Sector of the Central American Isthmus (OSPESCA).

Table 10. PACA project partners in the participating countries.

| Country (from north to south) | Environment authority | Fisheries authority | Foreign affairs authority |
|---|---|---|---|
| Mexico | Ministry of Environment and Natural Resources (SEMARNAT) | National Commission of Aquaculture and Fisheries (CONAPESCA) | Ministry of Foreign Affairs (SRE) |
| Guatemala | Ministry of Environment and Natural Resources (MARN) | Directorate for Fisheries and Aquaculture Regulations37 (DIPESCA) | Ministry of Foreign Affairs |
| El Salvador | Ministry of Environment and Natural Resources (MARN) | Fisheries and Aquaculture Development Centre38 (CENDEPESCA) | Ministry of Foreign Affairs |
| Honduras | Secretary of Natural Resources and Environment (MiAmbiente+) | General Directorate of Fisheries and Aquaculture (DIGEPESCA) | Secretary of Foreign Relations |
| Costa Rica | Ministry of Environment and Energy (MINAE) | Costa Rican Institute of Fisheries and Aquaculture (INCOPESCA) | Ministry of Foreign Affairs and Worship |
| Panama | Ministry of Environment (MiAmbiente) | Panama´s Water Resources Authority (ARAP) | Ministry of Foreign Affairs |
| Ecuador | Undersecretary of Natural Patrimony39 | Undersecretary of Fisheries Resources40 (SRP) | Ministry of Foreign Affairs and Human Mobility |

13. For the Regional project the following SICA entities are key partners:

    1. **OSPESCA** was established in 1995, its mandate is to coordinate the definition, execution and monitoring of policies, strategies and projects related to the regional regulatory framework to advance sustainable development of fishing and aquaculture activities. OSPESCA is not an RFMO, but the Council of Ministers adopt regional policies and regulations like:

37 Part of the Ministry of Agriculture, Livestock and Food.

38 Part of the Ministry of Agriculture and Livestock.

39 Part of the Ministry of Environment and Water.

40 Part of the Ministry of Production, Foreign Trade, Investments and Fisheries.

1. OSP-08-2014 to prevent, discourage and eliminate illegal, unreported and unregulated fishing in SICA member countries.

2. OSP-03-10 for gradual implementation of a regional satellite monitoring and control system for fishing vessels.

3. OSP-02-09 for Regional Management of the Caribbean Lobster fishery (*Panulirus argus*).

4. OSPESCA´s executive body is SICA/OSPESCA Regional Directorate which, among other functions, coordinate several regional working groups. The following working groups will directly participate in the Regional project:

1. Recreational fishing, which provides technical and scientific elements to advance the integration of sport fishing as an instrument to support food security and job creation in the region.

2. Regional Working Group on Gender Equality and Equity in fisheries and aquaculture (GRT-IEG), established in 2016, which provides inputs to advance SICA´s Regional Policy on Equity and Gender Equality (PRIEG/SICA) in the axis of financial autonomy aimed at removing the institutional, material and cultural obstacles that prevent women from fully enjoying their economic rights in equal conditions (COMMCA, 2013).

OSPESCA is the lead agency which coordinates the preparation of SICA´s regional strategy for blue growth. It is planned to have the strategy adopted during 2021.

1. **CCAD** was established in 1989, to develop a regional mechanism for environmental cooperation and integration that contributes to improve the quality of life of the populations of its member States. The highest authority is the council of ministers and the executive body is the Executive Secretariat which implement decisions and promote implementation of the regional strategies, such as the Framework Regional Environmental Strategy (ERAM) 2015-2020 and the Regional Strategy on Climate Change. CCAD has seven technical committees, one of them is the Technical Committee on seas and biodiversity.

2. **COMMCA** was established in 2005, it is SICA's political body specialised in gender and women´s human rights. The executive body is the Technical Secretariat for Women (STM-COMMCA) which implement decisions and promotes implementation of the Regional Policy on Equity and Gender Equality.

Strategic allies

TDA/SAP process

3. To achieve outcomes 1 and 2, it will be fundamental to collaborate with organizations that are generating information about the situation in PACA and have experience in governance of marine resources. There is a large number of national, regional and international entities which work in the area and have information and knowledge on different topics. The Stakeholder Analysis identified 68 entities as partners that need to collaborate with the project, and 101 entities that have to be involved (Annexes 8 and 9). Though, top key collaborators to engage with from project start (paragraph 99) are:

1. FAO compiles, analyses and disseminates fishery and aquaculture data (capture and trade) from the countries, this will be a valuable input for the TDA/SAP process. In addition, over the years FAO has implemented a series of activities that have generated valuable knowledge for the transboundary analysis and the construction of regional LME governance. Key projects to build upon are:

1. GEF Coastal Fisheries Initiative- Latin America (GEF ID 9124) which is implemented by UNDP in Ecuador and Peru. In Ecuador it is developing national management plans for fisheries that are

important in the region -- mahi mahi, shrimp (*Protrachypene precipua*), mangrove cockles (*Anadara tuberculosa* and *A. similis*), mangrove crab (*Ucides occidentalis*) and pole and line tuna --, an MSP exercise in the northern Gulf of Guayaquil, and is testing the use of the Ocean Health Index.

2. Sustainable management of bycatch in Latin America and Caribbean trawl fisheries (REBYC-II LAC) (GEF ID 5304) which works with three PACA countries: Colombia, Costa Rica, and Mexico. In Colombia it has worked on the Pacific and Caribbean fisheries and has generated knowledge about bycatch composition and measures to reduce it. In Costa Rica, which banned shrimp trawling in 2013, the project has worked on alternative livelihoods for local communities and research on the use of fish excluding devices in trawl nets. In Mexico, the project has worked on the Gulf of Mexico.

3. Global Sustainable Fisheries Management and Biodiversity Conservation in the Areas Beyond National Jurisdiction (programme), in particular the project Sustainable Management of Tuna Fisheries and Biodiversity Conservation in the Areas Beyond National Jurisdiction (ABNJ) (GEF ID 4581), which worked with IATTC and other RFMOs to improve tuna fisheries. It will be important to coordinate with the second phase of this programme (GEF ID 10548), which includes a child project to continue work with tuna fisheries (i.e., sustainable management of tuna fisheries and biodiversity conservation in the areas beyond national jurisdiction).

1. IOC/UNESCO Marine Spatial Planning Programme can provide valuable inputs to the TDA/SAP process, as well as to the development of MSP regional guidelines for PACA (see page 47). In addition, it will be important to coordinate with the MSPglobal initiative which is developing new international guidelines on marine spatial planning, including guidance on transboundary MSP. It also includes a pilot in the Gulf of Guayaquil in collaboration with the Permanent Commission for the South Pacific (CPPS).

2. IATTC is the RFMO which manage the fisheries of tuna and tuna like species in the Eastern Pacific Ocean. It generates fisheries information, assess the condition of pertinent stocks, and adopt conservation and management measures. IATTC was a partner of the first phase of FAO´s ABNJ project and will participate in the coming second phase.

3. CPPS is the maritime organization which coordinates regional policies for the conservation of the marine environment in the South East Pacific Ocean. It has four member States: Chile, Colombia, Ecuador and Peru. It executes the action plan for the South East Pacific of UNEP´s Regional Seas Programme. Panama is a party of the action plan. CPPS has wide experience in several relevant topics like coastal and marine protected areas, marine litter, integrated coastal zone management and conservation of marine mammals and sea turtles. CPPS sustain the Programme for the Regional Study on El Niño Phenomenon (ERFEN) which started in 1974 and is based on a regional protocol signed in 1992. The current strategic plan runs from 2020 until 2024 (CPPS, 2020). It will be important to coordinate with the SPINCAM project which has developed a set of agreed indicators for integrated coastal zone management and includes in its third phase (2017-2021) valuation of ecosystem services and MSP.

4. NOAA has a range of initiatives that can contribute to the present project. The main elements are:

1. The monitoring programme of ENSO by the Climate Prediction Centre which holds a historical database since 1950 and generates weekly status and prediction reports

2. The National Marine Protected Areas Centre which has a range of resources for MPA management, has an international MPA capacity building programme and thrive for international collaboration and networking.

3. The experience and tools in MSP. Currently, NOAA´s methodology is being applied in the Gulf of Guayaquil as part of the Coastal Fisheries Initiative project.

5. Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) which has a range of reports and publications on marine pollution issues like marine debris and microplastics.

4. Other entities working at the regional level to seek collaboration are:

1. Conservation International (CI) which has developed extensive work on marine conservation on the Eastern tropical Pacific. Two key projects to build upon are:

1. The Blue Action Fund sponsored project "Fishing for a prosperous future: Making the Eastern Tropical Pacific Marine Protected Area1 Network a driver of local community sustainable development" which will end during 2021. It works on Costa Rica, Panama, Colombia, Ecuador and focus on improving management and sustainability of small-scale fisheries linked to MPAs.

2. Walton Family Foundation sponsored final phase of 12-year support to MPA strengthening in the Eastern tropical Pacific (22 protected areas) which focus on financial sustainability.

2. WWF which has developed extensive work on conservation of marine biodiversity (e.g., sea turtles and sharks) and fisheries. There is ongoing work with industrial tuna fisheries, reduction of bycatch in artisanal longlines and Fisheries Improvement Projects (FIPs).

3. Global Fishing Watch which promotes transparency in fishing activity by making publicly available and analysing vessel monitoring system (VMS) data. Currently, Costa Rica and Panama have made public their vessel tracking data.

4. MIGRAMAR which works on migration routes of sea turtles and sharks in Mexico, Costa Rica, Panamá, Colombia and Ecuador.

5. There will be close collaboration with the CLME+ project[41] (GEF ID 5542) to take advantage of their experience in the topics of the coordination mechanism for ocean governance, mainstreaming blue growth into the SAP, the collaborative long-term reporting mechanism, and marine spatial planning. In addition, there will be collaboration with the second phase of the Humboldt project[42] (GEF ID 9592) to learn about the experience on SAP development and implementation.

6. Finally, there will be cooperation with national projects related to key TDA/SAP topics like those dealing with coastal tourism and fisheries in Mexico (GEF IDs 961343 and 1054044), source to sea watershed management in the Paz river between Guatemala and El Salvador (GEF ID 1007445), and the mainstreaming

41 Catalysing Implementation of the Strategic Action Programme for the Sustainable Management of Shared Living Marine Resources in the Caribbean and North Brazil Shelf Large Marine Ecosystems (CMLE+)+).

42 Catalysing Implementation of a Strategic Action Programme for the Sustainable Management of Shared Living Marine Resources in the Humboldt Current System (HCS). Implemented by UNDP in Chile and Peru.

43 Mainstreaming Biodiversity Conservation Criteria in Mexico's Tourism Sector with Emphasis on Biodiversity-rich Coastal Ecosystems.

44 From bait to plate: strengthening sustainable fisheries to safeguard marine biodiversity and food security.

45 Enabling concerted Source to Sea management in the Paz river watershed.

of conservation and sustainable use of biodiversity into coastal production landscapes in Panama (GEF ID 980446).

Pilot interventions

7. For pilot 1 on billfish recreational fisheries the key partners will be the national fisheries authorities of the participating countries, the International Game Fish Association and the Billfish Foundation which will provide information and coordination with the local fishing clubs.

8. For pilot 2 on MSP, the key partners will be:

1. In Mexico:

1. The governments of the six bordering states of the South-Central Pacific Region, each one has sectoral secretariats which manage areas related to MSP like tourism and environment.

2. The National Commission of Aquaculture and Fisheries (CONAPESCA) which is the federal fisheries authority.

3. The Secretariat of the Navy (SEMAR) which is the federal maritime authority.

4. The National Commission of Natural Protected Areas (CONANP) which manage the national system of protected areas.

All these entities will mainstream into their plans actions to implement the Marine Ecological Management Programme.

5. In Costa Rica:

6. The Tuna Chamber of Costa Rica which represent the local canning industry.

7. The Costa Rican Fishing Federation (FECOP) which represent recreational fishing operators.

8. The Chamber of Long-liners which represent commercial fishers that capture large pelagic fish.

9. The National System of Conservation Areas (SINAC) which administer the protected areas.

10. The Ministry of Public Security which operate the National Coast Guard Service.

11. In Panama:

12. The members of the CNP´s Directive Council and the Commission for Sustainable Management of the SZMP. In particular ARAP, the Panama Maritime Authority, and the Panama Tourism Authority which will have to adopt and enforce measures to implement the marine spatial plan.

13. The nine coastal municipalities that surround the area and from where tourism and fisheries activities operate: [1] David, San Félix, San Lorenzo, and Remedios from the Chiriqui province, and [2] Mariato, Montijo, Río de Jesús, Soná and Las Palmas from the Veraguas province.

14. Academia (i.e., Panama University, Autonomous University of Chiriqui, Estación Científica COIBA AIP, Panacetacea, and the Smithsonian Tropical Research Institute) which will provide information and scientific advice for the planning process.

15. In Ecuador:

46 Conservation and Sustainable Use of Biodiversity in Coastal Marine Production Landscapes

16. The authorities that will have to adopt and enforce regulations for the use of the ocean and coastal strips: (i) the three coastal municipalities (Figure 22), (ii) National Directorate of Aquatic Spaces of Ecuador (DIRNEA), and (iii) Vice Ministry of Aquaculture and Fisheries.

17. The associations of hoteliers and food and beverage services which are direct users of the coastal strip.

18. Research institutions which will provide information and scientific advice: (a) the Oceanographic and Antarctic Institute of the Navy (INOCAR) which will provide information about ocean and coastal dynamics (e.g., bathymetry, currents, beach profiles), and (b) the National Fisheries Institute (INP) which will provide fisheries information.

19. GIZ which has been supporting actions to test MSP methodologies.

9. For pilot 3 on cetacean conservation the key partner will be Panacetacea. This is a Panamanian NGO which concentrate on marine mammal research and conservation. They have the experience and expertise to characterise the marine soundscape in the pilot sites. Local boat captains, guides and tour operators will also contribute to the pilot by providing knowledge and facilities.

Risks and assumptions

10. The Social and Environmental Screening Procedure (SESP) was applied (Annex 5), five social and environmental risks were identified. In addition, three political and financial risks were identified and included in the UNDP Risk Register (Annex 6).

11. The eight risks and their corresponding risk level47 are outlined in Table 11. Most of them have a moderate risk level.

12. Two risks have a substantial level:

1. The future change in central government in all the participating countries (risk 1). Ecuador will change government in 2021, Costa Rica and Honduras in 2022 and the other countries in 2024. The change of government might entail changes in national priorities and the level of support and contributions to the project.

2. The difficulty to materialize the confirmed cofinancing due to the impacts of COVID-19 on the national economies (risk 8). It is anticipated that to confront the post-pandemic crisis the governments will have to change their public spending priorities and heavily invest in social protection and economic recovery therefore creating further pressure on fiscal balances. (CEPAL, 2020; CEPAL, 2020a; World Bank, 2020).

3. Another risk that will deserve careful consideration during project implementation is fishers concern about project actions (risk 4), with particular attention to the situation in Costa Rica (risk 5).

1. In general, the fisheries sector may be concerned about the implications of developing a regional collaborative framework and governance arrangements to implement PACA´s SAP. This could generate suspicions about possible limitations for fisheries activities in the region, particularly among groups that develop oceanic fisheries like tuna and large pelagic fish. This has happened before, for example, when the Marine Corridor of the Eastern Tropical Pacific (CMAR) was established in 2004 the tuna industry raised strong concerns that the corridor will expel them from traditional fishing grounds; in Ecuador tuna producers requested that the government abandon this initiative. Therefore, it will be fundamental that the fisheries sector:

47 According to UNDP Enterprise Risk Management (ERM) Policy (UNDP, 2018).

1. is adequately informed about the project purpose and its contribution to identify blue growth opportunities, and

2. is fully engaged into the TDA/SAP process.

2. In Costa Rica, the government and the fisheries sector have had growing tensions in the past years that escalated into several strikes during 2018 and 2019. A dialogue table was established in October 2019 with support of the Ombudsman for the Inhabitants of the Republic of Costa Rica and the United Nations office in the country. Several groups of the fisheries sector abandoned the dialogue table in February 2020 and tension continues up to date. Among the elements of discomfort for the fishing sector is the governance mechanism of marine areas that was established in 2019 (Executive Decree 41775- MP-MSP-MAG-MINAE-MOPT-TUR48).

   The present project´s marine spatial planning pilot intervention will operationalise the spatial planning for the exploitation of tuna and tuna-like species in national waters issued in 2014 (Executive Decree 38681 MAG-MINAE modified in 2016 and 2018) under the governance mechanism established by Executive Decree 41775. Towards the end of the project preparation phase the UNDP office in Costa Rica conversed with the Chamber of Long-liners and INCOPESCA. The fishers conditioned their participation in the pilot intervention to the government adoption of the National Action Plan for Large Pelagic Fisheries. INCOPESCA expressed willingness to adopt the plan depending on budget availability. At the close of the PPG, negotiations between fishers and government were still ongoing. Therefore, INCOPESCA (the responsible party) and the project team will have to be cautious to ensure that political tension does not jeopardise the pilot intervention and that the participatory planning process to be implemented facilitate respectful dialogue across difference.

Table 11. Regional Project risks.

| Description | Type49 | Impact and probability50 | Mitigation measures | Responsible | Status51 |
|---|---|---|---|---|---|
| Risk 1. Changes in central governments in the seven participating countries which may imply that project partners change their priorities and modify their support and contributions to the project. | Political | I = 3<br>P = 5<br>Substantial risk | The project unit will maintain ongoing fluid communication with key project partners (fisheries and environment authorities and ministry of foreign affairs on each country) and stakeholders, including main SICA entities (e.g., the General Secretariat, OSPESCA, CCAD). At any time that new authorities assume office, there will be a formal presentation of the project document, implementation progress, management arrangements and the roles and contributions of the entity. | OPM and PTA with support of UNDP country offices (as needed) | Without change |

48 http://www.fao.org/faolex/results/details/es/c/LEX-FAOC191287/

49 According to UNDP Enterprise Risk Management (ERM) Policy (UNDP, 2018): social and environmental, financial, operational, organizational, political, regulatory, strategic, and safety and security.

50 Five-point scale according to UNDP Enterprise Risk Management (ERM) Policy (UNDP, 2018). For impact: 1. Negligible, 2. Minor, 3. Intermediate, 4. Extensive, 5. Extreme. For likelihood: 1. Not likely, 2. Low likelihood, 3. Moderately likely, 4. Highly likely, 5. Expected.

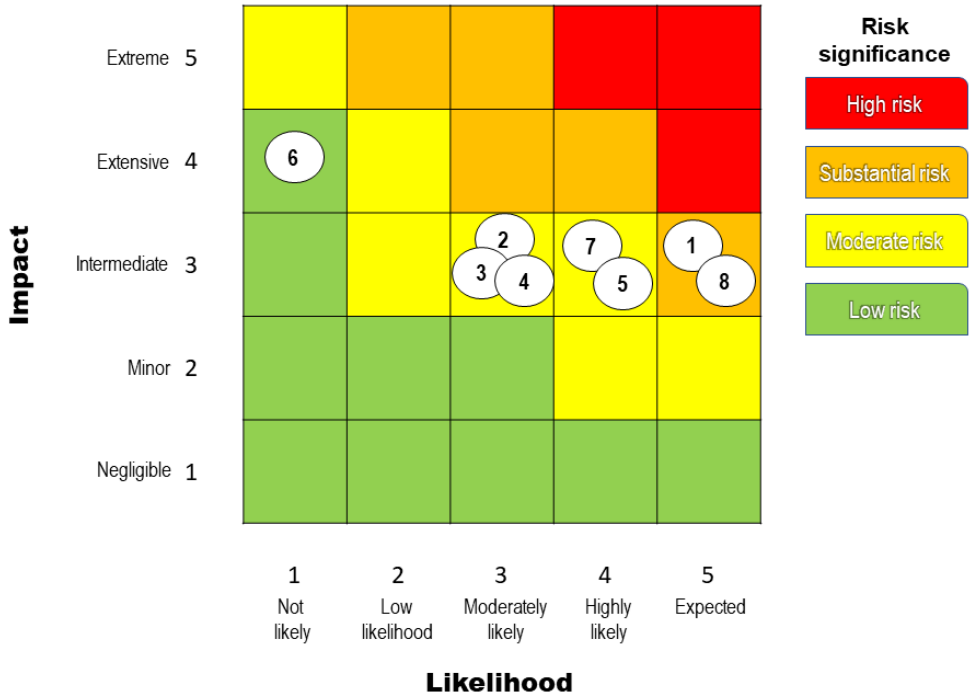
51 Finished, reducing, increasing, without change.

| Description | Type49 | Impact and probability50 | Mitigation measures | Responsible | Status51 |
|---|---|---|---|---|---|
| Risk 2. Limited indigenous peoples' participation and involvement during the implementation of the marine spatial planning pilot intervention and other project activities. | Social and environmental | I = 3<br>P = 3<br>Moderate risk | The stakeholder analysis (Annex 8 in the Prodoc) identified indigenous people along PACA´s coastal zone and their relation with specific project actions. The project will likely not intervene in areas where indigenous peoples are located, except for the pilot interventions on marine spatial planning in which there are indigenous people in the areas of influence. However, an indigenous peoples plan (IPP) will be prepared at the start of project implementation, which will fully assess and confirm the presence of and potential impacts on indigenous peoples. The requirements for free, prior, and informed consent (FPIC) will be defined in the IPP according to standard 6 of UNDP Social and Environmental Standards. | Gender and participation specialist | Without change |
| Risk 3. Limitations to women participation and involvement. | Social and environmental | I = 3<br>P = 3<br>Moderate risk | Implement the gender action plan and monitor and analyse the project´s gender-related indicators | Gender and participation specialist | Without change |
| Risk 4. Concern from ocean-going fishers that a regional agreement could lead to stricter fishing regulations and possible economic displacement | Social and environmental | I = 3<br>P = 3<br>Moderate risk | 1. There are well established regional fisheries management organisations (RFMOs), based on binding protocols, which deal with these matters: the Inter-American Tropical Tuna Commission (IATTC) and the Central America Fisheries & Aquaculture Organization (OSPESCA). The SAP will not supersede the existing fisheries agreements but the risk is that ocean-going fishers perceive that advancing towards large marine ecosystem management is a threat.<br>2. The regional pilot on billfish recreational fisheries will not restrict fishers' interests, on the contrary it will facilitate to explore an alternative activity that will generate important direct and indirect benefits and will contribute to conserve billfish stocks. This pilot will work with fisheries authorities and the billfishes recreational fishing supply chain to develop a regional plan.<br>3. The pilot on marine spatial planning has intervention sites in Mexico, Costa Rica, Panama, and Ecuador and | Principal technical advisor | Without change |

| Description | Type49 | Impact and probability50 | Mitigation measures | Responsible | Status51 |
|---|---|---|---|---|---|
| | | | on each site will work with key stakeholders to integrate fisheries into their work.<br><br>4. Fishers organisations participated in the two national consultation workshops held on each participating country during project preparation.<br><br>Management measures<br><br>To address fishers' concerns about stricter fisheries management regulations the following actions will be undertaken:<br><br>1. The project will liaise with key fisheries organisations like the Inter-American Tropical Tuna Commission, FAO and OSPESCA. It is expected that these entities will participate and contribute to the TDA/SAP process (see section "Strategic allies" in the PRODOC).<br><br>2. At project start there will be initiation workshops with national stakeholders on each participating country. In addition, the pilot interventions will hold start-up meetings with local stakeholders on each country. These meetings will allow to engage with representatives of the main fisheries organisations (see section "stakeholder engagement" in the PRODOC.<br><br>3. Fisheries representatives will directly participate in the TDA/SAP process (see section "Strategic allies" in the PRODOC).<br><br>4. Fisheries organisations, like other key stakeholders, will be duly informed of project progress and lessons through the various communication channels to be used (see outputs 2.3 and 5.1 in the PRODOC).<br><br>5. The TDA/SAP process and the pilots on billfish recreational fisheries and | | |

| Description | Type49 | Impact and probability50 | Mitigation measures | Responsible | Status51 |
|---|---|---|---|---|---|
| | | | marine spatial planning will apply a Strategic Environmental and. Social Assessment (SESA) approach to identify and manage possible risks of economic displacement.<br><br>6. Apply the recommendations from the indigenous peoples plan (which will be prepared at the project start). | | |
| Risk 5. Costa Rican fishers unwilling to participate in pilot intervention on management of tuna and tuna-like species (paragraph 147). | Political | I = 3<br>P = 4<br>Moderate risk | 1. The project team will support Costa Rican authorities in the process of adopting the National Action Plan for Large Pelagic Fisheries during the first year of project implementation.<br><br>2. The project team will approach the Chamber of Long-liners to identify ways to facilitate dialogue between them and the government authorities.<br><br>3. The Chamber of Long-liners will be duly informed of project progress and lessons through the various communication channels to be used. | Principal technical advisor & UNDP country office in Costa Rica | Without change |
| Risk 6. Negative impacts on critical habitats and/or legally protected areas. | Social and environmental | I = 4<br>P = 1<br><br>Moderate risk | 1. The project was designed to ensure that the value of critical habitats is recognised and that MPAs are the foundation for zoning to safeguard what is most ecologically important, biologically diverse, or vulnerable.<br><br>Management measures<br><br>2. Ensure that the TDA/SAP process is built upon a Strategic Environmental and Social Assessment (SESA) approach.<br><br>3. Ensure that the conservation value and contribution to blue growth of critical habitats and MPAs is discussed in the TDA/SAP process and included into the TDA and SAP (see paragraphs 99 and 105 of the PRODOC).<br><br>Ensure that the MSP pilot intervention safeguard that the value of critical habitats is recognised and that MPAs are used as the foundation for zoning to safeguard what is most ecologically important, biologically diverse, or | Specialist in marine resources management | Without change |

| Description | Type49 | Impact and probability50 | Mitigation measures | Responsible | Status51 |
|---|---|---|---|---|---|
| | | | vulnerable (see paragraphs 125, 147, 158, 170 and 180 of the PRODOC). | | |
| Risk 7. Impacts of climate variability and climate change. | Social and environmental | I = 3<br>P = 4<br><br>Moderate risk | Management measures<br><br>1. The project unit will ensure that the effects of climate variability and climate change will be analysed in the TDA and that the SAP incorporate appropriate adaptation measures and aligns, as much as possible, with the Nationally Determined Contributions (NDCs) of the participating countries (see paragraphs 99 and 105 and Table 11 of the PRODOC)<br>- Annual workplans will be adjusted, as needed, to cope with the impacts of ENSO events during project implementation (see Table 11 of the PRODOC). | Principal technical advisor | Without change |
| Risk 8. Difficulty to materialize cofinancing due to the impacts of COVID-19 on national economies | Financial | I = 3<br><br>P = 5<br><br>Substantial risk | 1. Maintain fluid communication with key project partners to identify difficulties in materializing cofinancing.<br>2. Encourage project partners to maintain as much as possible their contributions to the project.<br>3. Seek opportunities of collaboration with other ongoing projects and initiatives to obtain contributions that can add to project cofinancing. | Operations manager and UNDP country offices | Increasing |




Risk 1. Changes in central governments in the seven participating countries which may imply that project partners change their priorities and modify their support and contributions to the project.

Risk 2. Limitations to indigenous people participation and involvement during the implementation of the marine spatial planning pilot intervention.

Risk 3. Limitations to women participation and involvement.

Risk 4. Concern from ocean-going fishers that a regional agreement could lead to stricter fishing regulations

Risk 5. Costa Rican fishers unwilling to participate in pilot intervention on management of tuna and tuna-like species

Risk 6. Negative impacts on critical habitats and/or legally protected areas.

Risk 7. Impacts of climate variability and climate change.

Risk 8. Difficulty to materialize cofinancing due to the impacts of COVID-19 on national economies

Figure 25. Project risk matrix.

Stakeholder engagement

2. The stakeholders analysis and the stakeholders engagement plan are in Annexes 8 and 9. The EGP will coordinate the implementation the plan, and together with the monitoring and evaluation specialist will monitor and assess the indicators of the plan. The stakeholders engagement plan includes the grievance mechanism for the Regional project.

3. There are 206 actors identified as stakeholders to the PACA project in the seven participating countries, most of them are public institutions (91 actors) (Annex 8). From these 206 actors, there are 68 entities have been identified as partners for collaboration because of their high influence and interest in the project; there are as well four regional institutions (SICA, CCAD, OSPESCA, and IATTC) and 26 relevant actors for the implementation of the three pilot interventions. Twenty-four indigenous peoples are geographically located in the coastal states of the Mesoamerican Pacific (Table 3), but only eight of them are related to the pilot intervention on marine spatial planning in Mexico and Panama.

4. The formal involvement of key actors will begin with the Regional project initiation workshops with national stakeholders on each participating country (see output 5.2 in Annex 3). In these meetings, public and private stakeholders will (i) confirm their contributions and participation in project implementation, and (ii) agree on coordination mechanisms for each outcome. There will be as well closing workshops for delivering information of the implementation and closing of the project in each of the participation countries. The pilot interventions will have midterm and end meetings for self-assessment and reflection with local stakeholders, with special attention to the participation of indigenous peoples. In all meetings the project team will ensure the participation of pertinent stakeholders, including direct user groups and indigenous peoples as appropriate.
5. A TDA development team (Figure 14) of 25 persons will be formed with the participation of (i) three formal delegates from each participating country and (ii) a delegate from OSPESCA´s Regional Working Group on Gender Equality and Equity in fisheries and aquaculture. The TDA development team will ensure stakeholders participation through:
    1. A percentage of at least 30% of non-state entities independent of the government such as civil society organisations, producer associations or community groups.
    2. At least 30% of women.
6. To integrate technical information about social aspects and to determine participation conditions in each country, each TDA´s national diagnostic team will integrate a specialist in social participation and gender. The preliminary results of each national analysis will be presented in a one-day workshop with key stakeholder to validate information and receive feedback.
7. An SAP development team (Figure 15) will be formed by 25 persons with the participation of (i) three formal delegates from each participating country, and (ii) a delegate from the GRT-IEG. There will at least 30% of women in the SAP development team
8. There will be two moments for national consultation. The first with key stakeholders and the second with government entities (e.g., ministries of the economy, cabinet council). For consultation with key stakeholders there will be two national meetings on each of the participating countries:
    1. First national workshop to present the first draft of the SAP and to receive initial comments (see paragraph 106), and
    2. Second national workshop to receive detailed recommendations and contributions.
9. A professional facilitation team will run each national workshop, which will be designed to facilitate participation of women and men, mutual respect, and collective decision-making.
10. The TDA/SAP process will be supported by a strategy for awareness raising, participation and articulation among key decision-makers and stakeholders (output 2.3).
11. The TDA/SAP process is very demanding, it will require:
    1. significant effort of the members of the development teams,
    2. prepare adequate information tools for the consultation meetings to facilitate the understanding of the process and the contents,
    3. to count with an adequate staff with facilitation skills during consultation processes, ensuring that the range of stakeholders analyse information and proposals (which might be complex or very technical) and can freely express their comments and recommendations.
12. The three pilot interventions will be implemented through direct involvement of local stakeholders. About 4,1 million persons have been identified as direct beneficiaries (Table 12).
13. The EGP will be responsible for the implementation of the stakeholder engagement plan. In addition, a person specialized in knowledge management and a communication specialist will be part of the Regional Project Unit in order to facilitate sharing knowledge and an adequate transmission of information to key stakeholders. Their main responsibilities regarding the stakeholder engagement plan will be:

1. The EGP will ensure that project implementation is participatory and inclusive, and that social and gender issues are mainstreamed into the TDA/SAP process. The EGP will guide the project team in the development

of participatory processes and multi-level dialogue, as well as the inclusion of cultural sensitivity and social and gender perspective, and proper implementation of stakeholders engagement plan and the indigenous peoples plan (to be prepared at project start).

2. The ECM will prepare a communication strategy which will support stakeholders. As part of the communication strategy there will be briefs to inform decision makers in the regions about core findings of the TDA/SAP process, also dissemination versions of the TDA and SAP will be prepared for specific audiences. The TDA once finalised will be uploaded to the web portal for long-term reporting to be available for the public.
3. The EMC will prepare a knowledge transfer strategy linked to the stakeholders engagement plan, the indigenous peoples plan (to be prepared at project start) and the gender action plan. The sharing of project learning will contribute involve key stakeholders into regional transboundary marine management and blue growth. The EMC will organise onsite meetings with local key stakeholders to capture their lessons during pilot implementation (see paragraph 214).
4. Eight general barriers for stakeholder participation were identified, Table 13 summarise these barriers and the proposed mitigation actions.

Table 12. Direct and indirect beneficiaries from the pilot interventions.

| Pilot | Countries | Direct beneficiaries | Number | Indirect beneficiaries | Number |
|---|---|---|---|---|---|
| 1. Conservation and management of sailfish and marlin recreational fisheries | Mexico, Guatemala, El Salvador, Costa Rica, Panama, Colombia, Ecuador | Sport fishing operators and direct service providers (marinas, workshops, food). | 13,000 | Sport fishing operators, direct service providers and associated tourism supply chains (e.g., accommodation, transport, restaurants) | 50,000 |
| 2. Marine Spatial Planning | México | Population of 77 coastal municipalities of six States: Jalisco (5), Colima (3), Michoacán (3), Guerrero (13), Oaxaca (41), and Chiapas (12) and registered fishermen for fishing cooperatives. | 3,993,101 | Population of coastal states (Jalisco, Colima, Michoacán, Guerrero, Oaxaca, and Chiapas) | 27,428,548 |
| | Costa Rica | Fishers of medium-scale and advanced commercial fleets. | 4,000 | Population of the municipalities were the main landing ports are located (Puntarenas, Guanacaste, Quepos, and Golfito) | 243,898 |
| | Panama | Stakeholders that participate in the planning process: fishers, tourism operators, diving tours operators, hoteliers, Ngäbe-Buglé people that use playa Zapotal | 1,053 | Stakeholders that operate in the zone. fishers, tourism operators, diving tours operators, hoteliers, Ngäbe-Buglé people that use playa Zapotal | 10,000 |
| | Ecuador | Inhabitants of three coastal municipalities, tourism service providers. | 114,356 | Population of Manabi province | 1,141,904 |
| Pilot 3. Cetacean Conservation | Panama | Boat captains, guides and local tour operators that collaborate with the pilot | 103 | Boat captains, guides and local tour operators that operate in the area | 2,000 |
| TOTAL | | | 4,125,613 | | 28,876,350 |

Table 13. Stakeholder engagement barriers and proposed mitigation actions.

| |
|---|
| 1. COVID-19 context that prevents stakeholders' participation |
| Develop biosecurity plans for meetings to be developed during the implementation of the project. Design alternatives to implement virtual meetings. |
| 2. Time availability. Persons must leave other activities to participate in the project activities and events. |
| For members of the TDA and SAP development teams explain to their employers or nominators the importance of their contribution to the process and request to lessen their workload. Make sure that all meetings / workshops are efficiently planned and managed, with a clear agenda and specific targets. Plan meetings considering the needs and time limitations of the participants. |
| 3. Cost of participation. In addition to the cost of time that each person dedicates to the activities and events, there are other associated costs like travel expenses, food and lodging. Some persons will not have the means to cover these expenses. |
| Provide travel support (reimburse travel expenses) and provide board and lodging to stakeholders that need assistance. |
| 4. Distance. Some groups are in remote areas and have long journeys from their homes to the main localities to participate in national consultation workshops. |
| Take into consideration distance and travel time. When appropriate, allow that people can arrive a day before and provide board and lodging. |
| 5. Communication. This includes difficulty to understand technical matters and complex concepts, language, difficulty expressing ideas (specially in public) |
| Encourage the use of plain language and graphic communication during consultations. Complement group meetings with in-person meetings. Ensure in advance that everyone is fluent in Spanish. Assure that facilitators will have the abilities to integrate all the participants opinions. |
| 6. Gender biased to limit women participation and involvement |
| Implement project´s gender-related indicators and actions determined in gender action plan as part of implementing positive actions to facilitate women participation and representation. Use gender inclusive language in communication strategy. Register and follow up sex disaggregated information regarding participation in meetings and workshops. |
| 7. Cultural differences. |
| Identify in advance cultural issues and take measures to accommodate special requirements (e.g., food). Ensure that all meetings and activities are culturally sensitive and use inclusive language. At the beginning of an activity or meeting establish basic rules (e.g., respect different views, political neutrality). Hire a professional in facilitation to run consultation workshops and design them to facilitate participation of women and men, mutual respect, and collective decision-making. |
| 8. Political differences. |
| Explain that project activities and meetings are political-neutral. Do not allow the expression of political agendas or statements. At the beginning of an activity or meeting establish basic rules (e.g., respect different views, political neutrality). |

Indigenous peoples

5. The indigenous peoples plan will be prepared at Regional project start; it will confirm the presence of IPs, in addition to defining free, prior, and informed consent (FPIC) procedures/requirements; according to standard 6 of UNDP Social and Environmental Standards. The EGP will coordinate the implementation of this plan, and together with the monitoring and evaluation specialist will monitor and assess the corresponding indicators.
6. Although the seven participating countries are signatories of international agreements on the indigenous peoples matters, as the United Nations Declaration on the Rights of Indigenous Peoples or have ratified the

Convention 169 of the International Labour Organization on Indigenous Peoples, not all countries have specific national regulations that integrate rights of participation and consultation. Among the countries, there are different levels of application and progress and some that count with regulations, they are not binding, which makes the rights to participation difficult to be guarantee.

7. Twenty-four indigenous peoples are geographically located in the coastal states of the Mesoamerican Pacific (Table 3); eight of them are related to the pilot intervention on marine spatial planning in Mexico and Panama. The requirements/procedures for free, prior, and informed consent (FPIC) will be defined in the indigenous peoples plan according to standard 6 of UNDP Social and Environmental Standards.

Gender equality and empowering women

8. The gender analysis and the gender action plan are in Annexes 11 and 12. The EGP will coordinate the implementation the gender plan, and together with the monitoring and evaluation specialist will monitor and assess the indicators of this action plan.

9. The seven participating countries have appropriate national policies and regulations for the promotion of gender equality and women empowerment. All of them are signatories and have ratified the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Inter-American Convention on the Prevention, Punishment, and Eradication of Violence against Women Convention (Belém do Pará, 1994). In addition, SICA´s Regional Policy on Equity and Gender Equality is mandatory to its parties (COMMCA, 2013).

10. The Gender Inequality Index (GII)[52] measures inequality in three aspects of Human Development[53]: reproductive health, empowerment and economic status, among 189 countries. The participating countries have been placed (from lowest to highest) in a ranking according to the GII, described in Table 14, as follows: Costa Rica (position 64), Mexico (76), Ecuador (88), El Salvador (91), Honduras (109), Panama (109) and Guatemala (120). The Gender Analysis (Annex 10) makes a further explanation of the GII and national policies and regulations in each country.

11. The gender analysis found that:
    1. Regarding empowerment, the conditions among the countries are similar based on education figures for women and men; however, there is not equitable access to labour force, since men´s participation is much higher.
    2. Women representation in parliaments and ministers in the region is still limited although Mexico and Costa Rica have 50% indicators, the rest of the countries have a low representation (between 12% and 30%).
    3. Regional bodies relevant to the PACA Project (SICA, OSPESCA, IATTC) have a disparity in women´s representation, where most of the positions are held by men (63%, 77% and 70% respectively) in relation to much lower percentages occupied by women (between 37%, 23% and 30%).
    4. SICA formally integrates gender equality issues through the Council of Ministers for Women of Central America and Dominican Republic, as well as OSPESCA´s Regional Working Group on Gender and Equality and Equity in Fisheries and Aquaculture.
    5. In other SICA instances (related to environment, fisheries and aquaculture) there are more men in decision making and management positions and there are more women in scientific research.

12. There is a numerical evidence of inequality in participation and representation levels in SICA´s relevant institutions where they have a percentage of 63% participation of men in relation to 37% of women (Table 15).

13. In general, for the implementation of the present project there are various barriers that women face to have an appropriate participation and empowerment. In this context, women face three main barriers due to

[52] UNDP Human Development Report 2019. Gender Inequality Index. http://hdr.undp.org/en/composite/GII

53 GII measures: *Reproductive health* measured by maternal mortality rates and adolescent fertility rates; E*mpowerment*, measured by the proportion of parliamentary positions held by women and the proportion of adult women and adult men (aged 25 years and over) with at least some level of secondary education; and *Economic status*, expressed in the participation in the labour market of men and women over 15 years.

gender blindness which does not contribute to the transformation of the unequal structures of gender relations:

1. Barrier 1. Inequitable recognition of leadership capacity to represent technical positions at national and regional levels, giving women positions in instances that focus on the roles assigned to women such as Ministries of health or social inclusion, or in specific institutions created for women issues (e.g. COMMCA).

2. Barrier 2. The role of women in fisheries, tourism, environment, and aquaculture is not recognized and accepted, due to the biased perception that these sectors are mainly men´s issues.

3. Barrier 3. There is a lack of information of the real contributions of women on these sectors, which limits decision-making for greater integration.

Table 14. Gender Inequality Index for 2018 in the countries that share PACA.

| Country | Gender inequality Index (GII) | | Reproductive health | | Empowerment | | | Economic Status | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Maternal Mortality Ratio (deaths per 100,000 live births) | Adolescent birth rate (births per 1,000 women ages 15–19) | Share of sits in parliament (% held by women) | Population with at least some secondary education (% ages 25 and older) | | Labour force participation rate (% ages 15 and older) | |
| | Index | Rank | | | | Female | Male | Female | Male |
| Colombia | 0.383 | 87 | 64 | 47.5 | 19.8 | 51.1 | 49.2 | 58.8 | 82.6 |
| Costa Rica | 0.300 | 64 | 25 | 53.5 | 35.1 | 53.8 | 51.9 | 45.3 | 73.9 |
| Ecuador | 0.385 | 88 | 64 | 73.9 | 38.0 | 52.1 | 52.2 | 55.4 | 81.3 |
| El Salvador | 0.392 | 91 | 54 | 69.5 | 32.1 | 42.2 | 47.9 | 47.0 | 78.8 |
| Guatemala | 0.493 | 120 | 88 | 70.9 | 12.7 | 38.4 | 37.2 | 40.6 | 85.0 |
| Honduras | 0.461 | 109 | 129 | 70.8 | 25.8 | 36.8 | 33.5 | 50.9 | 85.8 |
| México | 0.343 | 76 | 38 | 60.3 | 41.4 | 57.8 | 61.0 | 44.1 | 79.0 |
| Nicaragua | 0.456 | 106 | 150 | 85.4 | 45.7 | 48.3 | 46.6 | 50.3 | 84.0 |
| Panama | 0.461 | 109 | 94 | 81.8 | 18.3 | 72.7 | 68.4 | 52.8 | 81.2 |

Source: UNDP Human Development Report 2019. Gender Inequality Index. http://hdr.undp.org/en/composite/GII

4. The gender action plan (Annex 11) delineates the measures to be executed during project implementation, which include the following general measures:

1. At all-time promote a gender responsive approach which seeks to ensure that women and men are given equal opportunities to participate in and benefit from the project's interventions and promote targeted measures to address inequalities and promote the empowerment of women.
2. For adequate regional representation in decision making, a representant of the Technical Secretariat for Women of the Council of Ministers for Women of Central America and Dominican Republic (STM-COMMCA) will be a member of the project board. For adequate regional representation in the technical aspects, the OSPESCA´s Regional Working Group on Gender Equality and Equity in fisheries and aquaculture will be participating in the project implementation.
3. The inclusion of women will be promoted in the project organization. The target is that 30% of the members of the project team, the project board and the technical committee will be women.
4. The EGP as part of the team will have experience in the incorporation of the gender approach. There will also be a person specialized in knowledge management and a communication specialist that will ensure appropriate advice for the project implementation with a gender-sensitive approach.
5. Communication materials, project documents, and publications will use appropriate gender-sensitive, and culturally inclusive language. The process of documenting the project's lessons will pay special attention to recording and informing the contribution and role of women in the implemented activities.

6. The participation in meetings, training courses and other activities will be documented using sex-disaggregated data. If pertinent, this will be applied in the collection of information of consultancies, studies and reports.
7. A TDA development team (Figure 14) of 25 persons will be formed with the participation of (i) three formal delegates from each participating country, and (ii) as an affirmative action, a delegate from the GRT-IEG. The TDA development team will be formed with the participation of at least 30% of women.
8. Each TDA´s national diagnostic analysis team will integrate a specialist in social and gender issues. They will generate seven studies of women participation and contributions to coastal tourism and fisheries supply chains. The national information will be consolidated into one regional analysis and recommendations to be included as a chapter/section of the TDA.

Table 15. Summary of numerical participation of women and men in SICA institutions.

| SICA Institutions | Men | Women | Total |
|---|---|---|---|
| Meeting of Presidents | 8 | 0 | 8 |
| Council of Ministers of Foreign Affairs | 5 | 3 | 8 |
| Executive Committee | 4 | 4 | 8 |
| Secretary and SICA General Secretariat | 9 | 7 | 16 |
| Council of Ministers for Women of Central America and Dominican Republic (COMMCA) | 0 | 7 | 7 |
| Central American Commission for Environment and Development (CCAD) | 7 | 1 | 8 |
| Central American Council for Tourism (CCT) | 7 | 1 | 8 |
| Central American Council for Social Integration (CIS) | 5 | 3 | 8 |
| Total | 45 | 26 | 71 |
| Percentage | 63% | 37% | |

9. An SAP development team (Figure 15) will be formed by 25 persons with the participation of (i) three formal delegates from each participating country, and (ii) as an affirmative action, a delegate from the GRT-IEG.
10. There will at least 30% of women as members of the SAP development team. Women participation in the SAP consultation process will be promoted, it is expected to have at least 50% of women on the meetings.
11. The EGP and ECM will prepare a strategy for awareness raising, participation and articulation among key decision-makers and stakeholders to facilitate regional action and to promote engagement, dialogue and collaboration to support the TDA/SAP process (outputs 1.1 and 2.1) and the construction of the collaborative arrangements for SAP implementation and long-term monitoring (outputs 2.3 and 4.1). During the implementation of this strategy the EGP will document the experience on women participation.
12. The EGP will organise a technical workshop of the GRT-IEG to analyse the experience from the TDA/SAP process and the pilot interventions to outline key ideas to strengthen participation of women in the governance of PACA. Next, the EGP and a core group of the GRT-IEG will prepare draft regional guidelines that will be open for analysis and comments of project partners. Later, the guidelines will be reviewed in a two-day regional meeting. Finally, the guidelines will be formally presented to COMMCA. It is intended that COMMCA will eventually adopt the guidelines.
13. The pilot interventions (output 3.1) will contribute to the development of regional information about the participation and contributions of women in in the billfishes recreational fishing supply chain, in the whale watching value chain, and about women´s participation and decision making in marine spatial planning processes. This information will be analysed and published (see paragraph 216).
14. The collaborative information system with key indicators about PACA´s condition and SAP implementation (output 4.1) will include a set of key indicators with gender-related considerations to be agreed by the Regional Project Board and in the future to be agreed and endorsed by the pertinent national authorities on each country.

15. The EMC and the EGP will organise a regional meeting to identify gender lessons from project implementation. The project will produce a document that systematise experience and gender-related lessons. The provisional title is the role of women in transboundary LME governance and the blue economy (see paragraph 217).

South-South and Triangular Cooperation

16. The Regional project is based on south-south cooperation. The project expresses the interest of the seven participating countries to coordinate common problems. The backbone of the project is the preparation of the Transboundary Diagnostic Analysis and the Strategic Action Programme for the large marine ecosystem. In addition, the project will build upon the strong tradition of collaboration among central American countries and the existing cooperation mechanisms and tools of SICA.

17. The Regional project includes a series of actions for joint development and for the exchange of knowledge, experience and lessons among authorities and key stakeholders of the participating countries. UNDP will catalyse this process by facilitating access to global experiences, expediting collaboration with relevant projects like the CLME+, and motivating alliances among project participants.

Innovativeness, sustainability and potential for scaling up

Environmental sustainability

18. The central axis of the project is to promote ecosystem-based management. The focus of the project is to build governance arrangements for transboundary management of the Pacific Central American large marine ecosystem. The highly participatory approach of the project will contribute to internalise the perspective of the ecosystem management at different levels of society in the participating countries.

19. Climate change will affect PACA and the biodiversity of the area. In this regard, the project will encourage the internalization of climate considerations in the SAP and all interventions.

20. All actions will be framed within the corresponding strategies and national plans of biodiversity and climate change.

Social sustainability

21. The project includes a participatory approach and emphasizes the involvement of key stakeholders in transboundary management of PACA. Measures will be taken to ensure that key stakeholders (fishers, tourist operators, indigenous people, shipping companies, local governments) are represented and participate in the processes of construction of the TDA and the SAP, in the pilot interventions, and in training and knowledge exchange activities.

22. The TDA/SAP process will facilitate multi-level interaction, dialogue and collaboration. A fundamental element will be that the key stakeholders will collaborate to address common problems and will develop relationships based on trust, which will contribute to strengthening social capital.

Institutional sustainability

23. The project is anchored in the environment and fisheries authorities and the ministries of foreign affairs of the participating countries (Table 10Table 10). The TDA/SAP process will motivate that government institutions and non-state entities see their roles and responsibilities in transboundary marine management and blue growth, and therefore mobilise their resources into action. In addition, it is envisioned that SICA will be the institutional framework to sustain regional marine governance among the countries that share PACA. SICA´s Secretary General will be part of the Regional Project Board and three key entities (i.e., OSPESCA, CCAD, COMMCA) will be key project partners.

24. A collaborative framework for long-term reporting of the condition of PACA will be built with pertinent entities (e.g., IATTC, FAO, NOAA), this coalition will bring together knowledge and expertise in support of regional decision making.

25. At the national level, the interventions will integrate multiple private and public actors. It is expected that through this networking, the fundamental elements of the project will continue in the institutional agendas.

Financial sustainability

26. GEF resources will be invested in strategic actions to catalyse regional governance arrangements for transboundary management of PACA. The SAP will outline regional blue growth priorities and therefore it is envisaged that this will motivate involvement of public and private sectors in its implementation. The post-project sustainability of the actions is ensured by their integration into the institutional budgets and commitments of several stakeholders such as the environment and fisheries authorities, local governments and civil society organizations. However, it has to be taken into account the economic impacts derived from the COVID-19 pandemic.

Replicability

27. There is a high probability of replication of the lessons and good practices of the project. GEF resources have been strategically assigned to activities with high potential to catalyse learning. For this purpose, both experience and lessons will be systematically documented and disseminated through the project website, the portals and channels of the project partners and the IW: LEARN platform.

28. It is expected that the lessons learned from the pilot interventions (e.g., MSP, billfish recreational fisheries, whale watching guidelines) will be immediately used in the short term in the countries of the region. The lessons learned from this project will be certainly applicable to various contexts of the planet.

**This project will contribute to the following Sustainable Development Goal (s):**

Sustainable Development Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

The development and endorsement of the TDA and the SAP will directly contribute to the following targets:

1. 14.1. By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.
2. 14.2. By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.
3. 14.4. By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.
4. 14.5. By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.

In addition, the project will indirectly contribute to Sustainable Development Goals 5, 13, 15 and 17. Furthermore the project is in line with UNDP´s Six Signature Solutions, in particular with (i) Governance and (ii) environment

**This project will contribute to the following country outcome (UNDAF/CPD, RPD, GPD):**

1. Costa Rica. UNDAF Strategic Priority 1. Strengthened capacities of public institutions, private organizations and civil society to facilitate and forge innovative, transformative and dialogue-based national pacts and agreements, in order to accelerate the achievement of the SDGs by a sustainable development with equality. Country programme document for Costa Rica (2018-2022). Output 1.1. Systems developed that provide accurate and timely information to help accelerate the SDGs in environmental and social sectors. Indicator 1.1.1. Extent to which updated, disaggregated data is used to monitor progress on national development goals aligned with SDGs.
2. Ecuador. Country programme document for El Salvador (2018-2021). Outcome 2. The acceleration of structural transformations for sustainable development, in particular through innovative solutions that have multiplier effects on all Sustainable Development Goals.
3. El Salvador. Country programme document for El Salvador (2016-2020). UNDAF Outcome 2: The population enjoys greater opportunities for access to a decent employment and sustainable livelihoods, contributing to the productive and inclusive growth.
4. Guatemala. UNDAF 2015 – 2019. Three effects: (i) Impoverished rural populations develop new sustainable economic opportunities to compete in market systems, (ii) The Urban and Rural Development Councils system and related government institutions work together to develop policies and investments that promote the protection, responsible use and conservation of natural resources, as well as the community's resilience to face natural climatic events, and (iii) Indigenous populations, mainly young people and women, are active citizens and participate effectively in decision-making related to development issues at the community, municipal, departmental and national levels.
5. Honduras. UNDAF 2017-2021. Populations in conditions of poverty and vulnerability to food insecurity in prioritised regions increase production and productivity, gain access to decent work, increase income and responsible consumption, while taking into account climate change, conservation and sustainable management of ecosystems.
6. MEXICO COOPERATION FRAMEWORK2020-2025 - OUTCOME 6. By 2025, the Mexican State implements policies, strategies, and programmes that allow moving towards a green economy that promotes the mitigation of climate change and the strengthening of the institutional framework, taking into consideration energy efficiency, promotion of clean and renewable energy, production, consumption, transportation, cities, and sustainable agriculture, with a focus on health, human rights, gender, interculturality, life cycle, and territory. Country Programmed

| | |
|---|---|
| | Document (CPD) Output 5: Strengthened capacities and partnerships between key actors for the promotion of sustainable economies and the fortification of institutional frameworks to create resilience to climate change.. |
| **7.** | Panama. Country programme document for Panama (2016-2020). UNDAF Outcome 3.2: By 2020, the State has strengthened its capacities for the design and implementation of Policies, Plans and Programs that contribute to environmental sustainability and food and nutrition security, adaptation to climate change, disaster risk reduction and resilience build-up |

| | **Objective and Outcome Indicators** | **Baseline** | **Mid-term Target**[54]<br><br>*Expected level of progress before MTR process starts* | **End of Project Target**<br><br>*Expected level when terminal evaluation undertaken* |
|---|---|---|---|---|
| **Project Objective: To promote ecosystem-based management of the Pacific Central American Large Marine Ecosystem through the strengthening of regional governance.** | **Mandatory** Indicator 1: Number of direct project beneficiaries disaggregated by sex (individual people) | *0* | *Number of direct beneficiaries from pilot interventions and project activities at mid-term*<br><br>*Billfishes 8,000 (men)*<br><br>*MSP Mexico 2,000,000 (1,000,000 women, 1,000,000 men)*<br><br>*MSP Costa Rica 2,000 (men)*<br><br>*MSP Panama 500 (100 women, 400 men)*<br><br>*MSP Ecuador 50,000 (25,000 women, 25,000 men)*<br><br>*Cetaceans 48 (8 women, 40 men)*<br><br>*Total 2,060,548* | *Number of direct beneficiaries from pilot interventions and project activities at project end* [55]<br><br>*Billfishes 13,000 (men)*<br><br>*MSP Mexico 3,993,101 (2,026,482 women, 1,966,619 men)*<br><br>*MSP Costa Rica 4,000 (men)*<br><br>*MSP Panama 1053 (163 women, 890 men)*<br><br>*MSP Ecuador 114,356 (56,464 women, 57,892 men)*<br><br>*Cetaceans 103 (17 women, 86 men)*<br><br>*Total 4,125,613* |
| | **Mandatory** Indicator 2: Number of indirect project beneficiaries disaggregated by sex (individual people) | *0* | *Number of indirect beneficiaries from pilot interventions and project activities*[56] | *Population of coastal provinces / departments / states of the* |

54 Target is the change in the baseline value that will be achieved by the mid-term review and then again by the terminal evaluation.

55 See Table 12.

56 See Table 12.

| | Objective and Outcome Indicators | Baseline | Mid-term Target[54]<br><br>*Expected level of progress before MTR process starts* | End of Project Target<br><br>*Expected level when terminal evaluation undertaken* |
|---|---|---|---|---|
| | | | *Billfishes 50,000 (ca., 40% women)*<br><br>*MSP Mexico 27,428,548 (14,041,686 women, 13,386,862 men)*<br><br>*MSP Costa Rica 243,898 (119,085 women, 124,813 men)*<br><br>*MSP Panama 10,000 (8,450 women, 1,550 men)*<br><br>*MSP Ecuador 1,141,904 (503,246 women, 638,658 men)*<br><br>*Cetaceans 2000 (330 women, 1,670 men)*<br><br>*Total 28,876,350* | *participating countries, once SAP has been endorsed.*<br><br>*Mexico: 14,026,592 men, 14,681,627 women, 28,708,219 total*<br><br>*Guatemala: 1,968,727 men, 2,062,021 women, 4,030,748 total*<br><br>*El Salvador: 1,572,379 men, 1,770,202 women, 3,342,581 total*<br><br>*Honduras: 327,418 men, 337,556 women, 664,974 total*<br><br>*Costa Rica: 454,742 men, 437,930 women, 892,672 total*<br><br>*Panama: 1,761,370 men, 1,753,616 women, 3,514,986 total*<br><br>*Ecuador: 3,839,701 men, 3,866,374 women, 7,706,075 total*<br><br>*Total 48,860,255* |
| | **Mandatory** GEF Core Indicators 3: Area of marine habitat under improved practices to benefit biodiversity[57] (hectares). | *0* | *≥50,000,000 ha* | *≥180,965,900 ha* |
| | **Mandatory** GEF Core Indicators 4: Globally over-exploited fisheries moved to more sustainable levels[58] (metric tons). | *0* | *≥40,000 t* | *≥82,000 t* |

57 Area included in the marine spatial planning exercises.

58 Capture Fishery Improvement Projects and sustainable fishing certification in the PACA LME. Mainly from the (i) the long-line fishery for large pelagic fish in Ecuador and Costa Rica, (ii) the purse seine fishery for tuna in Ecuador, and (iii) the purse seine fishery for small pelagic fish in Ecuador and Panama.

| | Objective and Outcome Indicators | Baseline | Mid-term Target[54]<br>*Expected level of progress before MTR process starts* | End of Project Target<br>*Expected level when terminal evaluation undertaken* |
|---|---|---|---|---|
| | | | | |
| | **Mandatory** GEF Core Indicators 5:<br>Number of shared water ecosystems (fresh or marine) under new or improved cooperative management | *0* | *0* | *1 once SAP has been endorsed* |
| | **Mandatory** GEF Core Indicators 6. Level of Transboundary Diagnostic Analysis formulation.<br>1. No progress on TDA development.<br>2. TDA developed. Transboundary issues agreed on based on limited analysis.<br>3. TDA developed. Transboundary issues agreed on based on solid analysis.<br>4. TDA adopted by project board | 1 | 2 | 4 |
| | **Mandatory** GEF Core Indicators 7. Level of Strategic Action Program formulation and implementation.<br>1. No development of SAP.<br>2. SAP developed, including clear targets, commitments and time frames addressing key transboundary concerns.<br>3. SAP signed on at ministerial level.<br>4. Adoption of SAP into National Action Plans (NAPs) and/or SAP commitments incorporated within national sectoral plans. | 1 | 1 | 3 |
| **Project component 1** | *Governance instruments improved at regional level for joint management of PACA* | | | |
| **Project Outcome 1** | *Indicator 8: project specific* | *0* | *Women ≥30%* | *Women ≥30%* |

| | Objective and Outcome Indicators | Baseline | Mid-term Target[54]<br>*Expected level of progress before MTR process starts* | End of Project Target<br>*Expected level when terminal evaluation undertaken* |
|---|---|---|---|---|
| ***Common understanding of the regional LME challenges and opportunities supported by the participant countries.*** | *Percentage of women and people from non-state entities[59] in the TDA Development team* | | *Non-state entities ≥30%* | *Non-state entities ≥30%* |
| | *Indicator 9: project specific*<br>*Level of development of long-term regional agreement to update the PACA status report*<br>1. No agreement/cooperation framework in place<br>2. Cooperation agreement negotiated but not yet signed<br>3. Cooperation agreement signed<br>4. Cooperation agreement under implementation | *1* | *2* | *3* |
| **Outputs to achieve Outcome 1** | *1.1. Transboundary Diagnostic Analysis (TDA) of the Pacific Central American Coastal Large Marine Ecosystem prioritizes threats to LME, their immediate and root causes.* | | | |
| **Outcome 2**<br>**Collaborative framework and governance arrangements adopted by the participating countries to implement PACA´s SAP** | *Indicator 10: project specific*<br>*Level of Regional Governance Mechanism to support SAP implementation.*<br>*1. No governance mechanism in place*<br>*2. Regional governance mechanism negotiated but not yet adopted*<br>*3. Countries adopt regional governance mechanism*<br>*4. Regional governance mechanism entered into force* | *1* | *2* | *3*<br>*Governance mechanism for SAP implementation within the framework of SICA.* |
| | *Indicator 11: project specific* | *0* | *0* | *≥400 people (women ≥50%[60], non-state entities ≥50%)* |

59 i.e., Entities that are independent of the government such as civil society organizations, farmers associations or community groups.

60 This is a challenging target, but the project will strive to achieve it.

| | Objective and Outcome Indicators | Baseline | Mid-term Target[54]<br>*Expected level of progress before MTR process starts* | End of Project Target<br>*Expected level when terminal evaluation undertaken* |
|---|---|---|---|---|
| | *Number of people that participate in SAP consultation (percentage of women and non-state entities)* | | | |
| | *Indicator 12: project specific*<br>*Level of adoption of regional guidelines to strengthen participation of women in the governance of PACA.*<br>*1. No progress on development of guidelines.*<br>*2. Guidelines developed.*<br>*3. Guidelines presented to COMMCA*<br>*4. Guidelines endorsed by COMMCA* | *1* | *1* | *3* |
| **Outputs to achieve Outcome 2** | *2.1 Strategic Action Programme (SAP) of legal, policy and institutional reforms, and needed investments, for sustainable utilization of the Pacific Central American Coastal large marine ecosystem endorsed at ministerial level by participating countries.*<br>*2.2 Collaborative framework and governance arrangements to implement PACA´s SAP endorsed by participating countries.*<br>*2.3. Strategy for awareness raising, participation and articulation among key decision-makers and stakeholders.*<br>*2.4. Training of key stakeholders (public and private) on ecosystem-based management of large marine ecosystems.* | | | |
| **Project component 2** | *Initial on the ground pilot active actions to address common key issues and to advance collaborative work and replication* | | | |
| **Outcome 3**<br>**Tangible impacts generated in demonstrative pilot interventions implemented to contribute to the development and buy-in of the SAP and to decision making on prioritized topics in the region.** | *Indicator 13: project specific*<br>*Level of adoption of a regional plan for the management of sailfish and marlin recreational fisheries (family Istiophoridae)*<br>*1. No progress on development of regional plan*<br>*2. Regional plan prepared*<br>*3. Regional plan presented to national fisheries authorities*<br>*4. Regional plan endorsed by national fisheries authorities* | *1* | *2* | *3* |

| | Objective and Outcome Indicators | Baseline | Mid-term Target[54]<br>*Expected level of progress before MTR process starts* | End of Project Target<br>*Expected level when terminal evaluation undertaken* |
|---|---|---|---|---|
| | *Indicator 14: project specific*<br>*Level of development of regional guidelines for marine spatial planning in PACA*<br>*1. No progress on development of guidelines.*<br>*2. Guidelines developed.*<br>*3. Guidelines agreed by project board*<br>*4. Guidelines endorsed by pertinent national authorities on each country* | *1* | *1* | *3* |
| | *Indicator 15: project specific*<br>*Level of development of regional guidelines for whale watching in PACA*<br>*1. No progress on development of guidelines.*<br>*2. Guidelines developed.*<br>*3. Guidelines agreed by project board*<br>*4. Guidelines endorsed by pertinent national authorities on each country* | *1* | *1* | *3* |
| **Outputs to achieve Outcome 3** | *3.1. Three pilot interventions on common key issues of the Pacific Central American Coastal Large Marine Ecosystem implemented.*<br>*3.2. Best practice and lessons from the pilots systematized, accessible and available to all stakeholders in the region* | | | |
| **Project component 3** | *Knowledge management* | | | |
| **Outcome 4**<br>**Collaborative information system developed with key indicators on PACA´s condition and SAP implementation** | *Indicator 16: project specific*<br>*Level of adoption of a set of key indicators about the condition of PACA and SAP implementation.*<br>*1. No progress on development of set of key indicators.* | *1* | *2* | *3* |

| | Objective and Outcome Indicators | Baseline | Mid-term Target[54]<br><br>*Expected level of progress before MTR process starts* | End of Project Target<br><br>*Expected level when terminal evaluation undertaken* |
|---|---|---|---|---|
| | *2. Set of key indicators developed.*<br><br>*3. Set of key indicators agreed by project board.*<br><br>*4. Set of key indicators endorsed by pertinent national authorities on each country.* | | | |
| **Outputs to achieve Outcome 4** | *4.1. Development and adoption of a suite of International Waters process, stress reduction and environmental/socioeconomic status indicators and implementation mechanisms to monitor PACA´s condition and SAP implementation.* | | | |
| **Outcome 5**<br><br>**Lessons on collaborative actions to manage PACA shared in the region and worldwide (south-south cooperation).** | *Indicator 17: project specific*<br><br>*Number of people (men and women, by country) who have participated in events for dissemination of lessons and best practices (e.g., workshops, IWC)* | *0* | *≥ 800 (>30% women)* | *≥ 1,600 (>30% women)* |
| | *Indicator 18: project specific*<br><br>*Number of visitors per month (annual average) recorded in the network of electronic platforms used to disseminate project´s learnings and best practice* | *Visits 0*<br><br>*Unique visits 0* | *Visits >2,000*<br><br>*Unique visits >1,500* | *Visits >4,000*<br><br>*Unique visits >3,000* |
| **Outputs to achieve Outcome 5** | 5.1. Website for dissemination of lessons and best practice, linked to partners´ portals and IW: LEARN.<br><br>5.2. Project lessons documented and disseminated. | | | |

Monitoring and Evaluation (M&E) Plan

8. The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored annually and evaluated periodically during project implementation. If baseline data for some of the results indicators is not yet available, it will be collected during the first year of project implementation. The Monitoring Plan included in Annex 4 details the roles, responsibilities, frequency of monitoring project results.

9. Project-level monitoring and evaluation (M&E) will be undertaken in compliance with UNDP requirements as outlined in the UNDP programme and operations policies and procedures (POPP) and the UNDP Evaluation Policy61. The UNDP Country Office in the host country is responsible for ensuring full compliance with all UNDP project monitoring, quality assurance, risk management, and evaluation requirements. Additional mandatory GEF-specific monitoring and evaluation requirements will be undertaken in accordance with the GEF policy on monitoring62 the GEF evaluation policy63 and other relevant GEF policies64. The costed M&E plan included below, and the Monitoring plan in Annex 4, will guide the GEF-specific M&E activities to be undertaken by this project.

10. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report.

Additional GEF monitoring and reporting requirements

Inception Workshop and Report

11. A Regional project inception workshop will be held within 60 days of project CEO endorsement. Before this event it will be necessary that: (i) the PRODOC document has been signed by the corresponding parties of the host country and at least two other participating countries, (ii) the agreement with the implementing partner has been signed, (iii) the OPM and the PTA have been contracted.

12. The inception workshop will aim to:

1. Familiarize key stakeholders with the detailed project strategy and discuss any changes that may have taken place in the overall context since the project idea was initially conceptualized that may influence its strategy and implementation.

2. Discuss the roles and responsibilities of the project team, including reporting and communication lines, stakeholder engagement strategies and conflict resolution mechanisms.

61 http://web.undp.org/evaluation/policy.shtml

62 https://www.thegef.org/sites/default/files/documents/EN_GEF.C.56.03.Rev_.01_Policy_on_Monitoring.pdf

63 https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C56_02_GEF_Evaluation_Policy_May_2019_0.pdf

64 https://www.thegef.org/documents/policies

3. Review the results framework and, if pertinent, adjust the indicators, means of verification and monitoring plans.

4. Discuss reporting, monitoring and evaluation roles and responsibilities, and if pertinent, (i) adjust the monitoring and evaluation budget, (ii) identify national / regional entities that could be involved in the monitoring and evaluation actions of the project, (iii) discuss the role of the GEF operational focal points and other stakeholders in project monitoring and evaluation.

5. Update and review responsibilities for monitoring project plans and strategies, including the risk log, UNDP's Social and Environmental Screening Procedure (SESP), safeguards requirements, project grievance mechanism, gender plan, knowledge management strategy, communication strategy and other relevant strategies.

6. Review financial reporting procedures and budget monitoring and other mandatory requirements and agree on the arrangements for the annual audit.

7. Plan and schedule the meetings of the project board and finalise the annual work plan for the first year.

8. Formally launch the project.

9. The OPM and the PTA will prepare the inception report no later than two weeks after the inception workshop. The final version of the inception report will be cleared by the UNDP country office in the host country and the UNDP-GEF Regional Technical Advisor, and then approved by the Steering Committee.

GEF project implementation report (PIR)

10. The annual GEF project implementation report (PIR) covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR. The PIR submitted to the GEF will be shared with the project board. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

11. The OPM, the UNDP Country Office in the host country, and the UNDP-GEF Regional Technical Advisor will provide objective input to the annual GEF PIR. The OPM will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the GEF project implementation report. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.

12. The PIR that is submitted to the GEF every year must be in English and it will be presented to the project board. The OPM will coordinate as necessary, the inputs for the PIR of the GEF operational focal points and other key stakeholders of the participating countries, as appropriate.

13. The final PIR of the project, together with the report of the terminal evaluation and the corresponding management response will be the final package of the project report. The final report project package will be analysed with the project board of the project during the final review meeting to identify lessons learned and opportunities to expand the outcomes.

GEF Core Indicators

14. In line with its objective and the corresponding focal areas / GEF programmes, the present project will apply the GEF-7 Core indicators submitted along with the CEO Endorsement request for this project.
15. The GEF Core indicators included as Annex 12 will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to MTR and TE. Note that the project team is responsible for updating the indicator status. The updated monitoring data should be shared with MTR/TE consultants prior to required evaluation missions, so these can be used for subsequent ground truthing. The methodologies to be used in data collection have been defined by the GEF and are available on the GEF website65.

Independent midterm review

16. An independent mid-term review process (MTR) will begin after the second PIR has been submitted to the GEF, and the MTR report will be submitted to the GEF in the same year as the third PIR.
17. The MTR findings and the management response will be incorporated as recommendations for enhanced implementation during the final half of the project's duration.
18. The terms of reference, the review process and the MTR report will follow the standard templates and guidance prepared by the UNDP Independent Evaluation Office for GEF-financed projects66. As noted in this guidance, the evaluation will be "independent, impartial and rigorous". The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the consultants should not be in a position where there may be the possibility of future contracts regarding the project under review.
19. The GEF Operational Focal Points of the participating countries and other stakeholders will be involved and consulted during the midterm review process. Additional quality assurance support will be available from the BPPS/GEF Directorate. The final MTR report will be available in English and will be cleared by the UNDP Country Office in the host country and the UNDP-GEF Regional Technical Adviser and approved by the project board.
20. The final MTR report and the MTR terms of reference will be publicly available in English and will be posted on the UNDP Evaluation Resource Centre (ERC) no later than one month after the process has been finalised. A management response to MTR recommendations will be posted in the ERC within six weeks of the MTR report's completion.
21. The present Pilot Project in Mexico will be included in the Mid term review of the Regional Project

Terminal Evaluation

22. An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance for GEF-financed projects available on the UNDP Evaluation Resource Center.

23. The evaluation will be 'independent, impartial and rigorous'. The evaluators that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.

65 See GEF guidelines on core indicators and sub-indicators at www.thegef.org/documents/policies-guidelines.

66 http://web.undp.org/evaluation/guidance.shtml#gef

24. The terminal evaluation process will begin three months before the operational closure of the project, facilitating that the evaluation mission proceeds while the project team is still operating, but making sure that the project is close enough to its conclusion, so that the evaluation team reach conclusions on key aspects such as the sustainability of the outcomes achieved. It is expected that the terminal evaluation is performed in the third quarter of the fourth year of the project, and that the operational closure is carried out during the last quarter of the same year.

25. The terms of reference terms, the evaluation process and the final TE report will follow the standard formats and guidelines of the UNDP Independent Evaluation Office for GEF-financed projects67. As stipulated in this guidance, the evaluation will be "independent, impartial and rigorous". The consultants that will be hired for this task will be independent from the entities that participated in the design, executing or advising on the project to be evaluated. Equally, the consultants should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.

26. The GEF operational focal points of the participating countries and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support will be available from the BPPS/GEF directorate.

27. The terminal evaluation report will be cleared by the UNDP country office in the host country and the BPPS/GEF Regional Technical Advisor and approved by the project board. The TE report and the corresponding terms of reference will be publicly available in English and posted on the UNDP ERC no later than one month after the evaluation process has been finalised. A management response to the TE recommendations will be posted to the ERC within six weeks of the TE report's completion.

28. The present Pilot Project in Mexico will be included in the Final evaluation of the Regional Project

Final Report

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

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

30. To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy68 and the GEF policy on public involvement69.

Knowledge management

67 http://web.undp.org/evaluation/documents/guidance/GEF/UNDP-GEF-TE-Guide.pdf

68 See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/

69 See https://www.thegef.org/gef/policies_guidelines

31. The Regional project team will ensure extraction and dissemination of lessons learned and good practices to enable adaptive management and upscaling or replication at local and global scales. Results will be disseminated to targeted audiences through relevant information sharing fora and networks. The project will contribute to scientific, policy-based and/or any other networks as appropriate (e.g., by providing content, and/or enabling participation of stakeholders/beneficiaries). As indicated before (see outcome 5), there will be close coordination and collaboration with IW: LEARN and at least 1% of GEF financing will support learning activities through IW: LEARN.

32. The Regional project team will identify, analyse and share the learning that could be beneficial for the design and implementation of similar projects and the lessons will be widely disseminated. There will be a continuous exchange of information between this project and other projects of similar approach in the participating countries, region and worldwide.

33. The lessons from the project will be collected into three documents which systematise experiences:

1. Application of the TDA / SAP process in the Pacific Central American Coastal Large Marine Ecosystem.

2. Advancing governance in the Pacific Central American Coastal Large Marine Ecosystem.

3. Visibility of the barriers for participation, representation and decision making of women in shared coastal and marine resources management.

4. These documents will be (i) in a dissemination format (e.g., visually appealing, plain language) to be accessible to a wide audience, and (ii) available to be downloaded from the web. Each document will include summaries in Spanish and English.

5. In addition, a memoir of the project that systematises both achievements and learnings will be prepared. The memoir will be in a simple and very graphic format, so that it is accessible to the general public. The document will have executive summaries in Spanish and English and it will be available to be downloaded from the web.

Mandatory GEF monitoring and evaluation requirements and budget

6. Monitoring and Evaluation budget is implemented and coordinated by WWF as the IP for the regional project.

Governance and Management Arrangements of the Project
Roles and responsibilities of the project's governance mechanism

Implementing partner

7. The Implementing Partner[70] for this Pilot Project is the Instituto de Ecología de la Universidad Nacional Autónoma de México, The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document. The implementing partner will concentrate on project administration, strategic

70 The "implementing partner" corresponds to the "project executing entity" described in the GEF policies. This entity receives project specific GEF funding from a GEF Agency (Implementing Agency) to execute a GEF project, or parts thereof, under the supervision of the same GEF Agency.

decisions will be taken together by UNDP and the Project Board with the National institutions. This will be detailed in the agreement to be signed with the implementing partner.

8. The Laboratorio Nacional de Ciencias de la Sostenibilidad (LANCIS) of the Instituto de Ecología de la Universidad Nacional Autónoma de México (UNAM) will execute national activities in Mexico as part of the regional pilot on marine spatial planning (output 3.1.1) and to produce the Ecological Management Programme for Mexico´s South Central Pacific Region.

9. The Implementing Partner is responsible for executing this project. Specific tasks include:

1. Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
2. Risk management as outlined in this Project Document;
3. Procurement of goods and services, including human resources;
4. Financial management, including overseeing financial expenditures against project budgets;
5. Approving and signing the multiyear workplan;
6. Approving and signing the combined delivery report at the end of the year; and,
7. Signing the financial report or the funding authorization and certificate of expenditures.

Responsible Parties for pilot project

1. NA

Project stakeholders and target groups

2. The Regional project partners are the environment, fisheries, and foreign affairs authorities of the seven participating countries (Table 10). In addition, SICA is a key partner and most probably will be the basis for the future joint management of PACA. The project will directly collaborate and interact with the following SICA entities: SG-SICA, CCAD, STM-COMMCA, and OSPESCA (see section Partnerships).

3. Representatives of SG-SICA and STM-COMMCA will be part of the Regional Projec Board (Figure 26). In addition, to ensure that gender issues are properly addressed delegates of OSPESCA´s Regional Working Group on Gender Equality and Equity in fisheries and aquaculture (GRT-IEG) and STM-COMMCA will be part of the TDA and SAP development teams, respectively.

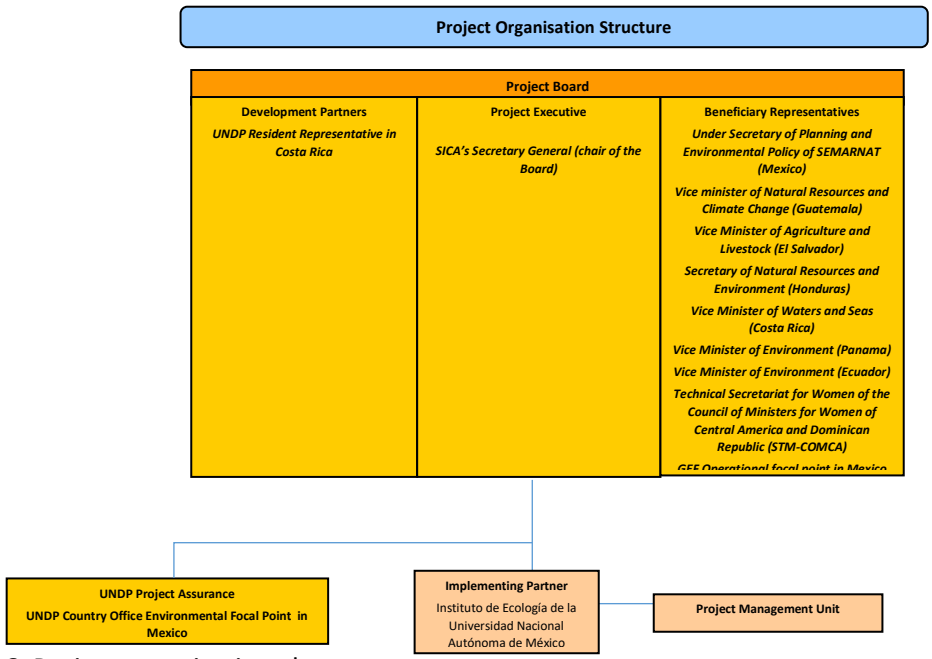
4. There will be mid and end meetings with the key stakeholders and direct beneficiaries of each pilot intervention (see paragraph 214214). In these meetings, the progress will be jointly reviewed, and comments, feedback and recommendations will be received for the execution of the project.

5. UNDP is accountable to the GEF for the implementation of this project. This includes oversight of project execution to ensure that the project is being carried out in accordance with agreed standards and provisions. UNDP is responsible for delivering GEF project cycle management services comprising project approval and

start-up, project supervision and oversight, and project completion and evaluation. UNDP is responsible for the Project Assurance role of the Project Board. The UNDP country office in Costa Rica will be the lead entity for this regional project.

Project organisation structure

6. The project organisation structure is presented in Figure 26.




**Second line of defense**

1. Regional Bureau oversees RR and Country Office compliance at portfolio level.
2. BPPS NCE RTA oversees technical assurance and GEF compliance. BPPS NCE PTA oversees RTA function.
3. UNDP NCE Executive Coordinator and Regional Bureau Deputy Director can revoke DOA/cance/suspend Project or provide enhanced oversight.

Figure 26. Project organization chart

Project Board

7. The Project Board (also called Project Steering Committee) is responsible for making by consensus, management decisions when guidance is required by the operations manager, including recommendations for UNDP/Implementing Partner approval of project plans and revisions, and addressing any project level grievances. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. The terms of reference of the Project Board are in Annex 7.

8. In case consensus cannot be reached within the Board, the UNDP Resident Representative (or their designate) of the host country will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.

9. Specific responsibilities of the Project Board include:

1. Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;

2. Address project issues as raised by the operations manager;

3. Provide guidance on new project risks, and agree on possible mitigation and management actions to address specific risks;

4. Agree on operation manager´s tolerances as required, within the parameters set by UNDP-GEF, and provide direction and advice for exceptional situations when the operation manager´s tolerances are exceeded;

5. Advise on major and minor amendments to the project within the parameters set by UNDP-GEF;

6. Ensure coordination between various donor and government-funded projects and programmes;
7. Ensure coordination with various government and international organisations and their participation in project activities;
8. Track and monitor co-financing for this project;
9. Review the project progress, assess performance, and appraise the Annual Work Plan for the following year;
10. Appraise the annual GEF project implementation report (PIR), including the quality assessment rating report;
11. Ensure commitment of human resources to support project implementation, arbitrating any issues within the project;
12. Review combined delivery reports (CDR) prior to certification by the implementing partner;

13. Provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;

14. Address project-level grievances;

15. Approve the project Inception Report, Mid-term Review and Terminal Evaluation reports and corresponding management responses;

16. Review the final project report package during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

17. Ensure highest levels of transparency and take all measures to avoid any real or perceived conflicts of interest.

18. In addition, in this project, it is the responsibility of the Project Board to:

1. Observe the development of the TDA / SAP process;

2. Keep informed high-level authorities (e.g., ministries, office of the president) of the development and achievements of the TDA / SAP process;

3. Adopt the TDA that is submitted by the TDA development team; and

4. Coordinate the steps for the high-level endorsement of the SAP.

5. The Project Board will be formed by eleven persons (Figure 26). Each board member will have an officially designated alternate person. The alternate board members of the participating countries are listed in Table 16. The alternate board member will be kept informed of the project developments and will be present at a meeting when the principal member is unable to attend. The countries will aim to have at least 30% women members in the project board.

6. The operations manager of the project will act as secretary of the committee (board secretariat), but without vote. The principal technical advisor and a representative of the Implementing Partner will also participate in the board meetings, but without vote. As necessary, the board will invite other persons to attend the meetings as observers without vote. In its first meeting, the board will agree its operating procedures. Until then, the terms of reference for the board are included in Annex 7.

7. The composition of the Project Board must include the following roles:

Project executive

8. The project executive is an individual who represents ownership of the project and chairs the Project Board. In this project the executive is SICA´s Secretary General.

9. The executive's role is to ensure that the project is focused throughout its life cycle on achieving its objectives and delivering outputs that will contribute to higher level outcomes. The executive must ensure that the project gives value for money, ensuring cost-conscious approach to the project, balancing the demands of beneficiary and suppler.

10. Specific responsibilities of the executive, as part of the above responsibilities for the Project Board, are:

1. Ensure that there is a coherent project organisation structure and logical set of plans;

2. Set tolerances in the annual workplan and other plans as required for the operations manager;

3. Monitor and control the progress of the project at a strategic level;

4. Ensure that risks are being tracked and mitigated as effectively as possible;

5. Brief relevant stakeholders about project progress;

6. Organise and chair Project Board meetings.

Beneficiary representatives

7. The beneficiary representatives are individuals or groups representing the interests of those who will ultimately benefit from the project. Their primary function within the board is to ensure the realization of project results from the perspective of project beneficiaries. In the present project, the beneficiary representative are:

    1. Under Secretary of Environmental Policy and Natural Resources of SEMARNAT (Mexico)
    2. Vice minister of Natural Resources and Climate Change (Guatemala)
    3. Vice Minister of Agriculture and Livestock (El Salvador)
    4. Secretary of Natural Resources and Environment (Honduras)
    5. Vice Minister of Waters and Seas (Costa Rica)
    6. Vice Minister of Environment (Panama)
    7. Vice Minister of Environment (Ecuador)
    8. Technical Secretariat for Women of the Council of Ministers for Women of Central America and Dominican Republic (STM-COMCA)
    9. GEF Operational focal point in Mexico

10. Specific responsibilities of the beneficiary representatives as part of the above responsibilities for the Project Board, are:

1. Prioritize and contribute beneficiaries' opinions on Project Board decisions on whether to implement recommendations on proposed changes;

2. Ensure that the specification of the beneficiary's needs is accurate, complete and unambiguous;

3. Safeguard that the implementation of activities at all stages is monitored to ensure that they will meet the beneficiary's needs and are progressing towards that target;

4. Guarantee that the impact of potential changes is evaluated from the beneficiary point of view;

5. Warrant that the risks to the beneficiaries are frequently monitored.

Development Partner

6. These are Individuals or groups representing the interests of the parties concerned that provide funding and/or technical expertise to the project. The development partner is UNDP´s resident representative.

Table 16. Country representatives on the Pilot Project Board.

| Country (from north to south) | Principal board member | Alternate board member |
|---|---|---|
| Mexico | Under Secretary of Environmental Policy and Natural Resources of SEMARNAT | Coordinator General of Operation and Institutional Strategy of CONAPESCA |

Note: During project development the countries agreed that exceptionally, if none of the principal or alternate board members can participate, another person with the rank of Director or its equivalent, accredited in writing and with decision-making power, may be delegated.

Technical committee of the Regional Project

7. The Regional Technical Committee is an inter-institutional multinational coordination space. Its main roles are to:

1. Ensure fluid inter-sectoral communication and collaboration within and among the countries.

2. Provide technical guidance to the operations manager and the project unit to support the achievement of the project outcomes.

3. Review and pre-approve the annual work plan and its corresponding budget before they are submitted for consideration of the Project Board.

4. Appraise and comment the draft PIR before it submitted for consideration of the Project Board.

5. Agree on the TDA and SAP before they are submitted to the Project Board.

6. The Regional technical committee will be composed by formally designated delegates from the environment, fisheries and foreign affairs authorities of each participating country (three persons per country) (Table 10). The chair of the committee will be elected by its members. In its first meeting, the Technical Committee will agree its operating procedures. The countries will aim to have at least 30% of women as members of the technical committee. The terms of reference of the committee are in Annex 7.

7. The members of the Regional Technical Committee will decide on inviting other entities that consider relevant. If necessary, working groups will be established to facilitate inter-institutional coordination. The members of the committee will decide about the creation, mandate and composition of the working groups.

Regional Project Management Unit

8. The Regional project management unit is headed by the operations manager (OPM) and includes seven members (Figure 26) who will be contracted by the implementing partner solely for the execution of this project. The implementing partner will apply strict measures to prevent that the project´s personnel is involved in other matters or activities, in particular of the implementing partner.

9. The members of the Regional project management unit will be based on the host country. At least 30% of its members will be women. Table 17 summarises the main responsibilities of the members of the project management unit and Annex 7 has the terms of reference for each post.

Table 17. Main technical responsibilities of the members of the Regional Project Coordination Unit.

| Output | Member of the project unit | | | | | |
|---|---|---|---|---|---|---|
| | **Principal technical advisor (PTA)** | **Gender and participation specialist (EGP)** | **Specialist in marine resources management (EMR)** | **Knowledge management specialist (EMC)** | **Communications specialist (ECM)** | **Monitoring and evaluation specialist (EME)** |
| 1.1. Transboundary Diagnostic Analysis (TDA) of the Pacific Central American Coastal Large Marine Ecosystem prioritizes threats to LME, their immediate and root causes and opportunities sustainable development | Oversee TDA preparation and provides strategic guidance. Responsible for TDA endorsement by the project board. | Together with the EMR are equally responsible for the development of the TDA. Ensures that social and gender issues are mainstreamed in the TDA. | Together with the EGP are equally responsible for the development of the TDA. Ensures the thorough implementation of the TDA/SAP process. | Ensures that best practice and lessons of the TDA development process are thoroughly documented. | Ensures that the target audiences are informed and receive key messages about TDA development. | Ensures that the development of the TDA is thoroughly monitored and assessed. |
| 2.1 Strategic Action Programme (SAP) of legal, policy and institutional reforms, and needed investments, for sustainable utilization of the Pacific Central American Coastal large marine ecosystem endorsed at ministerial level by participating countries. | Oversee SAP preparation, provides strategic guidance and ensures involvement of key national authorities and regional organisations. Responsible for SAP endorsement. | Together with the EMR are equally responsible for the development of the SAP. Ensures that social and gender issues are mainstreamed in the SAP. | Together with the EGP are equally responsible for the development of the SAP. Ensures the thorough implementation of the TDA/SAP process. | Ensures that best practice and lessons of the SAP development process are thoroughly documented. | Ensures that the target audiences are informed and receive key messages about SAP development. | Ensures that the development of the SAP is thoroughly monitored and assessed. |
| 2.2 Collaborative framework and governance arrangements to implement PACA´s SAP endorsed by participating countries. | Responsible for the development of the governance arrangements | Ensures that the governance arrangements include adequate representation of women and nonpublic stakeholders. | Ensures that the governance arrangements incorporate collaborative conservation and sustainable use of natural resources | Ensures that the lessons from the development and implementation of the governance arrangements are thoroughly documented and that information about the governance arrangements is widely distributed. | Ensures that the target audiences receive key messages during the development and implementation of the governance arrangements. | Ensures that the development and implementation of the governance arrangements are thoroughly monitored and assessed. |
| 2.3. Strategy for awareness raising, participation and articulation among key decision-makers and stakeholders. | Oversee implementation of the strategy and engage high-level national authorities and key regional organisations | Responsible for the development and implementation of the strategy | Contributes to engage key stakeholders. | Ensures synergy with the knowledge transfer strategy and supports the implementation of the strategy. | Ensures synergy with the communication strategy, contributes communication inputs, and supports the implementation of the strategy. | Ensures that the development and implementation of the strategy is thoroughly monitored and assessed. |
| 2.4. Training of key stakeholders (public and private) on ecosystem-based | Oversee training activities | Ensures that training include social and gender considerations | Responsible for implementation of training activities. | Supports the implementation of training activities. | Ensures that the target audiences are informed and receive key messages. | Ensures that the development and implementation of training |

| Output | Member of the project unit | | | | | |
|---|---|---|---|---|---|---|
| | **Principal technical advisor (PTA)** | **Gender and participation specialist (EGP)** | **Specialist in marine resources management (EMR)** | **Knowledge management specialist (EMC)** | **Communications specialist (ECM)** | **Monitoring and evaluation specialist (EME)** |
| management of large marine ecosystems. | | | | | | activities are thoroughly monitored and assessed. |
| 3.1. Three pilot interventions on common key issues of the Pacific Central American Coastal Large Marine Ecosystem implemented. | Oversee implementation of pilots and ensure they maintain a regional scope | Ensures that the pilots implement sound participatory methods, duly engage key stakeholders, and include social and gender considerations | Responsible for implementation of pilots. | Ensures that pilots apply methods and tools to document best practice and lessons. | Ensures that target audiences are adequately informed and receive key messages. | Ensures that pilot implementation is thoroughly monitored and assessed. |
| 3.2. Best practice and lessons from the pilots systematized, accessible and available to all stakeholders in the region | Ensure that lessons are documented and presented to high-level national authorities, key regional organisations, and the international community | Ensures that lessons capture social and gender aspects. | Together with the EMC are equally responsible for documentation and dissemination of best practice and lessons. | Together with the EMR are equally responsible for documentation and dissemination of best practice and lessons. | Ensures that best practice and lessons are adequately communicated to target audiences. | Contributes to the identification of lessons and best practice. |
| 4.1. Development and adoption of a suite of International Waters process, stress reduction and environmental / socioeconomic status indicators and implementation mechanisms to monitor PACA´s condition and SAP implementation. | Responsible for the development of the collaborative mechanism to sustain long-term reporting of the condition of PACA | Ensures that long-term reports include pertinent social and gender indicators. | Ensures that long-term reports include pertinent indicators. | Responsible for the development and adoption of indicators. | Ensures that target audiences are adequately informed and receive key messages. | Ensures that development and adoption of indicators is thoroughly monitored and assessed. |
| 5.1. Website for dissemination of lessons and best practice, linked to partners´ portals and IW:LEARN. | Oversee development of collaborative portal for long-term reporting of the condition of PACA | Ensures synergy with the awareness raising strategy and that inclusive language with gender perspective is used. | Ensures that website has content which is relevant for key stakeholders. | Responsible for the development and operation of the project´s website and the portal for long-term reporting of the condition of PACA | Responsible for the development of the communication strategy. Ensures that website uses inclusive, intercultural-sensitive and gender-sensitive language. | Ensures that the development and operation of the project´s website and the portal for long-term reporting of the condition of PACA are thoroughly monitored and assessed. |

| Output | Member of the project unit | | | | | |
|---|---|---|---|---|---|---|
| | **Principal technical advisor (PTA)** | **Gender and participation specialist (EGP)** | **Specialist in marine resources management (EMR)** | **Knowledge management specialist (EMC)** | **Communications specialist (ECM)** | **Monitoring and evaluation specialist (EME)** |
| 5.2. Project lessons documented and disseminated. | Ensure that lessons are documented and presented to high-level national authorities, key regional organisations, and the international community | Ensures synergy with the awareness raising strategy, contributes to document and disseminate project lessons, and assures that lessons capture social and gender aspects. | Contributes to document and disseminate project lessons. | Responsible for the development of the knowledge transfer strategy and the documentation and dissemination of project lessons. | Ensures synergy with the communication strategy, that the project´s learning documents use inclusive, intercultural-sensitive and gender-sensitive language, and that target audiences receive key messages. | Ensures that documentation and dissemination of project lessons is thoroughly monitored and assessed. |

Operations manager

10. The operations manager has the authority to run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Project Board. The Implementing Partner appoints the operations manager, who must be different from any Implementing Partner's representative in the Project Board.

11. The operations manager's primary responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. The operations manager will inform the Project Board and the Project Assurance roles of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted.

12. The operations manager will remain on contract until the Terminal Evaluation report and the corresponding management response have been finalized and the required tasks for operational closure and transfer of assets are fully completed.

13. The operations manager will ensure fluid communication and coordination among project partners, responsible parties and UNDP, as well as other entities that contribute to project execution (e.g., local governments, civil society organizations, international organisations).

UNDP Project Assurance

*14.* UNDP performs the quality assurance role and supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed, and conflict of interest issues are monitored and addressed. The Project Board cannot delegate any of its quality assurance responsibilities to the operations manager. UNDP provides a three – tier oversight services involving the UNDP Country Offices and UNDP at regional and headquarters levels – which is funded by the GEF agency fee. Project assurance is totally independent project execution.

Project Extensions

15. The UNDP Resident Representative and the UNDP-NCE Executive Coordinator must approve all project extension requests. Note that all extensions incur costs and the GEF project budget cannot be increased. A single extension may be granted on an exceptional basis and only if the following conditions are met: one extension only for a project for a maximum of six months; the project management costs during the extension period must remain within the originally approved amount, and any increase in PMC costs will be covered by non-GEF resources; the UNDP Country Office oversight costs in excess of the CO's Agency fee specified in the DOA during the extension period must be covered by non-GEF resources.

Financial Planning and Management

16. The total cost of the Mexico´s pilot project is USD 18,098,103.58. This is financed through a GEF grant of USD 348,450 71 administered by UNDP, and USD 17,749,653.58 72 in other co-financing. UNDP, as the GEF Implementing Agency, is responsible for the oversight of the GEF resources and the cash co-financing transferred to UNDP bank account only.

17. Confirmed Co-financing: The actual realization of project co-financing will be monitored during the mid-term review and terminal evaluation process and will be reported to the GEF. Co-financing will be used for the following project activities/outputs:

| Co-financing source | Co-financing type | Co-financing amount |
|---|---|---|
| CONANP | In kind | USD 500,000 |
| LANCIS | | USD 175,000 |
| CONAPESCA | In kind | USD 4,548,000 |
| PROFEPA | In kind | USD 30,465.54 |
| SCT | In kind | USD 11,649,169.15 |
| SEMAEDESO Oaxaca | In kind | USD 223,373.90 |
| SEMAHN Chiapas | In kind | USD 199,404.38 |
| SEMAR | In kind | USD 422,146.69 |
| SEMARNAT Colima | In kind | USD 1,403.31 |
| SEMARNAT Oaxaca | In kind | USD 690.61 |
| TOTAL | | USD 17,749,653.58 |

18. Budget Revision and Tolerance: As per UNDP requirements outlined in the UNDP programme and operations policies and procedures (POPP), the project board will 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 Project Board. Should the following deviations occur, the project manager and UNDP Country Office in the host country will seek the approval of the UNDP-GEF team to ensure accurate reporting to 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.

19. Any over expenditure incurred beyond the available GEF grant amount will be absorbed by non-GEF resources (e.g. UNDP Target for Resource Assignment from the Core (TRAC) or cash co-financing).

20. Audit: The project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies. Audit cycle and process must be discussed during the Inception workshop.

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

71 This amount is for the pilot project of MSP in Mexico.

72 This amount is the co-financing provided by Mexico for the whole project, including the pilot.

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

22. Operational completion: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. **Operational closure must happen at the end date calculated by the approved duration after the Project Document signature or at the revised operational closure date as approved in the project extension. Any expected activity after the operational date requires project extension approval**. The Implementing Partner through a project board decision will notify the UNDP Country Office in the host country when operational closure has been completed. At this time, the relevant parties will have already agreed and confirmed in writing on the arrangements for the disposal of any equipment that is still the property of UNDP.

23. Transfer or disposal of assets: In consultation with the Implementing Partner and other parties of the project, UNDP is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project. In all cases of transfer, a transfer document must be prepared and kept on file[73]. The transfer should be done before the project management unit (project team) complete their assignments.

24. Financial completion (closure): 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).

25. The project will be financially completed **within six 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 UNDP Country Office in the host country.

26. Refund to GEF: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the BPPS/GEF Directorate in New York. No action is required at country office level on the actual refund from UNDP project to the GEF Trustee.

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

Total Budget and Work Plan

MEXICO PILOT PROJECT

| **TOTAL BUDGET AND WORK PLAN** | | | |
|---|---|---|---|
| Atlas[1] Proposal or Award ID: | 00099248 | Atlas Primary Output Project ID: | 00102556 |
| Atlas Proposal or Award Title as in Atlas: | FSP Piloto México PACA | | |
| Atlas Business Unit | MEX10 | | |
| Atlas Primary Output Project Title as in Atlas: | FSP PACA Piloto México | | |
| UNDP-GEF PIMS No. | 6273 | | |
| Implementing Partner | Instituto de Ecología de La Universidad Nacional Autónoma de México | | |

| Atlas activity (GEF component) | Atlas implementing agent/Responsible Party | Atlas fund ID | Donor Name | Atlas budgetary account code | Atlas budget account description | Amount Year 1 (USD) | Amount Year 2 (USD) | Amount Year 3 (USD) | Amount Year 4 (USD) | Total (USD) | Budget Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Component 1. Initial on-the ground pilot active actions to address common key issues and to advance collaborative work and replication | Instituto de Ecologia de la Universidad Nacional Autónoma de México | 62000 | GEF | 71800 | Contractual Services – Imp Part | 59,828.94 | 134,079.12 | 44,439.12 | 29,652.82 | 268,000.00 | 1 |
| | | | | 71600 | Travel | 1,914.27 | 37,070.08 | 1,682.02 | 1,333.63 | 42,000.00 | 2 |
| | | | | 72800 | Information Technology Equipmt | 1,234.61 | 18,765.39 | | | 20,000.00 | 3 |
| | | | | 74200 | Audio Visual&Print Prod Costs | 1,021.18 | 12,957.64 | 1,021.18 | | 15,000.00 | 4 |
| | | | | | TOTAL COMPONENT 2 | **63,999.00** | **202,872.23** | **47,142.32** | **30,986.45** | **345,000.00** | |
| PMC | Instituto de Ecologia de la Universidad Nacional Autónoma de México | 62000 | GEF | 74100 | Professional services | 862.50 | 862.50 | 862.50 | 862.50 | 3,450 | 5 |
| | | | | | TOTAL PMC | **862.50** | **862.50** | **862.50** | **862.50** | **3,450** | |
| | | | | | Grand Total | **64,861.50** | **203,734.73** | **48,004.82** | **31,848.95** | **348,450.00** | |

## Summary of funds (regional)

| Source | | Amount year 1 | Amount year 2 | Amount year 3 | Amount year 4 | Total |
|---|---|---|---|---|---|---|
| GEF grant | | 64,861.50 | 203,734.73 | 48,004.82 | 31,848.95 | 348,450.00 |
| Mexico | CONANP | 100,000.00 | 275,000.00 | 75,000.00 | 50,000.00 | 500,000.00 |
| Mexico | Lancis | 35,000.00 | 96,250.00 | 26,250.00 | 17,500.00 | 175,000.00 |
| Mexico | CONAPESCA | 909,600.00 | 2,501,400.00 | 682,200.00 | 454,800.00 | 4,548,000.00 |
| Mexico | PROFEPA | 6,093.11 | 16,756.05 | 4,569.83 | 3,046.55 | 30,465.54 |
| Mexico | SCT | 2,329,833.83 | 6,407,043.03 | 1,747,375.37 | 1,164,916.92 | 11,649,169.15 |
| Mexico | SEMAEDESO Oaxaca | 44,674.78 | 122,855.65 | 33,506.08 | 22,337.39 | 223,373.90 |
| Mexico | SEMAHN Chiapas | 39,880.88 | 109,672.41 | 29,910.66 | 19,940.43 | 199,404.38 |
| Mexico | SEMAR | 84,429.34 | 232,180.68 | 63,322.00 | 42,214.67 | 422,146.69 |
| Mexico | SEMARNAT Colima | 280.66 | 771.82 | 210.50 | 140.33 | 1,403.31 |
| Mexico | SEMARNAT Oaxaca | 138.12 | 379.84 | 103.59 | 69.06 | 690.61 |
| | Total | 3,614,792.22 | 9,966,044.21 | 2,710,452.85 | 1,806,814.30 | 18,098,103.58 |

Budget notes

| Number | Budget note |
|---|---|
| 1 | 268,000. Technicians to manage geographic information system, Administrative assistant, Technical director, technical coordinator integrates work of sectoral specialists, sectoral specialists to analyse key information (fisheries & aquaculture, tourism, conservation, energy, shipping & ports), ecological planning specialist, geospatial specialist, computer model specialist, lawyer, geovisualization specialist, databank specialist. |
| 2 | 42,000 Travel expenses for three workshops to prepare multicriteria model. Travel expenses for two workshops to prepare socioeconomic models. Travel expenses for meeting with ecological planning committee to present prospective analysis. Travel expenses for three workshops to define ecological planning units. Travel expenses for meeting with ecological planning committee to present proposed planning model. Regional MSP pilot. Mexico site. |

| Number | Budget note |
|---|---|
| 3 | 20,000 SIG Planning software license for 10 users. |
| 4 | 15,000 Design and printing of information material. |
| 5 | 3,450 Annual financial audits and spot checks. |

Legal Context

27. This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Mexico and UNDP, signed on (07/08/1973). All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

28. This project will be implemented by Instituto de Ecologia de la Universidad Nacional Autónoma de México ("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.

29. The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

Risk Management

1. Consistent with the Article III of the SBAA *[or the Supplemental Provisions to the Project Document]*, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
    1. 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;
    2. assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan.

3. 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.

4. 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.

5. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or

subcontractors and their personnel, and any individuals performing services for them under the Project Document.

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

(b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment.

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

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

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

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

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

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

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

2. 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).

3. 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.

4. 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.

5. 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.

6. 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.

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

8. 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.

1. 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. Recovery of such amount by UNDP shall not diminish or curtail the Implementing Partner's obligations under this Project Document.

   Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud 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.

1. 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.

2. 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.

3. 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.

Mandatory Annexes

Annex 1: GEF Budget

Annex 2:  Co-Financing letters (see separate file)

Annex 3: Multiyear workplan.

Annex 4: Monitoring plan.

Annex 5: UNDP Social and Environmental Screening Procedure (SESP) (see separate file)

Annex 6: UNDP Risk Register.

Annex 7: Terms of reference for project board and key personnel (see separate file)

Annex 8. Stakeholders Analysis (see separate file).

Annex 9: Stakeholders engagement plan (see separate file).

Annex 10: Gender analysis (see separate file).

Annex 11: Gender Action Plan (see separate file).

Annex 12:  GEF core indicators (see separate file).

Annex 13:  GEF  7 taxonomy (see separate file).

Annex 14: Literature cited.

Annex 15: Definitions

Annex 16: Memoirs of regional and national meetings (see separate file)

## Annex 1. GEF Budget of the Regional Project

| Expenditure Category | Detailed Description | Component (USDeq.) | | | | | | | Total (USDeq.) | Responsible Entity |
|---|---|---|---|---|---|---|---|---|---|---|
| | | *Component 1* | | *Component 2* | *Component 3* | *Sub-Total* | *M&E* | *PMC* | | (Executing Entity receiving funds from the GEF Agency)[1] |
| | | *Sub-component 1* | *Sub-component 2* | *Sub-component 3* | *Sub-component 4* | | | | | |
| **Equipment** | 6,500.00 Laptops and digital projector. Regional MSP pilot. Panama site. Funds will be administered by WWF and executed by MarViva (responsible party).<br>7,500.00 Digital cameras, GoPro cameras, digital projector. National pilot with STAR resources. Funds will be administered by WWF and executed by MarViva.<br>6,000 Computers and equipment for field work. Regional MSP pilot. Costa Rica site. Responsible party: INCOPESCA, funds to be administered by WWF. | | | 20,000 | | 20,000 | | | 20,000 | WWF Guatemala/Mesoamerica |
| **Equipment** | 35,000 Equipment for field work and data processing for the nine countries. For each country: one laptop computer + one cameras with built-in GPS. Regional pilot executed by OSPESCA (responsible party).<br>20,000 SIG Planning software license for 10 users. Regional MSP pilot. Mexico site. Executed by LANCIS (responsible party).<br>36,197.00 Equipment for field work and data analysis (e.g., Raven sound analysis software, SoundTrap hydrophones, battery packs, hard drives, GPS, laptops). National pilot with STAR resources. Funds will be administered by WWF Guatemala/Mesoamerica. and executed by MarViva.<br>6,000 Laptops and printer. Regional MSP pilot. Ecuador site executed by Conservation International - Ecuador (responsible party). | | | 97,197 | | 97,197 | | | 97,197 | WWF Guatemala/Mesoamerica |
| **Equipment** | 4,500 Plotter maintenance. Regional MSP pilot. Ecuador site executed by Conservation International - Ecuador (responsible party). | | | 4,500 | | 4,500 | | | 4,500 | WWF Guatemala/Mesoamerica |
| **Equipment** | 8,000 Rental of diving equipment for coral surveys. Regional MSP pilot. Ecuador site executed by Conservation International - Ecuador (responsible party). | | | 8,000 | | 8,000 | | | 8,000 | WWF Guatemala/Mesoamerica |

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| **Equipment** | 17,160.00 Equipment and software for website and social-media platforms. Two servers (USD8,000) + two video cameras (USD1,400) + dos voice recorders (USD200) + software to edit video, audio and images (USD2,000) + website and webinar administration software (USD4,000).<br>8,800.00 Annual fees for software licences (e.g., webinars, office).<br>132,000.00 Equipment and software for PACA´s long-term reporting mechanism web portal.<br>5,500.00 Equipment and software for communication and online collaboration of project team. One server + teleconference equipment + software.<br>11,000.00 Equipment for project office (computers, printers, software). | | | | | - | 174,460 | | 174,460 | WWF Guatemala/Mesoamerica |
| **Contractual services-Individual** | For outcome 1:<br>97,983.60 Principal Technical Advisor. Time allocated to this outcome.<br>60,628.88 Gender and participation specialist. Time allocated to this outcome.<br>36,791.04 Specialist in marine resources management. Time allocated to this outcome.<br>25,084.16 Communications specialist. Time allocated to this outcome.<br>11,000.00 Translation of TDA document into English.<br>16,600.00 Editing of TDA document. Includes publishing in high quality PDF format.<br>1,100.00 Prepare TDA brief for decision makers (government authorities). Includes text editing and graphic design.<br>21,500.00 Prepare TDA dissemination versions for specific key stakeholders (fisheries, marine tourism, aquaculture, shipping, local governments) (five versions). Includes pedagogical translation and graphic design (e.g., infographics). | 271,688 | | | | 271,688 | | | 271,688 | WWF Guatemala/Mesoamerica |

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| **Contractual services-Individual** | 97,983.60 Principal Technical Advisor. Time allocated to this outcome.<br>60,628.88 Gender and participation specialist. Time allocated to this outcome.<br>37,791.04 Specialist in marine resources management. Time allocated to this outcome.<br>25,084.16 Communications specialist. Time allocated to this outcome.<br>63,360.00 Facilitation teams for national consultation workshops with stakeholders (two one-day events per country x 8 countries = 16 workshops). Per workshop: 3 persons x USD300 per person per day x 4 days.<br>13,000.00 Translation of SAP document into English. USD50/page (500 words in A4 page x USD0.1 per word) x 200 pages.<br>16,600.00 Editing of SAP document. USD30/page x 200 pages. Includes publishing in high quality PDF format.<br>1880.00 Prepare SAP brief for decision makers (government authorities). Includes text editing and graphic design.<br>18,720.00 Prepare SAP dissemination versions for specific key stakeholders (fisheries, marine tourism, aquaculture, shipping, local governments) (five versions). Includes pedagogical translation and graphic design (e.g., infographics). USD3,000 / version. | | 335,048 | | | 335,048 | | | 335,048 | WWF Guatemala/Mesoamerica |
| **Contractual services-Individual** | 101,902.94 Principal Technical Advisor. Time allocated to this outcome.<br>116,561.28 Gender and participation specialist. Time allocated to this outcome.<br>93,582.08 Specialist in marine resources management. Time allocated to this outcome.<br>56,168.32 Communications specialist. Time allocated to this outcome.<br>120,848.64 Pilot coordinator and administrative assistant. Regional pilot executed by OSPESCA (responsible party). Unir ambos<br>268,000. Technicians to manage geographic information system, Administrative assistant, Technical director, technical coordinator integrates work of sectoral specialists, sectoral specialists to analyse key information (fisheries & aquaculture, tourism, conservation, energy, shipping & ports), ecological planning specialist, geospatial specialist, computer model specialist, lawyer, geovisualization specialist, databank specialist. Regional MSP pilot. Mexico site. Executed by LANCIS (responsible party).<br>16,056.00 Administrative assistant- USD1,338/month x 12 months. National pilot with STAR resources, funds will be administered by WWF Guatemala/Mesoamerica and executed by MarViva.<br>115,000. Integrated coastal management specialist plus time allocation of CI-Ecuador staff: marine programme manager, contracts coordinator and director of operations. Regional MSP pilot. Ecuador site executed by Conservation International - Ecuador (responsible party). | | | 888,119 | | 888,119 | | | 888,119 | WWF Guatemala/Mesoamerica |

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| **Contractual services-Individual** | 15,677.38 Principal Technical Advisor. Time allocated to this outcome.<br>For outcome 1 and 2:<br>92,315.52 Knowledge Management specialist. Time allocated to these outcomes.<br>For outcome 4:<br>29,140.32 Gender and participation specialist. Time allocated to this outcome.<br>18,395.52 Specialist in marine resources management. Time allocated to this outcome.<br>69,236.64 Knowledge management specialist. Time allocated to this outcome.<br>20,568.24 Monitoring and evaluation specialist. Time allocated to this outcome.<br>11,542.08 Communications specialist. Time allocated to this outcome. | | | | 143,991 | 143,991 | 112,884 | | 256,875 | WWF Guatemala/Mesoamerica |
| **Contractual services-Individual** | For outcome 5:<br>29,140.32 Gender and participation specialist. Time allocated to this outcome.<br>18,395.52 Specialist in marine resources management. Time allocated to this outcome.<br>69,236.64 Knowledge management specialist. Time allocated to this outcome.<br>20,568.24 Monitoring and evaluation specialist. Time allocated to this outcome.<br>11,542.08 Communications specialist. Time allocated to this outcome. | | | | 79,646 | 79,646 | 69,237 | | 148,883 | WWF Guatemala/Mesoamerica |
| **Contractual services-Individual** | 221,369 Operations Manager | | | | | - | | 221,369 | 221,369 | WWF Guatemala/Mesoamerica |
| **Contractual services-Company** | 369,982.80 Contract national diagnostic analysis Mexico.<br>98,285.00 Contract national diagnostic analysis Guatemala.<br>94,161.10 Contract national diagnostic analysis El Salvador.<br>66,498.30 Contract national diagnostic analysis Honduras.<br>105,483.40 Contract national diagnostic analysis Costa Rica.<br>153,051.80 Contract national diagnostic analysis Panama.<br>219,997.80 Contract national diagnostic analysis Colombia / Nicaragua.<br>245,531.00 Contract national diagnostic analysis Ecuador. | 1,352,991 | | | | 1,352,991 | | | 1,352,991 | WWF Guatemala/Mesoamerica |
| **Contractual services-Company** | 59,800.00 Data storage in ARBIMON storage (600,000 minutes x USD0.06/minutes = USD36,000) and construction of mooring for underwater equipment USD22,800. National pilot with STAR resources. Funds will be administered by WWF Guatemala/Mesoamerica. and executed by MarViva. | | | 58,800 | | 58,800 | | | 58,800 | WWF Guatemala/Mesoamerica |
| **Contractual services-Company** | 11,000.00 Development of project website according to IW: LEARN guidelines, linked to web portals of project partners.<br>35,200.00 Maintenance and operation of project website (outsourced).<br>44,000.00 Development of web portal to host PACA´s long-term reporting mechanism. | | | | | - | 90,200 | | 90,200 | WWF Guatemala/Mesoamerica |

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| **International Consultants** | For outcome 1:<br>7,700.00 TDA/SAP process trainer. Prepare and implement a regional training workshop (three-days workshop) and to facilitate the TDA initiation workshop (one-day workshop). USD500/day x 10 days to prepare and implement workshops + USD2,000 for travel expenses.<br>55,000.00 Senior advisor for TDA development. USD500/day x 100 working days. Travel expenses are included on the budget of each event.<br>For outcome 2:<br>49,500.00 Senior advisor for SAP development. USD500/day x 90 working days. Travel expenses are included on the budget of each event.<br>7,700.00 TDA/SAP process trainer. Prepare and implement a regional training workshop (three-days workshop) and to facilitate the TDA initiation workshop (one-day workshop). USD500/day x 10 days to prepare and implement workshops + USD2,000 for travel expenses. | 62,700 | | | | 62,700 | | | 62,700 | WWF Guatemala/Mesoamerica |
| **International Consultants** | For outcome 1:<br>7,700.00 TDA/SAP process trainer. Prepare and implement a regional training workshop (three-days workshop) and to facilitate the TDA initiation workshop (one-day workshop). USD500/day x 10 days to prepare and implement workshops + USD2,000 for travel expenses.<br>55,000.00 Senior advisor for TDA development. USD500/day x 100 working days. Travel expenses are included on the budget of each event.<br>For outcome 2:<br>49,500.00 Senior advisor for SAP development. USD500/day x 90 working days. Travel expenses are included on the budget of each event.<br>7,700.00 TDA/SAP process trainer. Prepare and implement a regional training workshop (three-days workshop) and to facilitate the TDA initiation workshop (one-day workshop). USD500/day x 10 days to prepare and implement workshops + USD2,000 for travel expenses. | | 57,200 | | | 57,200 | | | 57,200 | WWF Guatemala/Mesoamerica |
| **International Consultants** | 10,600.00. 6,600 Research advisor on acoustic monitoring and analysis. USD550/month x 12 months. 4,000 Invited researcher to contribute on data analysis and workshops. National pilot with STAR resources. Funds will be administered by WWF Guatemala/Mesoamerica.<br>58,800.00. 30,000 Lead researcher. USD2,500/month x 12 months. 28,800 Three research students. USD800/month each x 12 months. National pilot with STAR resources. Funds will be administered by WWF Guatemala/Mesoamerica. | | | 69,400 | | 69,400 | | | 69,400 | WWF Guatemala/Mesoamerica |
| **International Consultants** | 19,800.00 Independent mid-term review. International consultant.<br>23,100.00 Independent final assessment. International consultant. | | | | | - | 42,900 | | 42,900 | WWF Guatemala/Mesoamerica |

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| **Local Consultants** | 15,400.00 Consultant to process information from national analyses to prepare a regional analysis of women's participation and contributions in coastal tourism and fisheries supply chains. Honorarium USD400/day x 35 days. | 15,400 | | | | 15,400 | | | 15,400 | WWF Guatemala/Mesoamerica |
| **Local Consultants** | 11,550.00 Consultant to prepare an analysis about women´s participation and contributions in the billfishes recreational fishing supply chain. Honorarium USD350/day x 30 days = USD10,500.<br>15,400.00 Consultant to draft regional guidelines for marine spatial planning in PACA based on the lessons and results of the site interventions. USD400/day x 35 days.<br>15,400.00 Consultant to prepare an analysis about women´s participation and decision making in marine spatial planning processes. USD400/day x 35 days.<br>13,200.00 Consultant to prepare analysis about women´s participation and contributions in the whale watching value chain. Honorarium USD400/day x 30 days.<br>8,800.00 Consultant to draft regional guidelines for whale watching in PACA. Only honorarium. Home-based work, no travel required. USD400/day x 20 days.<br>44,000 Consultants to prepare the indigenous peoples plan at project start and to organise meetings for consultations are indicated in the plan.<br>55,000. 30,000.00 Technical specialist, 15,000.00 Technical assistant in Ecuador, 10,000.00 Legal specialist. Regional pilot executed by OSPESCA (responsible party).<br>85,000. Technical personnel and short-term consultants. Regional MSP pilot. Panama site. Executed by MarViva (responsible party).<br>20,000. Consultant to prepare gender analysis. Regional MSP pilot. Ecuador site executed by Conservation International - Ecuador (responsible party).<br>80,000. Technical personnel and short-term consultants. Regional MSP pilot. Costa Rica site. Responsible party: INCOPESCA, funds to be administered by WWF Guatemala/Mesoamerica. | | | 348,350 | | 348,350 | | | 348,350 | WWF Guatemala/Mesoamerica |
| **Local Consultants** | 22,770.00 Consultant to identify and systematise availability and sources (national, regional, global) of core indicators of PACA´s condition. Honorarium USD350/day x 30 days = USD10,500. Travel expenses. 25 days x USD120/day to cover food and lodging = USD3,000. 8 airplane tickets x US900 = USD7,200.<br>13,200.00 Independent mid-term review. National consultant.<br>5,500.00 Translation of midterm review report.<br>15,400.00 Independent final assessment. National consultant.<br>5,500.00 Translation of final assessment report. | | | | 22,770 | 22,770 | | | 22,770 | WWF Guatemala/Mesoamerica |

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| **Local Consultants** | 22,770.00 Consultant to identify and systematise availability and sources (national, regional, global) of core indicators of PACA´s condition. Honorarium USD350/day x 30 days = USD10,500. Travel expenses. 25 days x USD120/day to cover food and lodging = USD3,000. 8 airplane tickets x US900 = USD7,200.<br>13,200.00 Independent mid-term review. National consultant (specialist).<br>5,500.00 Translation of midterm review report.<br>15,400.00 Independent final assessment. National consultant (specialist).<br>5,500.00 Translation of final assessment report. | | | | | - | 39,600 | | 39,600 | WWF Guatemala/Mesoamerica |
| **Training, Workshops, Meetings** | For outcome 1:<br>45,870.00 Training workshop on the TDA/SAP methodology. Three-day workshop. 30 people, including TDA development team (25 persons), senior advisor for TDA development (1 person), project team (3 persons) and trainer (1 person). Four nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 30 persons x 4 nights) plus airplane tickets (USD900/ticket x 27 persons = USD24,300) plus USD3,000 for terminal expenses and travel support for participants.<br>3,960.00 TDA initiation workshop. Linked to TDA/SAP training workshop. Cost of one additional day of TDA development team (25 persons), senior advisor for TDA development (1 person), project team (3 persons) and trainer (1 person). USD 120 per person per night x 30 persons x 1 night.<br>40,524.00 Start-up meeting with consultants that will prepare the national diagnostic analyses. Two-day workshop. 29 people, including TDA development team (25 persons), senior advisor for TDA development (1 person), and project team (3 persons). Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 29 persons x 3 nights) plus airplane tickets (USD900/ticket x 26 persons = USD23,400) plus USD3,000 for terminal expenses and travel support for participants. The travel expenses of the consultants are included in their contracts.<br>26,400.00 National meetings to appraise results of national diagnostic analyses. One-day meetings. USD 3000 per meeting to cover refreshments, venue and materials x 8 national meetings (includes Colombia / Nicaragua).<br>44,352.00 Regional workshop to analyse national diagnostic analyses. Three-day workshop. 29 people, including TDA development team (25 persons), senior advisor for TDA development (1 person), and project team (3 persons). Four nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 29 persons x 4 nights) plus airplane tickets (USD900/ticket x 26 persons = USD23,400) plus USD3,000 for terminal expenses and travel support for participants. The travel expenses of the consultants are included in their contracts.<br>48,180.00 TDA review workshop. Four-day workshop. 29 people, including TDA development team (25 persons), senior advisor for TDA development (1 person), | 209,286 | | | | 209,286 | | | 209,286 | WWF Guatemala/Mesoamerica |

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| | and project team (3 persons). Five nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 29 persons x 5 nights) plus airplane tickets (USD900/ticket x 26 persons = USD23,400) plus USD3,000 for terminal expenses and travel support for participants. The travel expenses of the consultants are included in their contracts.<br>For outcome 2:<br>45,870.00 Training workshop on the TDA/SAP methodology and SAP launch meeting. Three-day workshop. 30 people, including SAP development team (25 persons), senior advisor for SAP development (1 person), project team (3 persons) and trainer (1 person). Four nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 30 persons x 4 nights) plus airplane tickets (USD900/ticket x 27 persons = USD24,300) plus USD3,000 for terminal expenses and travel support for participants.<br>40,524.00 Strategic thinking meeting 1. Two-day workshop. 29 people, including SAP development team (25 persons), senior advisor for SAP development (1 person) and project team (3 persons). Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 29 persons x 3 nights) plus airplane tickets (USD900/ticket x 26 persons = USD23,400) plus USD3,000 for terminal expenses and travel support for participants.<br>44,352.00 Strategic thinking meeting 2. Three-day workshop. 29 people, including SAP development team (25 persons), senior advisor for SAP development (1 person) and project team (3 persons). Four nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 29 persons x 4 nights) plus airplane tickets (USD900/ticket x 26 persons = USD23,400) plus USD3,000 for terminal expenses and travel support for participants.<br>88,000.00 National consultation workshops. Two one-day events on each country (the first to analyse the proposed SAP and gather initial comments, the second to receive detailed comments from key stakeholders). Each workshop: [1] venue and refreshments = 60 persons x USD20 = USD1,200. [2] lodging USD100/person x 2 nights x 10 persons = USD2,000. [3] reimbursement of travel expenses USD1,000. [4] materials and unforeseen expenses USD800.<br>17,600.00 High level country government consultation. Two meetings per country. USD1,000 per meeting to cover venue, refreshments, materials and travel support to authorities (if needed).<br>44,352.00 Final SAP review meeting. Three-day event. 29 people, including SAP development team (25 persons), senior advisor for SAP development (1 person) and project team (3 persons). Four nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 29 persons x 4 nights) plus airplane tickets (USD900/ticket x 26 persons = USD23,400) plus | | | | | | | | | |

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| | USD3,000 for terminal expenses and travel support for participants.<br>16,060.00 GRT-IEG technical workshop to draft regional guidelines to strengthen participation of women in the governance of PACA. Two-day workshop. 10 people. Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 10 persons x 3 nights) plus airplane tickets (USD900/ticket x 10 persons = USD9,000) plus USD1,500 for terminal expenses and travel support for participants plus USD500 for various materials.<br>45,430.00 Meeting to analyse the proposal of regional guidelines to strengthen participation of women in the governance of PACA. Two-day workshop. 30 people. Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 30 persons x 3 nights) plus airplane tickets (USD900/ticket x 30 persons = USD27,000) plus USD3,000 for terminal expenses and travel support for participants plus USD500 for various materials.<br>88,000.00 Training on ecosystem-based management of large marine ecosystems. To cover course fees of MOOCs or in-person courses. | | | | | | | | | |
| **Training, Workshops, Meetings** | For outcome 1:<br>45,870.00 Training workshop on the TDA/SAP methodology. Three-day workshop. 30 people, including TDA development team (25 persons), senior advisor for TDA development (1 person), project team (3 persons) and trainer (1 person). Four nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 30 persons x 4 nights) plus airplane tickets (USD900/ticket x 27 persons = USD24,300) plus USD3,000 for terminal expenses and travel support for participants.<br>3,960.00 TDA initiation workshop. Linked to TDA/SAP training workshop. Cost of one additional day of TDA development team (25 persons), senior advisor for TDA development (1 person), project team (3 persons) and trainer (1 person). USD 120 per person per night x 30 persons x 1 night.<br>40,524.00 Start-up meeting with consultants that will prepare the national diagnostic analyses. Two-day workshop. 29 people, including TDA development team (25 persons), senior advisor for TDA development (1 person), and project team (3 persons). Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 29 persons x 3 nights) plus airplane tickets (USD900/ticket x 26 persons = USD23,400) plus USD3,000 for terminal expenses and travel support for participants. The travel expenses of the consultants are included in their contracts.<br>26,400.00 National meetings to appraise results of national diagnostic analyses. One-day meetings. USD 3000 per meeting to cover refreshments, venue and materials x 8 national meetings (includes Colombia / Nicaragua).<br>44,352.00 Regional workshop to analyse national diagnostic analyses. Three-day | | 430,188 | | | 430,188 | | | 430,188 | WWF Guatemala/Mesoamerica |

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| | workshop. 29 people, including TDA development team (25 persons), senior advisor for TDA development (1 person), and project team (3 persons). Four nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 29 persons x 4 nights) plus airplane tickets (USD900/ticket x 26 persons = USD23,400) plus USD3,000 for terminal expenses and travel support for participants. The travel expenses of the consultants are included in their contracts.<br>48,180.00 TDA review workshop. Four-day workshop. 29 people, including TDA development team (25 persons), senior advisor for TDA development (1 person), and project team (3 persons). Five nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 29 persons x 5 nights) plus airplane tickets (USD900/ticket x 26 persons = USD23,400) plus USD3,000 for terminal expenses and travel support for participants. The travel expenses of the consultants are included in their contracts.<br>For outcome 2:<br>45,870.00 Training workshop on the TDA/SAP methodology and SAP launch meeting. Three-day workshop. 30 people, including SAP development team (25 persons), senior advisor for SAP development (1 person), project team (3 persons) and trainer (1 person). Four nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 30 persons x 4 nights) plus airplane tickets (USD900/ticket x 27 persons = USD24,300) plus USD3,000 for terminal expenses and travel support for participants.<br>40,524.00 Strategic thinking meeting 1. Two-day workshop. 29 people, including SAP development team (25 persons), senior advisor for SAP development (1 person) and project team (3 persons). Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 29 persons x 3 nights) plus airplane tickets (USD900/ticket x 26 persons = USD23,400) plus USD3,000 for terminal expenses and travel support for participants.<br>44,352.00 Strategic thinking meeting 2. Three-day workshop. 29 people, including SAP development team (25 persons), senior advisor for SAP development (1 person) and project team (3 persons). Four nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 29 persons x 4 nights) plus airplane tickets (USD900/ticket x 26 persons = USD23,400) plus USD3,000 for terminal expenses and travel support for participants.<br>88,000.00 National consultation workshops. Two one-day events on each country (the first to analyse the proposed SAP and gather initial comments, the second to receive detailed comments from key stakeholders). Each workshop: [1] venue and refreshments = 60 persons x USD20 = USD1,200. [2] lodging USD100/person x 2 nights x 10 persons = USD2,000. [3] reimbursement of travel | | | | | | | | | |

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| | expenses USD1,000. [4] materials and unforeseen expenses USD800.<br>17,600.00 High level country government consultation. Two meetings per country. USD1,000 per meeting to cover venue, refreshments, materials and travel support to authorities (if needed).<br>44,352.00 Final SAP review meeting. Three-day event. 29 people, including SAP development team (25 persons), senior advisor for SAP development (1 person) and project team (3 persons). Four nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 29 persons x 4 nights) plus airplane tickets (USD900/ticket x 26 persons = USD23,400) plus USD3,000 for terminal expenses and travel support for participants.<br>16,060.00 GRT-IEG technical workshop to draft regional guidelines to strengthen participation of women in the governance of PACA. Two-day workshop. 10 people. Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 10 persons x 3 nights) plus airplane tickets (USD900/ticket x 10 persons = USD9,000) plus USD1,500 for terminal expenses and travel support for participants plus USD500 for various materials.<br>45,430.00 Meeting to analyse the proposal of regional guidelines to strengthen participation of women in the governance of PACA. Two-day workshop. 30 people. Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 30 persons x 3 nights) plus airplane tickets (USD900/ticket x 30 persons = USD27,000) plus USD3,000 for terminal expenses and travel support for participants plus USD500 for various materials.<br>88,000.00 Training on ecosystem-based management of large marine ecosystems. To cover course fees of MOOCs or in-person courses. | | | | | | | | | |

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| **Training, Workshops, Meetings** | 27,258.00 Regional workshop to systematise lessons from the preparation of the regional plan for the management of sailfish and marlin fisheries. Two-day workshop. 18 people = two persons per country (14 persons) + one person from OSPESCA + one person from GRT-IEG + specialist in marine resources management + gender and participation specialist. Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 18 persons x 3 nights) plus airplane tickets (USD900/ticket x 18 persons = USD16,200) plus USD1,800 for terminal expenses and travel support for participants plus 300 for materials.<br>13,200.00 Start-up meetings with local stakeholders to initiate site actions of the regional pilot intervention on marine spatial planning. One meeting per site. Four sites (México, Panamá, Costa Rica, Ecuador). USD3,000 per meeting to cover refreshments and materials.<br>46,530.00 Regional workshop to exchange methods, best practice and experience on marine spatial planning. Two-day workshop. 30 people, including the specialist in marine resources management. Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 30 persons x 3 nights) plus airplane tickets (USD900/ticket x 30 persons = USD27,000) plus USD3,500 for terminal expenses and travel support for participants plus 1000 for materials.<br>47,432.00 Exchange visits among pilot sites. Per site visit = 6 persons (2 persons per country x 3 countries), 4 nights accommodation at 120 per person per day, airplane tickets at 900 per ticket per person, USD2,500 to cover various expenses (land transportation, materials) = USD10,780. Four site visits = USD43,120.<br>46,530.00 Regional workshop to analyse the proposed regional guidelines for marine spatial planning in PACA. Two-day workshop. 30 people, including the specialist in marine resources management and the consultant that prepared the proposed guidelines. Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 30 persons x 3 nights = USD10,800) plus airplane tickets (USD900/ticket x 30 persons = USD27,000) plus USD3,500 for terminal expenses and travel support for participants plus 1000 for materials.<br>31,570.00 Regional workshop to exchange best practice for responsible whale watching. Two-day workshop. 20 people, including the specialist in marine resources management. Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 20 persons x 3 nights) plus airplane tickets (USD900/ticket x 20 persons = USD18,000) plus USD2,500 for terminal expenses and travel support for participants plus 1000 for materials.<br>31,570.00 Regional meeting to analyse the proposed guidelines for whale watching in PACA. Two-day workshop. 20 people, including the specialist in | | | 624,790 | | 624,790 | | | 624,790 | WWF Guatemala/Mesoamerica |

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| | marine resources management and the consultant that prepared the guidelines for whale watching. Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 20 persons x 3 nights) plus airplane tickets (USD900/ticket x 20 persons = USD18,000) plus USD2,500 for terminal expenses and travel support for participants plus 1000 for materials.<br>40,000.00 First regional workshop in Guatemala.<br>40,000.00 Second regional workshop in El Salvador.<br>85,000.00 First round of national workshops to gather information and coordinate among technical teams and fishers. Two per country.<br>44,000.00 Second round of national workshops to analyse information among technical teams and fishers. Two per country. Regional pilot executed by OSPESCA (responsible party).<br>83,000.00 Participatory workshops to build and analyse proposals. Regional MSP pilot. Panama site. Funds wil be administered by WWF Guatemala/Mesoamerica and executed by MarViva (responsible party).<br>11,700.00. Training on use of research drone. Training on best practice and presentation of results to skippers and tourist guides (Boca Chica and Las Perlas). Cost includes venue, refreshments, materials. National pilot with STAR resources. Funds will be administered by WWF Guatemala/Mesoamerica. and executed by MarViva.<br>22,000 Workshops to analyse proposals, cover venue, food and beverages, and travel support to local stakeholders if needed. Regional MSP pilot. Ecuador site executed by Conservation International - Ecuador (responsible party).<br>55,000 Participatory workshops with stakeholders. Regional MSP pilot. Costa Rica site. Responsible party: INCOPESCA, funds to be administered by WWF Guatemala/Mesoamerica. | | | | | | | | | |
| **Training, Workshops, Meetings** | For outcome 4:<br>42,988.00 Workshop to agree a core set of indicators among countries and collaborating entities. Two-day workshop. 28 people, including the specialist in marine resources management and the senior advisor for TDA development. Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 28 persons x 3 nights) plus airplane tickets (USD900/ticket x 28 persons = USD25,200) plus USD2,800 for terminal expenses and travel support for participants plus USD1000 for materials.<br>16,500.00 Short meetings to present and discuss with key partners the set of core indicators and framework for long-term monitoring and reporting the condition of PACA. USD1,500 per meeting (refreshments, materials) x 10 meetings.<br>For outcome 5:<br>33,396.00 Inception workshop. Two-days meeting. 19 persons. Board members | | | | 59,488 | 59,488 | | | 59,488 | WWF Guatemala/Mesoamerica |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | (10), project team (3), responsible parties (6). Provide food and lodging for participants (USD180 per person per day x 19 persons x 3 nights). Airplane tickets and travel expenses USD1000 / person x 19 persons. Materials USD 1,100.<br>44,000.00 Initiation workshop with national stakeholders on each country (eight workshops, including Colombia / Nicaragua). USD5,000 / workshop. Includes materials, venue, food and lodging and travel support for participants from distant rural areas (if necessary).<br>51,018.00 In-person meetings of the project board. 11 persons (includes an additional person in case Colombia / Nicaragua joins the project). Provide food and lodging for board members (USD180 per person per day x 11 persons x 2 nights). Airplane tickets and travel expenses USD1000 / person x 11 persons. Materials USD 500. Meetings will be held in years 2, 3 and 4.<br>39,600.00 Onsite meetings for self-assessment and reflection with local key stakeholders implementing pilot interventions. Includes refreshments, venue, materials and travel support if necessary. Two meetings per pilot intervention (mid-term and end). USD 3,000 per meeting x 6 meetings (four marine spatial planning sites, one billfishes' pilot, one cetaceans' pilot).<br>52,800.00 Participation in IWC2022 and IWC2024. Five persons per meeting (four country delegates + principal technical advisor). Six-days trip (two days for travel). Cost per person = USD3,000/ticket + 6 days x 250 DSA/day + USD300 various expenses (e.g., visa) = USD4,800/person x 5 persons = USD24,000/meeting.<br>44,000.00 Closing workshop with national stakeholders on each country (eight workshops, including Colombia / Nicaragua). USD5,000 / workshop. Includes materials, venue, food and lodging and travel support for participants from distant rural areas (if necessary).<br>17,952.00 Regional meeting to identify gender lessons from project implementation. Two-day workshop. 12 people, including delegates from GRT-IEG and STM-COMMCA and the gender and participation specialist. Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 12 persons x 3 nights) plus airplane tickets (USD900/ticket x 12 persons = USD10,800) plus USD1,200 for terminal expenses and travel support for participants. | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|
| **Training, Workshops, Meetings** | For outcome 4:<br>42,988.00 Workshop to agree a core set of indicators among countries and collaborating entities. Two-day workshop. 28 people, including the specialist in marine resources management and the senior advisor for TDA development. Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 28 persons x 3 nights) plus airplane tickets (USD900/ticket x 28 persons = USD25,200) plus USD2,800 for terminal expenses and travel support for participants plus USD1000 for materials.<br>16,500.00 Short meetings to present and discuss with key partners the set of core indicators and framework for long-term monitoring and reporting the condition of PACA. USD1,500 per meeting (refreshments, materials) x 10 meetings.<br>For outcome 5:<br>33,396.00 Inception workshop. Two-days meeting. 19 persons. Board members (10), project team (3), responsible parties (6). Provide food and lodging for participants (USD180 per person per day x 19 persons x 3 nights). Airplane tickets and travel expenses USD1000 / person x 19 persons. Materials USD 1,100.<br>44,000.00 Initiation workshop with national stakeholders on each country (eight workshops, including Colombia / Nicaragua). USD5,000 / workshop. Includes materials, venue, food and lodging and travel support for participants from distant rural areas (if necessary).<br>51,018.00 In-person meetings of the project board. 11 persons (includes an additional person in case Colombia / Nicaragua joins the project). Provide food and lodging for board members (USD180 per person per day x 11 persons x 2 nights). Airplane tickets and travel expenses USD1000 / person x 11 persons. Materials USD 500. Meetings will be held in years 2, 3 and 4.<br>39,600.00 Onsite meetings for self-assessment and reflection with local key stakeholders implementing pilot interventions. Includes refreshments, venue, materials and travel support if necessary. Two meetings per pilot intervention (mid-term and end). USD 3,000 per meeting x 6 meetings (four marine spatial planning sites, one billfishes' pilot, one cetaceans' pilot).<br>52,800.00 Participation in IWC2022 and IWC2024. Five persons per meeting (four country delegates + principal technical advisor). Six-days trip (two days for travel). Cost per person = USD3,000/ticket + 6 days x 250 DSA/day + USD300 various expenses (e.g., visa) = USD4,800/person x 5 persons = USD24,000/meeting.<br>44,000.00 Closing workshop with national stakeholders on each country (eight workshops, including Colombia / Nicaragua). USD5,000 / workshop. Includes materials, venue, food and lodging and travel support for participants from distant rural areas (if necessary).<br>17,952.00 Regional meeting to identify gender lessons from project | | | | | - | 282,766 | | 282,766 | WWF Guatemala/Mesoamerica |

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|---|---|---|---|---|---|---|---|---|---|---|
| | implementation. Two-day workshop. 12 people, including delegates from GRT-IEG and STM-COMMCA and the gender and participation specialist. Three nights per person to cover accommodation, food, venue and workshop materials (USD 120 per person per night x 12 persons x 3 nights) plus airplane tickets (USD900/ticket x 12 persons = USD10,800) plus USD1,200 for terminal expenses and travel support for participants. | | | | | | | | | |
| **Travel** | For outcome 1<br>22,000.00 Airplane tickets for project team. USD1,000/ticket x 5 tickets/year.<br>19,536.00 Reimbursement of travel expenses of project team. USD120/day x 37 days/year.<br>4,400.00 Land travel of project team in project area.<br>For outcome 2:<br>22,000.00 Airplane tickets for project team. USD1,000/ticket x 5 tickets/year.<br>19,536.00 Reimbursement of travel expenses of project team. USD120/day x 37 days/year.<br>4,400.00 Land travel of project team in project area.<br>21,824.00 Travel of senior advisor for SAP development to participate in high level government consultations. Eight countries (including Colombia / Nicaragua) and two meetings per country. Each meeting: USD120/day for food and lodging x two days + USD 100 for terminal expenses + USD 900 for airplane ticket = USD1,240. Then, USD1,240 x 16 = 19,840. | 45,936 | | | | 45,936 | | | 45,936 | WWF Guatemala/Mesoamerica |
| **Travel** | For outcome 1<br>22,000.00 Airplane tickets for project team. USD1,000/ticket x 5 tickets/year.<br>19,536.00 Reimbursement of travel expenses of project team. USD120/day x 37 days/year.<br>4,400.00 Land travel of project team in project area.<br>For outcome 2:<br>22,000.00 Airplane tickets for project team. USD1,000/ticket x 5 tickets/year.<br>19,536.00 Reimbursement of travel expenses of project team. USD120/day x 37 days/year.<br>4,400.00 Land travel of project team in project area.<br>21,824.00 Travel of senior advisor for SAP development to participate in high level government consultations. Eight countries (including Colombia / Nicaragua) and two meetings per country. Each meeting: USD120/day for food and lodging x two days + USD 100 for terminal expenses + USD 900 for airplane ticket = USD1,240. Then, USD1,240 x 16 = 19,840. | | 67,760 | | | 67,760 | | | 67,760 | WWF Guatemala/Mesoamerica |

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|---|---|---|---|---|---|---|---|---|---|---|
| **Travel** | 22,000.00 Airplane tickets for project team. USD1,000/ticket x 5 tickets/year.<br>19,536.00 Reimbursement of travel expenses of project team. USD120/day x 37 days/year.<br>4,400.00 Land travel of project team in project area.<br>110,000 Field trips to collect information from the fisheries. Two field trips per country. Field trips to collect additional information from countries with large fisheries (Costa Rica, Mexico and Panama). The cost includes food and lodging, ground transportation, petrol for cars and boats and consumables. Regional pilot executed by OSPESCA (responsible party).<br>42,000 Travel expenses for three workshops to prepare multicriteria model. Travel expenses for two workshops to prepare socioeconomic models. Travel expenses for meeting with ecological planning committee to present prospective analysis. Travel expenses for three workshops to define ecological planning units. Travel expenses for meeting with ecological planning committee to present proposed planning model. Regional MSP pilot. Mexico site. Executed by LANCIS (responsible party).<br>35,000.00 Field visits. Regional MSP pilot. Panama site. Executed by MarViva (responsible party).<br>47,730.00 Four field trips, about 10 days each. To cover travel costs, food and lodging. 13,600 Field travel. Includes ground transportation, petrol, food and lodging. National pilot with STAR resources. Funds will be administered by WWF Guatemala/Mesoamerica. and executed by MaraViva.<br>23,000 Land travel, includes petrol, tolls, reimbursement of food and lodging. Regional MSP pilot. Ecuador site executed by Conservation International - Ecuador (responsible party).<br>58,000 Travel expenses for field work. Regional MSP pilot. Costa Rica site. Responsible party: INCOPESCA, funds to be administered by WWF Guatemala/Mesoamerica. | | | 361,666 | | 361,666 | | | 361,666 | WWF Guatemala/Mesoamerica |
| **Travel** | For outcome 4:<br>13,200.00 Airplane tickets for project team. USD1,000/ticket x 3 tickets/year.<br>5,808.00 Reimbursement of travel expenses of project team. USD120/day x 11 days/year.<br>For outcome 5:<br>13,200.00 Airplane tickets for project team. USD1,000/ticket x 3 tickets/year.<br>5,808.00 Reimbursement of travel expenses of project team. USD120/day x 11 days/year.<br>2,200.00 Land travel of project team in project area. | | | | 19,008 | 19,008 | | | 19,008 | WWF Guatemala/Mesoamerica |

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|---|---|---|---|---|---|---|---|---|---|---|
| **Travel** | For outcome 4:<br>13,200.00 Airplane tickets for project team. USD1,000/ticket x 3 tickets/year.<br>5,808.00 Reimbursement of travel expenses of project team. USD120/day x 11 days/year.<br>For outcome 5:<br>13,200.00 Airplane tickets for project team. USD1,000/ticket x 3 tickets/year.<br>5,808.00 Reimbursement of travel expenses of project team. USD120/day x 11 days/year.<br>2,200.00 Land travel of project team in project area. | | | | | - | 21,208 | | 21,208 | WWF Guatemala/Mesoamerica |
| **Travel** | 11,000.00 Travel expenses. International consultant for mid-term review. Airplane tickets about 5,000 + about 5,000 food and lodging (about 20 days field visit).<br>9,900.00 Travel expenses. National consultant for mid-term review. Airplane tickets about 4,000 + about 5,000 food and lodging (about 20 days field visit).<br>11,000.00 Travel expenses. International consultant for final assessment. Airplane tickets about 5,000 + about 5,000 food and lodging (about 20 days field visit).<br>9,900.00 Travel expenses. National consultant for final assessment. Airplane tickets about 4,000 + about 5,000 food and lodging (about 20 days field visit). | | | | | - | | 41,800 | 41,800 | WWF Guatemala/Mesoamerica |
| **Office Supplies** | 6,000 Office supplies (e.g., paper, markers, pencils). Regional pilot executed by OSPESCA (responsible party).<br>8,000.00 Field and office supplies. Regional MSP pilot. Panama site. Funds will be administered by WWF Guatemala/Mesoamerica. and executed by MarViva (responsible party).<br>5,000.00 Consumables for field and office work. National pilot with STAR resources. Funds will be administered by WWF Guatemala/Mesoamerica. and executed by MarViva.<br>23,000 Field and office supplies (e.g., disposable gloves, paper, printer toner, plotter toner). Regional MSP pilot. Ecuador site executed by Conservation International - Ecuador (responsible party).<br>6,000 Field and office supplies. Regional MSP pilot. Costa Rica site. Responsible party: INCOPESCA, funds to be administered by WWF Guatemala/Mesoamerica. | | | 48,000 | | 48,000 | | | 48,000 | WWF Guatemala/Mesoamerica |
| **Office Supplies** | 6,782.40 Office supplies, personnel field equipment (e.g., paper, pencils, general purpose cleaning agents, paper towels). | | | | | - | | 6,782 | 6,782 | WWF Guatemala/Mesoamerica |
| **Other Operating Costs** | 33,000.00 Preparation of communication materials for dissemination through electronic platforms (strategy for awareness raising, participation and articulation among key decision-makers and stakeholders). USD7,500 per year. | | 33,000 | | | 33,000 | | | 33,000 | WWF Guatemala/Mesoamerica |

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| **Other Operating Costs** | 20,000 Video of results + design and printing final report (500 copies) + design and printing of promotional material (brochure, banners, T-shirts). Regional pilot executed by OSPESCA (responsible party).<br>15,000 Design and printing of information material. Regional MSP pilot. Mexico site. Executed by LANCIS (responsible party).<br>30,000.00 Design and printing of information material. Regional MSP pilot. Panama site. Funds will be administered by WWF Guatemala/Mesoamerica and executed by MarViva (responsible party).<br>17,200.00 Design and printing of educational and promotional material, including marine mammal guides. National pilot with STAR resources. Funds will be administered by WWF and executed by MarViva.<br>30,000 Printing implementation strategies for local governments + communication materials of lessons + signboards for local sites. Regional MSP pilot. Ecuador site executed by Conservation International - Ecuador (responsible party).<br>20,000 Design and printing of information material. Regional MSP pilot. Costa Rica site. Responsible party: INCOPESCA, funds to be administered by WWF Guatemala/Mesoamerica. | | | 132,200 | | 132,200 | | | 132,200 | WWF Guatemala/Mesoamerica |
| **Other Operating Costs** | 10,560.00 Landline and mobile communications. Landline USD100/month. Mobile phone service USD100/month.<br>25,520.00 Online communications service (e.g., WebEx, SKYPE for business) - USD 200/month + high-speed internet service USD200/month + webhosting USD1000/year. | | | | | - | 36,080 | | 36,080 | WWF Guatemala/Mesoamerica |
| **Other Operating Costs** | 33,000.00 Contract preparation of communication materials to implement the project´s communication strategy. USD7,500 per year.<br>23,100.00 Prepare and edit learning documents (three documents). The documents will be in a format to be accessible to the general public (visually appealing, plain language). Each document will include summaries in Spanish and English. The documents will be in high-quality for web browsing and download.<br>33,000.00 Prepare and distribute project memoirs. Prepare and edit a communication document accessible to the general public (visually appealing, plain language) and three short videos that summarise the project achievements and lessons, including testimonies of key stakeholders and beneficiaries. The document will be in high-quality PDF format for online distribution and browsing. The short videos will be made available through IW: LEARN, the project partners websites and YouTube. | | | | | - | 89,100 | | 89,100 | WWF Guatemala/Mesoamerica |
| **Other Operating Costs** | 7,700 Online communications services | | | | | - | | 7,700 | 7,700 | WWF Guatemala/Mesoamerica |

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| **Other Operating Costs** | 44,000.00 Annual financial audits. USD11,000/year. | | | | | - | | 44,000 | 44,000 | WWF Guatemala/Mesoamerica |
| **Grand Total** | | **1,958,000.88** | **923,195.68** | **2,661,022.26** | **324,903.50** | **5,867,122.32** | **958,435.00** | **321,651.68** | **7,147,209.00** | |

Annex 2: Co-financing letters (see separate file)

Annex 3. Multiyear Workplan

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Project start | | 1. Signing of PRODOC by participating countries | | | x | | | | | | | | | | | | | |
| | | 2. Sign agreement with host country to accommodate the project unit | | | x | | | | | | | | | | | | | |
| | | 3. Formal designation of members of the project board | | | x | | | | | | | | | | | | | |
| | | 4. Formal designation of members of the technical committee | | | x | | | | | | | | | | | | | |
| | | 5. Sign agreement with the implementing partner | | | x | | | | | | | | | | | | | |
| | | 6. Contract project team | | | x | | | | | | | | | | | | | |
| | | 7. Prepare indigenous peoples plan | | | x | | | | | | | | | | | | | |
| | | 8. Complete capacity assessment of responsible parties (if not completed | | | x | | | | | | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | during project preparation phase) | | | | | | | | | | | | | | | | |
| | | 9. Form communications working group with partners´ communication officers | | | | x | | | | | | | | | | | | |
| | | 10. Prepare project´s communication strategy and multi-year action plan | | | | x | | | | | | | | | | | | |
| | | 11. Implement project´s communication strategy | | | | x | x | x | x | x | x | x | x | x | x | x | | |
| | | 12. Sign agreements with responsible parties for implementation of pilot interventions | | | x | | | | | | | | | | | | | |
| | | 13. Inception workshop | | | x | | | | | | | | | | | | | |
| Outcome 1. Common understanding of the regional LME challenges and | 1.1. Transboundary Diagnostic Analysis (TDA) of the Pacific Central American Coastal Large Marine Ecosystem prioritizes threats to LME, their immediate and root | . Prepare budget and work plan | | | x | | | | | | | | | | | | | |
| | | . Establish contact and collaboration agreements with entities that can provide information for the | | | x | x | | | | | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| opportunities supported by the participant countries. | causes and opportunities sustainable development | TDA and can engage into long-term support to update it (e.g., IATTC, FAO, UNEP, NOAA, MarViva) | | | | | | | | | | | | | | | | |
| | | 3. Contract senior advisor for TDA development | | | x | | | | | | | | | | | | | |
| | | 4. Contract consultant for TDA/SAP training | | | x | | | | | | | | | | | | | |
| | | 5. Prepare terms of reference for national diagnostic analyses (senior advisor for TDA development) | | | | x | | | | | | | | | | | | |
| | | 6. Identification and formal designation of TDA development team (≥30% women, ≥30% non-state) | | | | x | | | | | | | | | | | | |
| | | 7. TDA/SAP training workshop | | | | x | | | | | | | | | | | | |
| | | 8. TDA launch meeting | | | | x | | | | | | | | | | | | |
| | | 9. Contract consultants to prepare national diagnostic analyses | | | | x | x | | | | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 1.0. Start-up meeting with consultants that will prepare national diagnostic analyses | | | | | x | | | | | | | | | | | |
| | | 1.1. Development of national diagnostic analyses | | | | | x | x | x | | | | | | | | | |
| | | 1.2. National meetings to appraise results | | | | | | | x | | | | | | | | | |
| | | 1.3. Workshop to analyse national diagnostic analyses | | | | | | | x | | | | | | | | | |
| | | 1.4. Prepare regional analysis of women's participation and contributions in coastal tourism and fisheries supply chains (consultant) | | | | | | | x | x | | | | | | | | |
| | | 1.5. Assemble TDA (senior advisor) | | | | | | | | x | | | | | | | | |
| | | 1.6. TDA review workshop | | | | | | | | x | | | | | | | | |
| | | 1.7. Endorsement of TDA by project board | | | | | | | | | x | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 18. Edit TDA for publication | | | | | | | | | x | | | | | | | |
| | | 19. Translate TDA into English | | | | | | | | | x | | | | | | | |
| | | 20. Prepare dissemination versions of the TDA (e.g., policy brief, flyer, press release) | | | | | | | | | x | | | | | | | |
| | | 21. Distribute the TDA and dissemination versions to national and international audiences | | | | | | | | | | x | x | | | | | |
| 2. Collaborative framework and governance arrangements adopted by the participating countries to implement PACA´s SAP | 2.1 Strategic Action Programme (SAP) of legal, policy and institutional reforms, and needed investments, for sustainable utilization of the Pacific Central American Coastal large marine ecosystem endorsed at ministerial level by participating countries. | 1. Prepare budget and work plan | | | | | | | x | | | | | | | | | |
| | | 2. Contract senior advisor for SAP development | | | | | | | x | | | | | | | | | |
| | | 3. Contract consultant for TDA/SAP training | | | | | | | x | | | | | | | | | |
| | | 4. Identification and formal designation of SAP development team (≥30% women) | | | | | | | x | | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 5. TDA/SAP training workshop | | | | | | | | x | | | | | | | | |
| | | 6. SAP launch meeting | | | | | | | | x | | | | | | | | |
| | | 7. Strategic thinking workshop 1 | | | | | | | | x | | | | | | | | |
| | | 8. Strategic thinking workshop 2 | | | | | | | | | x | | | | | | | |
| | | 9. National consultation with key stakeholders | | | | | | | | | x | x | | | | | | |
| | | 10. Prepare first SAP draft | | | | | | | | | | x | | | | | | |
| | | 11. High level country government consultation | | | | | | | | | | x | | | | | | |
| | | 12. Final SAP review meeting | | | | | | | | | | | x | | | | | |
| | | 13. SAP signing at ministerial level on each country | | | | | | | | | | | | x | x | | | |
| | | 14. Present SAP in CCAD and OSPESCA | | | | | | | | | | | | | | x | x | |
| | | 15. Edit SAP for publication | | | | | | | | | | | | | x | | | |
| | | 16. Translate SAP into English | | | | | | | | | | | | | x | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 17. Prepare dissemination versions of the SAP (e.g., policy brief, flyer, press release) | | | | | | | | | | | | | x | | | |
| | | 18. Distribute the SAP and dissemination versions to national and international audiences | | | | | | | | | | | | | x | x | | |
| | 2.2. Collaborative framework and governance arrangements to implement PACA´s SAP endorsed by participating countries. | 1. Prepare proposal of a regional collaboration agreement for SAP implementation within the framework of SICA | | | | | | | | | x | x | | | | | | |
| | | 2. Review proposed agreement in SAP´s high-level country government consultations | | | | | | | | | | x | | | | | | |
| | | 3. Negotiation of final version of the regional collaboration agreement for SAP implementation | | | | | | | | | | x | x | | | | | |
| | | 4. Signing of regional agreement by countries | | | | | | | | | | | | x | x | x | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | 2.3. Strategy for awareness raising, participation and articulation among key decision-makers and stakeholders. | 1. Prepare strategy for awareness raising, participation and articulation among key decision-makers and stakeholders | | | | X | | | | | | | | | | | | |
| | | 2. Implement strategy for awareness raising, participation and articulation among key decision-makers and stakeholders | | | | X | x | x | x | x | x | x | x | x | x | x | | |
| | | 3. Prepare regional guidelines to strengthen participation of women in the governance of PACA (GRT-IEG technical workshop and regional meeting) | | | | | | | | | | | x | x | x | | | |
| | | 4. Analysis of regional guidelines in COMMCA | | | | | | | | | | | | x | x | | | |
| | | 5. Endorsement of guidelines by COMMCA | | | | | | | | | | | | | | x | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | 2.4. Training of key stakeholders (public and private) on ecosystem-based management of large marine ecosystems. | . Identify people interested in training for management of large marine ecosystems | | | | x | x | | | | | | | | | | | |
| | | . Organize training plan based on MOOCs | | | | | x | | | | | | | | | | | |
| | | . Training in the Transboundary Marine Spatial Planning (MSP) and Sustainable Blue Economy Course (CAP-NET) | | | | | x | x | x | x | x | x | x | x | | | | |
| | | . Training in massive open online course on Marine Litter (Open University & UNEP) | | | | | x | x | x | x | x | x | x | x | | | | |
| | | . Training in Large Marine Ecosystems: Assessment and Management (COURSERA) | | | | | x | x | x | x | x | x | x | x | | | | |
| | | . Training in other courses (including selected in-person courses) | | | | | x | x | x | x | x | x | x | x | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 7. Monitor people who take the courses | | | | | x | x | x | x | x | x | x | x | | | | |
| | | 8. Assess the impact of the courses | | | | | x | x | x | x | x | x | x | x | | | | |
| 3. Tangible impacts generated in demonstrative pilot interventions implemented to contribute to the development and buy-in of the SAP and to decision making on prioritized topics in the region. | 3.1. Three pilot interventions on common key issues of the Pacific Central American Coastal Large Marine Ecosystem implemented. | *Pilot 1. Conservation and management of sailfish and marlin recreational fisheries (family Istiophoridae)* | | | | | | | | | | | | | | | | |
| | | 1. Consolidate information about fishing areas (satellite tags, sport fishing logbooks) | | | | x | x | x | | | | | | | | | | |
| | | 2. Consolidate information about fishing fleets and related tourism facilities (censuses and surveys) | | | | x | x | x | | | | | | | | | | |
| | | 3. Comparative analysis of fishing regulations related to billfishes in the area | | | | | x | x | | | | | | | | | | |
| | | 4. Draft regional plan for the management of sailfish and marlin fisheries. | | | | | | x | x | x | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 5. Present proposed regional plan to national fisheries authorities in participating countries | | | | | | | | x | x | x | | | | | | |
| | | 6. Present proposed regional plan within OSPESCA´s decision-making structure | | | | | | | | | x | x | x | | | | | |
| | | *Pilot 2. Marine spatial planning* | | | | | | | | | | | | | | | | |
| | | 7. Start-up meetings with local stakeholders to initiate site actions of the regional pilot intervention on marine spatial planning | | | | x | | | | | | | | | | | | |
| | | 8. Regional workshop to exchange methods, best practice, and experience on marine spatial planning | | | | x | | | | | | | | | | | | |
| | | 9. Exchange visits among pilot sites | | | | | | x | | | | | | | | | | |
| | | Site 1. Mexico | | | | | | | | | | | | | | | | |
| | | 10. Review and update the existing baseline analyses | | | | x | x | x | x | | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 11. Prepare forecast scenarios | | | | | | | x | | | | | | | | | |
| | | 12. Prepare territorial ecological zoning model and corresponding ecological management programme | | | | | | | x | x | | | | | | | | |
| | | 13. Present proposal to the ecological planning committee for analysis and endorsement | | | | | | | | x | | | | | | | | |
| | | Site 2. Costa Rica | | | | | | | | | | | | | | | | |
| | | 14. Develop the participation and consultation mechanism for collaborative management of the fishery (advisory management committee) | | | | x | | | | | | | | | | | | |
| | | 15. INCOPESCA establish the advisory management committee | | | | | x | | | | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 16. Prepare situation analysis and validate it with key stakeholders | | | | x | x | x | | | | | | | | | | |
| | | 17. Participatory process to prepare the management plan with private and public stakeholders. | | | | | | x | x | x | | | | | | | | |
| | | 18. Formal approval of the plan by INCOPESCA´s board. | | | | | | | | x | | | | | | | | |
| | | Site 3. Panama | | | | | | | | | | | | | | | | |
| | | 19. Prepare stakeholder analysis | | | | x | | | | | | | | | | | | |
| | | 20. Training of key stakeholders on marine governance | | | | x | | | | | | | | | | | | |
| | | 21. Organise Inter-Institutional Coordination Platform | | | | x | x | | | | | | | | | | | |
| | | 22. Training of key stakeholders on key concepts and tools for the MSP process | | | | | x | | | | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 23. Outline spatial information with stakeholders | | | | | x | | | | | | | | | | | |
| | | 24. Compile and process existing technical and scientific information | | | | | x | | | | | | | | | | | |
| | | 25. Prepare multi-sectoral analysis of conflicts and compatibilities and analyse it with stakeholders | | | | | | x | | | | | | | | | | |
| | | 26. Prepare zoning plan | | | | | | x | | | | | | | | | | |
| | | 27. Draft marine spatial plan | | | | | | x | | | | | | | | | | |
| | | 28. Prepare financial strategy | | | | | x | x | | | | | | | | | | |
| | | 29. Consolidate marine spatial plan and submit for government endorsement | | | | | | | x | | | | | | | | | |
| | | 30. Establish communication forum to facilitate interaction among stakeholders | | | | x | | | | | | | | | | | | |
| | | 31. Inform stakeholders and public of pilot advances | | | | x | x | x | x | x | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 32. Document and disseminate results and lessons | | | | | | | x | x | | | | | | | | |
| | | Site 4. Ecuador | | | | | | | | | | | | | | | | |
| | | 33. Install interagency core group to develop the planning exercise on the ocean strip. | | | | x | | | | | | | | | | | | |
| | | 34. Compile and process information about the ocean strip. | | | | x | x | | | | | | | | | | | |
| | | 35. Gather information from key stakeholders. | | | | x | x | | | | | | | | | | | |
| | | 36. Participatory planning workshops to reach agreements, and draft the zoning scheme and the management plan. | | | | | x | x | | | | | | | | | | |
| | | 37. Prepare integrated coastal management plans for each municipality. | | | | | | x | | | | | | | | | | |
| | | 38. Validate individual plans with local stakeholders | | | | | | | x | | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 39. Sign at least two interagency agreements to implement actions on the ocean strip. | | | | | | x | x | | | | | | | | | |
| | | 40. Form planning committees on each municipality to prepare the management plans for the sea beach and adjacent strip | | | | x | | | | | | | | | | | | |
| | | 41. Compile and process information of each beach (technical reports, beach topography map, participatory mapping with stakeholders) | | | | | x | x | | | | | | | | | | |
| | | 42. Validate the analysis and participatively prepare zoning scheme for each beach | | | | | | | x | | | | | | | | | |
| | | 43. Draft the management plan and validate with local stakeholders | | | | | | | | x | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 44. Submit each plan for endorsement of the municipal council | | | | | | | | | x | | | | | | | |
| | | 45. Start-up gender training | | | | x | | | | | | | | | | | | |
| | | 46. Basic gender awareness raising and training to selected stakeholders of the beaches | | | | x | x | x | | | | | | | | | | |
| | | 47. Inform interested parties about advances and achievements | | | | x | x | x | x | x | x | | | | | | | |
| | | *Pilot 3. Cetacean conservation* | | | | | | | | | | | | | | | | |
| | | 48. Start-up meetings with local stakeholders to initiate site actions of the pilot on conservation of cetaceans | | | | | x | | | | | | | | | | | |
| | | 49. Purchase and installation of hydrophones | | | | | x | | | | | | | | | | | |
| | | 50. Recording and data recovery | | | | x | x | x | x | | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 51. Data processing and analysis | | | | | | x | x | | | | | | | | | |
| | | 52. Assessment of whale watching practices on the sites | | | | | | x | | | | | | | | | | |
| | | 53. Call for and selection of research students | | | x | x | | | | | | | | | | | | |
| | | 54. Regional workshop to exchange best practice for responsible whale watching | | | | x | | | | | | | | | | | | |
| | | 55. Revise and update the whale watching guide | | | | x | x | | | | | | | | | | | |
| | | 56. Develop training course for captains, guides and tour operators | | | | | x | | | | | | | | | | | |
| | | 57. Implement training course in Boca Chica and Isla Contadora | | | | | x | | | | | | | | | | | |
| | | 58. Prepare and distribute communication materials | | | | | x | x | x | | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | 3.2. Best practice and lessons from the pilots systematized, accessible and available to all stakeholders in the region | 1. Monitor and document pilot interventions´ experience and learning | | | | x | x | x | x | x | x | | | | | | | |
| | | *Pilot 1. Conservation and management of sailfish and marlin recreational fisheries (family Istiophoridae)* | | | | | | | | | | | | | | | | |
| | | 2. Prepare analysis about women´s participation and contributions in the billfishes recreational fishing supply chain | | | | | | | x | | | | | | | | | |
| | | 3. Regional workshop to systematise lessons from the preparation of the regional plan for the management of sailfish and marlin fisheries | | | | | | | | | | | x | | | | | |
| | | *Pilot 2. Marine spatial planning* | | | | | | | | | | | | | | | | |
| | | 4. Prepare analysis about women´s participation and decision making in marine spatial planning processes | | | | | | | x | | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 5. Draft regional guidelines for marine spatial planning in PACA | | | | | | | | x | | | | | | | | |
| | | 6. Regional workshop to analyse the proposed regional guidelines for marine spatial planning in PACA | | | | | | | | | x | | | | | | | |
| | | 7. Submit regional guidelines for marine spatial planning in PACA for endorsement of project board | | | | | | | | | | x | | | | | | |
| | | 8. Present regional guidelines to CCAD and other pertinent SICA entities | | | | | | | | | | | x | x | x | | | |
| | | 9. Present regional guidelines to pertinent national authorities in participating countries | | | | | | | | | | | x | x | x | | | |
| | | *Pilot 3. Cetacean conservation* | | | | | | | | | | | | | | | | |
| | | 10. Prepare analysis about women´s participation and | | | | | | | x | | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | contributions in the whale watching value chain | | | | | | | | | | | | | | | | |
| | | 11. Draft regional guidelines for whale watching in PACA | | | | | | | | x | x | | | | | | | |
| | | 12. Regional meeting to analyse the proposed guidelines for whale watching in PACA | | | | | | | | | x | | | | | | | |
| | | 13. Present regional guidelines for whale watching in PACA for endorsement of project board | | | | | | | | | | x | | | | | | |
| | | 14. Present regional guidelines for whale watching in PACA to CCAD and other pertinent SICA entities | | | | | | | | | | | x | x | x | | | |
| 4. Collaborative information system developed with key indicators | 4.1. Development and adoption of a suite of International Waters process, stress reduction and environmental/socioeconomic | 1. Identify and systematise availability and sources (national, regional, global) of core indicators about PACA´s condition | | | | x | x | | | | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| on PACA´s condition and SAP implementation | status indicators and implementation mechanisms to monitor PACA´s condition and SAP implementation. | 2. Workshop to agree a core set of indicators among countries and collaborating entities (e.g., FAO, UNEP, IOC/UNESCO, NOAA, OSPESCA) | | | | | x | | | | | | | | | | | |
| | | 3. Based on TDA development experience adjust the set of core indicators for long-term monitoring and reporting | | | | | | | | x | | | | | | | | |
| | | 4. Based on TDA development experience develop a formal framework for long-term monitoring and reporting about the condition of PACA. | | | | | | | | x | x | | | | | | | |
| | | 5. Board endorsement of set of core indicators and framework for long-term monitoring and reporting the condition of PACA | | | | | | | | | x | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 6. Present long-term monitoring and reporting framework to pertinent entities (e.g., OSPESCA, CCAD, FAO, IOC/UNESCO) | | | | | | | | | x | x | x | x | x | | | |
| | | 7. Draft, negotiate and subscribe collaboration agreements to support long-term reporting about the condition of PACA | | | | | | | | | x | x | x | x | x | | | |
| 5. Lessons on collaborative actions to manage PACA shared in the region and worldwide (south-south cooperation). | 5.1. Website for dissemination of lessons and best practice, linked to partners´ portals and IW: LEARN. | 1. Development of project website | | | | X | | | | | | | | | | | | |
| | | 2. Maintenance and operation of project website | | | | X | x | x | x | x | x | x | x | x | x | x | x | x |
| | | 3. Development of web portal to host PACA´s long-term reporting mechanism | | | | | | | | | | x | | | | | | |
| | | 1. Prepare knowledge transfer strategy | | | | | x | | | | | | | | | | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | 5.2. Project lessons documented and disseminated. | 2. Initiation workshop with national stakeholders on each country | | | | | x | x | | | | | | | | | | |
| | | 3. Project board meetings | | | | | | x | | | | x | | | | | | x |
| | | 4. Onsite meetings for self-assessment and reflection with local key stakeholders implementing pilot interventions (midterm and end) | | | | | x | | | x | | | | | | | | |
| | | 5. Participation in IWC2022 y 2024 | | | | | | x | | | | | | | | x | | |
| | | 6. Annual measurement of project indicators | | | | x | | | | x | | | | x | | x | | |
| | | 7. Regional meeting to identify gender lessons from project implementation | | | | | | | | | | | | | x | | | |
| | | 8. Prepare and distribute project´s learning documents (three) | | | | | | | | | | | | | x | x | | |

| Outcome | Outputs | Activities | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | | 9. Prepare and distribute project memoirs | | | | | | | | | | | | | x | x | | |
| | | 10. Closing workshop with national stakeholders on each country | | | | | | | | | | | | | | x | | |
| | | 11. Annual financial audits | | | | x | | | | x | | | | x | | | x | |
| | | 12. Independent mid-term review | | | | | | | | x | | | | | | | | |
| | | 13. Independent final assessment | | | | | | | | | | | | | | | x | |
| Project closure | | 1. Operational closure | | | | | | | | | | | | | | x | | |
| | | 2. Prepare final project report | | | | | | | | | | | | | | | x | x |

Annex 4: Monitoring Plan

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| Project Objective: To promote ecosystem-based management of the Pacific Central American Large Marine Ecosystem through the strengthening of regional governance. | Mandatory Indicator 1: Number of direct project beneficiaries disaggregated by sex (individual people) | **Mid-term**<br><br>Number of direct beneficiaries from pilot interventions and project activities at mid-term<br><br>Billfishes 8,000 (men)<br><br>MSP Mexico 2,000,000 (1,000,000 women, 1,000,000 men)<br><br>MSP Costa Rica 2,000 (men)<br><br>MSP Panama 500 (100 women, 400 men)<br><br>MSP Ecuador 50,000 (25,000 women, 25,000 men)<br><br>Cetaceans 48 (8 women, 40 men)<br><br>Total 2,060,548<br><br>**End-of-project**<br><br>Number of direct beneficiaries from pilot interventions and project activities at project end<br><br>Billfishes 13,000 (men)<br><br>MSP Mexico 3,993,101 (2,026,482 women, 1,966,619 men)<br><br>MSP Costa Rica 4,000 (men) | **Indicator**<br><br>Number of persons that receive direct benefits from pilot interventions and project activities. Sex disaggregated data.<br><br>**Mid-term**<br><br>Number of persons that participate in activities and meetings of pilot interventions.<br><br>Number of persons that participate in project activities and meetings (e.g., TDA development team, stakeholder meetings).<br><br>Mexico. Population of 77 coastal municipalities of six States: Jalisco (5), Colima (3), Michoacán (3), Guerrero (13), Oaxaca (41), and Chiapas (12).<br><br>Ecuador. Population of three municipalities: Pedernales, Jama, and San Vicente.<br><br>**End-of-project**<br><br>Same as above. | **Mid-term**<br><br>Record participants on each project´s meeting/ activity / training event. Records must include sex of each person.<br><br>Official population for each coastal municipality from national statistics office.<br><br>**End-of-project**<br><br>Same as above. | **Mid-term**<br><br>Continuous data collection, monthly processing.<br><br>**End-of-project**<br><br>Once, after SAP is finalized. | Monitoring and evaluation specialist | Event registration forms | Participation on each event is duly recorded |

74 Data collection methods should outline specific tools used to collect data and additional information as necessary to support monitoring. The PIR cannot be used as a source of verification.

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| | | MSP Panama 1053 (163 women, 890 men)<br><br>MSP Ecuador 114,356 (56,464 women, 57,892 men)<br><br>Cetaceans 103 (17 women, 86 men)<br><br>Total 4,125,613 | | | | | | |
| | Mandatory Indicator 2: Number of indirect project beneficiaries disaggregated by sex (individual people) | **Mid-term**<br><br>Number of indirect beneficiaries from pilot interventions and project activities<br><br>Billfishes 50,000 (ca., 40% women)<br><br>MSP Mexico 27,428,548 (14,041,686 women, 13,386,862 men)<br><br>MSP Costa Rica 243,898 (119,085 women, 124,813 men)<br><br>MSP Panama 10,000 (8,450 women, 1,550 men)<br><br>MSP Ecuador 1,141,904 (503,246 women, 638658 men)<br><br>Cetaceans 2000 (330 women, 1,670 men)<br><br>**End-of-project**<br><br>Population of coastal provinces / departments / states of the participating countries, once SAP has been endorsed.<br><br>Mexico: 14,026,592 men, 14,681,627 women, 28,708,219 total | **Indicator**<br><br>Number of persons that receive indirect benefits from pilot interventions and project activities. Sex disaggregated data.<br><br>**Mid-term**<br><br>Billfishes. Number of persons of the recreational fisheries supply chain and associated tourism on each country.<br><br>Mexico. Population of coastal states (Jalisco, Colima, Michoacán, Guerrero, Oaxaca, and Chiapas)<br><br>Costa Rica. Population of the municipalities were the main landing ports are located (Puntarenas, Guanacaste, Quepos, and Golfito)<br><br>Panama. Number of stakeholders that operate in the zone. fishers, tourism operators, diving tour operators, hoteliers, Ngäbe-Buglé people that use playa Zapotal<br><br>Ecuador. Population of Manabi province | **Mid-term**<br><br>Billfishes. Estimates calculated during pilot execution.<br><br>Mexico. Official population data from national statistics office.<br><br>Costa Rica. Official population data from national statistics office.<br><br>Panama. Estimates calculated during pilot execution.<br><br>Ecuador. Official population data from national statistics office.<br><br>Cetaceans. Estimates calculated during pilot execution.<br><br>**End-of-project**<br><br>Official population data from national statistics office. | **Mid-term**<br><br>Billfishes. Once.<br><br>Mexico. Once.<br><br>Costa Rica. Once.<br><br>Panama. Once.<br><br>Ecuador. Once.<br><br>Cetaceans. Once.<br><br>**End-of-project**<br><br>Once, after SAP is finalized. | **Mid-term**<br><br>Billfishes. OSPESCA.<br><br>Mexico. UNAM.<br><br>Costa Rica. INCOPESCA.<br><br>Panama. MarViva.<br><br>Ecuador. CI Ecuador<br><br>Cetaceans. MiAmbiente<br><br>**End-of-project**<br><br>Monitoring and evaluation specialist | **Mid-term**<br><br>Billfishes. Report from OSPESCA.<br><br>Mexico. Report from UNAM.<br><br>Costa Rica. Report from INCOPESCA.<br><br>Panama. Report from MarViva.<br><br>Ecuador. Report from CI Ecuador<br><br>Cetaceans. Report from MiAmbiente<br><br>**End-of-project**<br><br>Report from Monitoring and evaluation specialist | Responsible parties duly document indirect beneficiaries during pilot execution |

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| | | Guatemala: 1,968,727 men, 2,062,021 women, 4,030,748 total<br><br>El Salvador: 1,572,379 men, 1,770,202 women, 3,342,581 total<br><br>Honduras: 327,418 men, 337,556 women, 664,974 total<br><br>Costa Rica: 454,742 men, 437,930 women, 892,672 total<br><br>Panama: 1,761,370 men, 1,753,616 women, 3,514,986 total<br><br>Ecuador: 3,839,701 men, 3,866,374 women, 7,706,075 total | Cetaceans. Number of boat captains, guides and local tour operators that operate in the area<br><br>**End-of-project**<br><br>Population of coastal provinces / departments / states of the participating countries, once SAP has been endorsed. | | | | | |
| | Mandatory GEF Core Indicators 3: Area of marine habitat under improved practices to benefit biodiversity (hectares). | **Mid-term**<br><br>>50,000,000 ha<br><br>**End-of-project**<br><br>>180,965,900 ha | Area included into the marine spatial planning exercises. | Official maps. | Annually | Monitoring and evaluation specialist | Maps | Delays in initiating the MSP exercises |
| | Mandatory GEF Core Indicators 4: Globally over-exploited fisheries moved to more sustainable levels (metric tons). | **Mid-term**<br><br>>40,000 t<br><br>**End-of-project**<br><br>>82,000 t | Annual catch from fisheries that have sustainable fishing certification or from Fisheries Improvement Projects | Marine Stewardship Council Database and FIP Directory in the Fishery Progress web portal | Quarterly | Monitoring and evaluation specialist | Records from the Marine Stewardship Council Database and FIP Directory in the Fishery Progress web portal | Fisheries have difficulties in developing FIPs and obtaining sustainable fishing certification. |
| | Mandatory GEF Core Indicators 5:<br><br>Number of shared water ecosystems (fresh or marine) under new or improved | **Mid-term**<br><br>0<br><br>**End-of-project**<br><br>1 once SAP has been endorsed | Number of shared large marine ecosystems (i.e., PACA) under new cooperative management (i.e., the endorsed SAP). | Document endorsing SAP at the highest possible ministerial level on each country. | Once, after SAP is endorsed. | Monitoring and evaluation specialist | Documents endorsing SAP | The process of endorsement could be lengthy. |

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| | cooperative management | | | | | | | |
| | Mandatory GEF Core Indicators 6. Level of Transboundary Diagnostic Analysis formulation. | **Mid-term**<br><br>2. TDA developed. Transboundary issues agreed on based on limited analysis.<br><br>**End-of-project**<br><br>4. TDA adopted by project board | Level of development of the TDA.<br><br>Scale:<br><br>1. No progress on TDA development.<br><br>2. TDA developed. Transboundary issues agreed on based on limited analysis.<br><br>3. TDA developed. Transboundary issues agreed on based on solid analysis.<br><br>4. TDA adopted by project board | Document level of development of TDA according to the four steps of the scale. | biannually | Monitoring and evaluation specialist | Board decision adopting the TDA | Delays in TDA development process. |
| | Mandatory GEF Core Indicators 7. Level of Strategic Action Program formulation and implementation. | **Mid-term**<br><br>1. No development of SAP.<br><br>**End-of-project**<br><br>3. SAP signed on at ministerial level. | Level of development of the SAP.<br><br>Scale:<br><br>1. No development of SAP.<br><br>2. SAP developed, including clear targets, commitments and time frames addressing key transboundary concerns.<br><br>3. SAP signed on at ministerial level.<br><br>4. Adoption of SAP into National Action Plans (NAPs) and/or SAP commitments incorporated within national sectoral plans. | Document level of development of SAP according to the four steps of the scale. | biannually | Monitoring and evaluation specialist | Documents endorsing SAP on each participating country | Delays in SAP development process.<br><br>The process of endorsement could be lengthy. |
| Outcome 1<br><br>Common understanding of the regional LME | Indicator 8: project specific<br><br>Percentage of women and people from non- | **Mid-term**<br><br>Women ≥30% | Percentage of women and persons from non-state entities that are part of the TDA development team. | Record sex and affiliation of every person designated to be part of the TDA development team. | Continuous data collection, monthly processing. | Monitoring and evaluation specialist | Letters designating each member of the TDA development team | The governments support women participation |

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| challenges and opportunities supported by the participant countries. | state entities[75] in the TDA Development team | Non-state entities ≥30%<br>**End-of-project**<br>Women ≥30%<br>Non-state entities ≥30% | | Record participants on each TDA development team meeting/ activity / training event. Records must include sex and affiliation of each person. | | | Event registration forms | Participation on each event is duly recorded |
| | Indicator 9: project specific<br>Level of development of long-term regional agreement to update the PACA status report | **Mid-term**<br>2. Cooperation agreement negotiated but not yet signed<br>**End-of-project**<br>3. Cooperation agreement signed | Level of development of the agreement.<br>Scale:<br>1. No agreement/cooperation framework in place<br>2. Cooperation agreement negotiated but not yet signed<br>3. Cooperation agreement signed<br>4. Cooperation agreement under implementation | Document level of development of the agreement according to the four steps of the scale. | biannually | Monitoring and evaluation specialist | Agreement for long-term reporting | Delays in negotiating and signing the agreement. |
| Outcome 2<br>Collaborative framework and governance arrangements adopted by the participating countries to implement PACA´s SAP | Indicator 10: project specific<br>Level of Regional Legal Agreements and Regional Management Institutions to support its implementation | **Mid-term**<br>2. Regional legal agreement negotiated but not yet signed<br>**End-of-project**<br>3. Countries signed legal agreement | Level of development of the agreement.<br>Scale:<br>1. No legal agreement/cooperation framework in place<br>2. Regional legal agreement negotiated but not yet signed<br>3. Countries signed legal agreement<br>4. Legal agreement ratified and entered into force | Document level of development of the agreement according to the four steps of the scale. | biannually | Monitoring and evaluation specialist | Collaboration agreement for SAP implementation within the framework of SICA. | Delays in negotiating and signing the agreement.<br>The countries are willing to collaborate on LME management. |

75 i.e., Entities that are independent of the government such as civil society organizations, farmers associations or community groups.

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| | Indicator 11: project specific<br><br>Number of people that participate in SAP consultation (percentage of women and non-state entities) | **Mid-term**<br><br>0<br><br>**End-of-project**<br><br>≥400 people (women ≥50%, non-state entities ≥50%) | Number of persons that participate in SAP consultation meetings / workshops on each country. | Record participants on each SAP consultation meeting/ workshop. Records must include sex and affiliation of each person. | Continuous data collection during SAP consultation process | Monitoring and evaluation specialist | Event registration forms | Participation on each event is duly recorded |
| | Indicator 12: project specific<br><br>Level of adoption of regional guidelines to strengthen participation of women in the governance of PACA. | **Mid-term**<br><br>1. No progress on development of guidelines.<br><br>**End-of-project**<br><br>3. Guidelines presented to COMMCA. | Level of adoption of regional guidelines<br><br>Scale:<br><br>1. No progress on development of guidelines.<br><br>2. Guidelines developed.<br><br>3. Guidelines presented to COMMCA<br><br>4. Guidelines endorsed by COMMCA | Document level of development of the guidelines according to the four steps of the scale. | biannually | Gender and participation specialist | Guidelines<br><br>Letter submitting guidelines to COMMCA<br><br>Memoir of COMMCA meeting to analyse the guidelines (if applicable) | Delays in preparation of the guidelines. |
| Outcome 3<br><br>Tangible impacts generated in demonstrative pilot interventions implemented to contribute to the development and buy-in of the SAP and to decision making on prioritized topics in the region. | Indicator 13: project specific<br><br>Level of adoption of a regional plan for the management of sailfish and marlin recreational fisheries (family Istiophoridae) | **Mid-term**<br><br>2. Regional plan prepared<br><br>**End-of-project**<br><br>3. Regional plan presented to national fisheries authorities | Level of adoption of regional plan<br><br>Scale:<br><br>1. No progress on development of regional plan<br><br>2. Regional plan prepared<br><br>3. Regional plan presented to national fisheries authorities<br><br>4. Regional plan endorsed by national fisheries authorities | Document level of adoption of the guidelines according to the four steps of the scale. | biannually | Monitoring and evaluation specialist | Regional plan<br><br>Letter submitting the plan to national fisheries authorities of the participating countries<br><br>Memoirs of meetings with national fisheries authorities to present the plan<br><br>Documents endorsing the plan on each participating country (if applicable) | Delays in preparation of the regional plan<br><br>Fisheries authorities are interested in the plan |

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| | Indicator 14: project specific<br><br>Level of development of regional guidelines for marine spatial planning in PACA | **Mid-term**<br><br>1. No progress on development of guidelines.<br><br>**End-of-project**<br><br>3. Guidelines agreed by project board | Level of adoption of regional guidelines<br><br>Scale:<br><br>1. No progress on development of guidelines.<br><br>2. Guidelines developed.<br><br>3. Guidelines agreed by project board<br><br>4. Guidelines endorsed by pertinent national authorities on each country | Document level of development of the guidelines according to the four steps of the scale. | biannually | Monitoring and evaluation specialist | Guidelines<br><br>Board decision adopting the guidelines | Delays in preparation of the guidelines |
| | Indicator 15: project specific<br><br>Level of development of regional guidelines for whale watching in PACA | **Mid-term**<br><br>1. No progress on development of guidelines.<br><br>**End-of-project**<br><br>3. Guidelines agreed by project board | Level of adoption of regional guidelines<br><br>Scale:<br><br>1. No progress on development of guidelines.<br><br>2. Guidelines developed.<br><br>3. Guidelines agreed by project board<br><br>4. Guidelines endorsed by pertinent national authorities on each country | Document level of development of the guidelines according to the four steps of the scale. | biannually | Monitoring and evaluation specialist | Guidelines<br><br>Board decision adopting the guidelines | Delays in preparation of the guidelines |
| Outcome 4<br><br>Collaborative information system developed with key indicators on PACA´s condition and SAP implementation | Indicator 16: project specific<br><br>Level of adoption of a set of key indicators about the condition of PACA and SAP implementation. | **Mid-term**<br><br>2. Set of key indicators developed.<br><br>**End-of-project**<br><br>3. Set of key indicators agreed by project board. | Level of adoption of key regional indicators<br><br>Scale:<br><br>1. No progress on development of set of key indicators.<br><br>2. Set of key indicators developed.<br><br>3. Set of key indicators agreed by project board. | Document level of adoption of the indicators according to the four steps of the scale. | biannually | Monitoring and evaluation specialist | Document with key indicators<br><br>Board decision adopting the set of indicators<br><br>Documents endorsing the indicators on each participating | Delays in development and agreeing indicators |

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| | | | 4. Set of key indicators endorsed by pertinent national authorities | | | | country (if applicable) | |
| Outcome 5<br><br>Lessons on collaborative actions to manage PACA shared in the region and worldwide (south-south cooperation). | Indicator 17: project specific<br><br>Number of people (men and women, by country) who have participated in events for dissemination of lessons and best practices (e.g., workshops, IWC) | **Mid-term**<br><br>≥ 800 (≥30% women)<br><br>**End-of-project**<br><br>≥ 1,600 (≥30% women) | Number of persons that participate in meetings / workshops / events that present project lessons and best practice. Includes International Waters Conference. | Record participants on each meeting/ workshop / event. Records must include sex and affiliation of each person. | Continuous data collection, monthly processing. | Monitoring and evaluation specialist | Event registration forms | Participation on each event is duly recorded |
| | Indicator 18: project specific<br><br>Number of visitors per month (annual average) recorded in the network of electronic platforms used to disseminate project´s learnings and best practice | **Mid-term**<br><br>Visits ≥2,000<br><br>Unique visits ≥1,500<br><br>**End-of-project**<br><br>Visits ≥4,000<br><br>Unique visits ≥3,000 | Number of visits and unique visits to the project´s network of electronic platforms | Record visits and unique visits | Monthly | Knowledge management specialist | Report from data processing programme | None |
| Stakeholders action plan | SAPI 1.<br><br>Number of direct project beneficiaries disaggregated by sex (corresponds to Results Framework indicator 1). | See indicator 1 above | | | | | | |
| | SAPI 2.<br><br>Number of indirect project beneficiaries disaggregated by sex (corresponds to Results Framework indicator 2). | See indicator 2 above | | | | | | |
| | SAPI 3. Percentage of participants from non- | See indicator 6 above | | | | | | |

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| | state entities (independent of the government such as civil society organizations, farmers associations or community groups) in the TDA Development team (corresponds to indicator 6 of Results Framework) | | | | | | | |
| | SAPI 4. Number of social and gender specialists on each national team that prepares the national diagnostic analysis | **Mid-term**<br><br>Seven (one on each national team)<br><br>**End-of-project**<br><br>Seven (one on each national team) | One social-gender specialist on each team that will prepare the national diagnostic analysis<br><br>(seven specialists) | Document that each national team includes a social-gender specialist | Monthly during preparation of TDA | Senior TDA Specialist with collaboration of Gender and participation Specialist | Letter from head of each national team indicating name of social and gender specialists<br><br>Curriculum vitae of each social and gender specialists | None |
| | SAPI 5. Number of communication materials to inform diverse stakeholders about PACA´s TDA in the participating countries. | **Mid-term**<br>Two<br><br>**End-of-project**<br>Six | Prepare adequate information tools (documents, infographics, posters) for key stakeholders about PACA´s TDA as part of the communication strategy. | Document that communication materials have been prepared and disseminated | Monthly | Knowledge management Specialist with Communications Specialist | Communication materials | Delays in TDA development process |
| | SAPI 6. Percentage of non-state entities in SAP consultation meetings. (corresponds to Results framework indicator 9) | See indicator 9 above | | | | | | |
| | SAPI 7. Number of meetings in consultation processes for SAP in the participating countries. (associated to Results framework indicator 9, consultations) | **Mid-term**<br>0<br><br>**End-of-project**<br>16 (two per participating country) | Number of consultation meetings with national stakeholders. At least two subsequent meetings per country. | Document execution of each SAP consultation meeting.<br>Record participants on each SAP consultation meeting/ workshop.<br>Records must include sex and affiliation of each person. | Continuous data collection during SAP consultation process | Senior advisor for SAP preparation in collaboration with Gender and Participation Specialist | Event registration forms<br>Memoir of each workshop | Stakeholder are interested and participate in the consultation process |

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| | SAPI 8. Level of awareness about SAP content | **Mid-term**<br>≥40%<br><br>**End-of-project**<br>≥80% | Percentage of key decision makers and stakeholders that understand what is the SAP and its value. | Conduct a survey at mid-term and end-of-project. Stratified sample of government and non-state stakeholders | Twice at mid-term and end-of-project. | Gender and Participation Specialist with the support of the knowledge management and of the communications specialist. | Report of each survey | Interviewees provide accurate information |
| | SAPI 9. Number of communication materials to inform diverse stakeholders about PACA´s SAP in the participating countries. | **Mid-term**<br>Two<br><br>**End-of-project**<br>Six | Prepare adequate information tools (documents, infographics, posters) for key stakeholders about PACA´s SAP as part of the communication strategy. | Document that communication materials have been prepared and disseminated | Monthly | Knowledge management Specialist with Communications Specialist | Communication materials | Delays in SAP development process |
| Gender action plan | GAPI 1.<br><br>Number of direct project beneficiaries disaggregated by sex (corresponds to Results Framework indicator 1). | See indicator 1 above | | | | | | |
| | GAPI 2.<br><br>Number of indirect project beneficiaries disaggregated by sex (corresponds to Results Framework indicator 2). | See indicator 2 above | | | | | | |
| | GAPI 3. Percentage of women in the TDA Development team (corresponds to indicator 6 of Results Framework) | See indicator 6 above | | | | | | |
| | GAPI 4. a) Number of national gender studies about participation and contributions of women in coastal tourism and fisheries supply chains. | **Mid-term**<br><br>None<br><br>**End-of-project** | a) Number of national gender studies about participation and contributions of women in coastal tourism and fisheries supply chains. To be prepared as part of | Document the preparation of the national gender studies and the regional analysis | Bimonthly during TDA development | Senior TDA Specialist with the collaboration of Gender and participation Specialist | Advance reports from head of each national team indicating status of | All national studies use the same terms of reference<br><br>Sufficient information is available |

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| | b) Number of regional analyses of women's participation and contributions in coastal tourism and fisheries supply chains. | 7 studies national studies and one regional analysis with recommendations to be included as chapter/section of the TDA. | the national analyses of the TDA development process.<br><br>b) Regional analysis based on the national analyses | | | | national gender studies<br><br>National gender studies<br><br>Regional gender analysis | |
| | GAPI 5. Number of social and gender specialists on each national team that prepares the national diagnostic analyses. | **Mid-term**<br><br>Seven (one on each national team)<br><br>**End-of-project**<br><br>Seven (one on each national team) | One social-gender specialist on each team that will prepare the national diagnostic analysis<br><br>(seven specialists) | Document that each national team includes a social-gender specialist | Monthly during preparation of TDA | Senior TDA Specialist with collaboration of Gender and participation Specialist | Letter from head of each national team indicating name of social and gender specialists<br><br>Curriculum vitae of each social and gender specialists | None |
| | GAPI 6. Percentage of women in the SAP Development team | **Mid-term**<br><br>≥30%<br><br>**End-of-project**<br><br>≥30% | Percentage of women that are part of the TDA development team. | Record sex and affiliation of every person designated to be part of the SAP development team.<br><br>Record participants on each SAP development team meeting/ activity / training event. Records must include sex and affiliation of each person. | Continuous data collection, monthly processing. | Monitoring and evaluation specialist | Letters designating each member of the SAP development team<br><br>Event registration forms | The governments support women participation<br><br>Participation on each event is duly recorded |
| | GAPI 7. Percentage of women participating in SAP consultation meetings. (corresponds to Results framework indicator 9) | See indicator 9 above | | | | | | |
| | GAPI 8. Level of adoption of regional guidelines to strengthen participation of women in the governance of PACA. (corresponds to Results | See indicator 10 above | | | | | | |

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| | Framework indicator 10) | | | | | | | |
| | GAPI 9. Number of regional studies about women´s participation and contributions in the billfishes recreational fishing supply chain | **Mid-term**<br>1<br>**End-of-project**<br>1 | One regional study about women´s participation and contributions in the billfishes recreational fishing supply chain. | Document data collection and analysis on each participating country<br><br>Document preparation of the regional analysis | Bimonthly during execution of billfishes pilot | Specialist in marine resources management in collaboration with Gender and participation Specialist | Progress report from OSPESCA<br><br>National analyses<br><br>Regional analysis | All national studies use the methodology<br><br>Sufficient information is available |
| | GAPI 10. Number of regional studies about women´s participation and contributions in the whale watching value chain | **Mid-term**<br>0<br>**End-of-project**<br>1 | One regional study about women´s participation and contributions in the whale watching value chain | Document preparation of the regional analysis | Bimonthly during execution of cetacean pilot | Specialist in marine resources management in collaboration with<br><br>Gender and participation Specialist | Regional study | Sufficient information is available |
| | GAPI 11. Number of regional studies about women´s participation and decision making in marine spatial planning processes | **Mid-term**<br>0<br>**End-of-project**<br>1 | One regional study about women´s participation and decision making in marine spatial planning processes | Document preparation of the regional analysis | Bimonthly during execution of marine spatial planning pilot | Specialist in marine resources management in collaboration with Gender and participation Specialist | Progress report from pilot responsible parties in Mexico, Costa Rica, Panama and Ecuador<br><br>Analyses of participation on each pilot site<br><br>Regional analysis | Standard methodology is used in all sites<br><br>Sufficient information is available |
| | GAPI 12. Level of adoption of a set of key gender related indicators on PACA´s condition and SAP implementation. | **Mid-term**<br><br>2. Set of key gender-related indicators developed and agreed by COMMCA.<br><br>**End-of-project**<br><br>4. Set of key indicators agreed by project board. | Scale:<br><br>1. No progress on development of set of key gender-related indicators.<br><br>2. Set of key gender-related indicators developed and agreed by COMMCA.<br><br>3. Key gender-related indicators embedded into the set of set of key indicators about the condition of PACA and SAP implementation. | Document level of development of key gender-related indicators as part of the set of key indicators about the condition of PACA and SAP implementation. | biannually | Monitoring and evaluation specialist | Progress report prepared by Gender and Participation Specialist<br><br>Document with key indicators<br><br>Board decision adopting the set of indicators | Delays in development and agreeing indicators |

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| | | | 4. Set of key indicators agreed by project board.<br><br>5. Set of key indicators endorsed by pertinent national authorities on each country (this is an integral part of the Result Framework Indicator 14). | | | | | |
| | GAPI 13. Percentage of women by country who have participated in events for dissemination of lessons and best practices (e.g. workshops, IWC). (corresponds to Indicator 15 of the Results Framework) | See indicator 15 above. | | | | | | |
| | GAPI 14. Number of project learning documents which include gender-related lessons | **Mid-term**<br><br>Zero<br><br>**End-of-project**<br><br>One | One project learning document about gender-related lessons (provisional title: the role of women in transboundary LME governance and the blue economy) | Register the process of preparing the project learning document | Bimonthly during years 3 and 4 | Gender and participation Specialist in collaboration with Knowledge management Specialist | Report of regional meeting to identify gender lessons from project implementation.<br><br>Project learning document | None |
| | GAPI 15. One Representant of the Technical Secretariat for Women of the Council of Ministers for Women of Central America and Dominican Republic (STM-COMMCA) in the project board | **Mid-term**<br><br>One<br><br>**End-of-project**<br><br>One | One representant of ST-COMMCA is a full member of the project board and participate in the board meetings. | Record formal designation of ST-COMMCA representative to the project board<br><br>Record participation of ST-COMMCA in board meetings | Monthly | Monitoring and evaluation specialist | Letter designating ST-COMMCA representative<br><br>Registration form of each board meeting | Delay in designation of ST-COMMCA representative<br><br>ST-COMMCA interest in the project |
| | GAPI 16. Percentage of women in the project board | **Mid-term**<br><br>≥30%<br><br>**End-of-project** | At least 30% women are full members of the project board and participate in the board meetings. | Record formal designation of each board member | Monthly | Monitoring and evaluation specialist | Letter designating each member of the project board | The governments support women participation |

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| | | ≥30% | | Record participation of members in board meetings | | | Registration form of each board meeting | |
| | GAPI 17. Percentage of women in the technical committee | **Mid-term**<br>≥30%<br>**End-of-project**<br>≥30% | At least 30% women are full members of the technical committee and participate in the meetings. | Record formal designation of each member of the technical committee<br>Record participation of members in meetings | Monthly | Monitoring and evaluation specialist | Letter designating each member of the technical committee<br>Registration form of each meeting | The governments support women participation |
| | GAPI 18. Percentage of women in the project unit. | **Mid-term**<br>≥30%<br>**End-of-project**<br>≥30% | The project unit includes at least 30% of women among its members | Record each person contracted as member of the project unit. Record dates of contract start and end. | Monthly | Monitoring and evaluation specialist | Contracts | The implementing agency and the implementing partner support women participation |
| | GAPI 19. One gender and participation specialist is part of the project unit | **Mid-term**<br>One<br>**End-of-project**<br>One | The project unit includes one person specialized in gender and participation. | Record dates of contract start and end. | Monthly | Monitoring and evaluation specialist | Contracts<br>Curriculum vitae | The implementing agency and the implementing partner support women participation |
| | GAPI 20. One knowledge management specialist is part of the project unit | **Mid-term**<br>One<br>**End-of-project**<br>One | The project unit includes one person specialized in knowledge management. Experience in knowledge management and its application in development programs | Record dates of contract start and end. | Monthly | Monitoring and evaluation specialist | Contracts<br>Curriculum vitae | |
| | GAPI 21. One communication specialist is part of the project unit | **Mid-term**<br>One<br>**End-of-project**<br>One | The project unit includes one person specialized in communications. | Record dates of contract start and end. | Monthly | Monitoring and evaluation specialist | Contracts<br>Curriculum vitae | |
| GEF core indicators | 7.1. Level of Transboundary Diagnostic Analysis and | **Mid-term** | Level of TDA or SAP formulation and | Document level of development of TDA and | biannually | Monitoring and evaluation specialist | Board decision adopting the TDA | Delays in TDA/SAP development process. |

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| | Strategic Action Program formulation and implementation | 1 = No TDA/SAP developed<br><br>**End-of-project**<br><br>3 = SAP ministerially endorsed | implementation.<br><br>Scale:<br><br>1 = No TDA/SAP developed<br><br>2 = TDA finalized<br><br>3 = SAP ministerially endorsed<br><br>4 = SAP under implementation. | SAP according to the four steps of the scale. | | | Documents endorsing SAP on each participating country | The process of SAP endorsement could be lengthy. |
| | 7.2. Level of Regional Legal Agreements and Regional Management Institution(s) to support its implementation | **Mid-term**<br><br>2 = Regional legal agreement under development<br><br>**End-of-project**<br><br>3 = Regional legal agreement signed and RMI in place | Level of Regional Legal Agreements or Regional Management Institution(s) (RMI) formulation and implementation.<br><br>Directly linked to project indicator 8 (see above).<br><br>Scale:<br><br>1 = No regional legal agreement, or neither institutional framework nor RMI in place<br><br>2 = Regional legal agreement under development<br><br>3 = Regional legal agreement signed and RMI in place<br><br>4 = Regional legal agreement ratified and RMI functional | Document level of development of the agreement according to the four steps of the scale. | biannually | Monitoring and evaluation specialist | Collaboration agreement for SAP implementation within the framework of SICA. | Delays in negotiating and signing the agreement.<br><br>The countries are willing to collaborate on LME management. |
| | 7.3. Level of national/local reforms and active participation of Inter-Ministerial Committees (IMCs) | **Mid-term**<br><br>1 = Neither national/local reforms nor IMCs<br><br>**End-of-project**<br><br>1 = Neither national/local reforms nor IMCs | Level of national or local reforms and participation in inter-ministerial committees (IMC).<br><br>Scale:<br><br>1 = Neither national/local reforms nor IMCs<br><br>2 = National/local reforms in preparation, IMCs functional | Document level of development of national / local reforms and IMCs according to the four steps of the scale. | biannually | Monitoring and evaluation specialist | Report of the technical committee.<br><br>Supporting documents. | National / local reforms and IMCs are not foreseen until SAP is endorsed by the countries. |

| Monitoring | Indicators | Targets | Description of indicators and targets | Data source/Collection Methods[74] | Frequency | Responsible for data collection | Means of verification | Risks/Assumptions |
|---|---|---|---|---|---|---|---|---|
| | | | 3 = National/local reforms and IMCs in place<br><br>4 = National/local reforms/policies implemented, supported by IMCs. | | | | | |
| | 7.4. Level of engagement in IW: Learn through participation and delivery of key products | **Mid-term**<br><br>3 = As above, plus strong participation in training/twinning events and production of at least one experience note and one results note<br><br>**End-of-project**<br><br>4 = As above, plus active participation of project staff and country representatives at International Waters conferences and the provision of spatial data and other data points via project website. | Level of engagement in International Waters Learning Exchange and Resource Network (IW:LEARN).<br><br>Scale:<br><br>1 = No participation<br><br>2 = Website in line with IW:LEARN guidance active<br><br>3 = As above, plus strong participation in training/twinning events and production of at least one experience note and one results note<br><br>4 = As above, plus active participation of project staff and country representatives at International Waters conferences and the provision of spatial data and other data points via project website. | Document level of development according to the four steps of the scale.<br><br>Record participation on IW:LEARN events (including International Waters Conference)<br><br>Record experience notes and result notes produced<br><br>Record press news / articles sent for dissemination on the IW:LEARN portal | Monthly | Knowledge management specialist | Event registration forms<br><br>Travel reports<br><br>Experience notes and result notes<br><br>Electronic messages submitting press news / articles to IW:LEARN portal | None |
| | 11. Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment | See project indicator 1 above. | The total number of direct beneficiaries including the proportion of women beneficiaries. | | | | | |

Annex 5. UNDP social and environmental screening procedure (SESP) (see separate file)

Annex 6. UNDP Risk Register.

| # | Description | Date Identified | Risk Category | Impact & Probability[76] | Risk Treatment / Management Measures | Risk Owner | Status[77] |
|---|---|---|---|---|---|---|---|
| 1 | Risk 1. Changes in central governments in the seven participating countries which may imply that project partners change their priorities and modify their support and contributions to the project. | April 2020 | Political | Potential effect. project partners change their priorities and modify their support and contributions to the project.<br>I = 3<br>P = 5 | The project unit will maintain ongoing fluid communication with key project partners (fisheries and environment authorities and ministry of foreign affairs on each country) and stakeholders, including main SICA entities (e.g., the General Secretariat, OSPESCA, CCAD). At any time that new authorities assume office, there will be a formal presentation of the project document, implementation progress, management arrangements and the roles and contributions of the entity. | operations manager and PTA with support of UNDP country offices (as needed) | Without change |
| 2 | Risk 2. Limited indigenous peoples' participation and involvement during the implementation of the marine spatial planning pilot intervention and other project activities. | April 2020 | Social and environmental | Potential effect. Limited participation and involvement of indigenous peoples in the MSP pilot intervention<br>I = 3<br>P = 3 | The stakeholder analysis (Annex 8 in the Prodoc) identified indigenous people along PACA´s coastal zone and their relation with specific project actions. The project will likely not intervene in areas where indigenous peoples are located, except for the pilot interventions on marine spatial planning in which there are indigenous people in the areas of influence. However, an indigenous peoples plan (IPP) will be prepared at the start of project implementation, which will fully assess and confirm the presence of and potential impacts on indigenous peoples. The requirements for free, prior, and informed consent (FPIC) will be defined in the IPP according to standard 6 of UNDP Social and Environmental Standards. | Gender and participation specialist | Without change |
| 3 | Risk 3. Limitations to women participation and involvement. | April 2020 | Social and environmental | Potential effect. Women have limited participation on decision-making bodies related to the key sectors | Implement the gender action plan and monitor and analyse the project´s gender-related indicators | Gender and participation specialist | Without change |

76 Five-point scale according to UNDP Enterprise Risk Management (ERM) Policy approved on November 2018. For impact: 1. Negligible, 2. Minor, 3. Intermediate, 4. Extensive, 5. Extreme. For likelihood: 1. Not likely, 2. Low likelihood, 3. Moderately likely, 4. Highly likely, 5. Expected.

77 Finished, reducing, increasing, without change.

| # | Description | Date Identified | Risk Category | Impact & Probability[76] | Risk Treatment / Management Measures | Risk Owner | Status[77] |
|---|---|---|---|---|---|---|---|
| | | | | I = 3<br>P = 3 | | | |
| 4 | Risk 4. Concern from ocean-going fishers that a regional agreement could lead to stricter fishing regulations and possible economic displacement | April 2020 | Social and environmental | Potential effect. Opposition to TDA/SAP process<br>I = 3<br>P = 3 | 1. There are well established regional fisheries management organisations (RFMOs), based on binding protocols, which deal with these matters: the Inter-American Tropical Tuna Commission (IATTC) and the Central America Fisheries & Aquaculture Organization (OSPESCA). The SAP will not supersede the existing fisheries agreements but the risk is that ocean-going fishers perceive that advancing towards large marine ecosystem management is a threat.<br>2. The regional pilot on billfish recreational fisheries will not restrict fishers' interests, on the contrary it will facilitate to explore an alternative activity that will generate important direct and indirect benefits and will contribute to conserve billfish stocks. This pilot will work with fisheries authorities and the billfishes recreational fishing supply chain to develop a regional plan.<br>3. The pilot on marine spatial planning has intervention sites in Mexico, Costa Rica, Panama, and Ecuador and on each site will work with key stakeholders to integrate fisheries into their work.<br>4. Fishers organisations participated in the two national consultation workshops held on each participating country during project preparation.<br><u>Management measures</u><br>To address fishers' concerns about stricter fisheries management regulations the following actions will be undertaken: | Principal technical advisor | Without change |

| # | Description | Date Identified | Risk Category | Impact & Probability[76] | Risk Treatment / Management Measures | Risk Owner | Status[77] |
|---|---|---|---|---|---|---|---|
| | | | | | 1. The project will liaise with key fisheries organisations like the Inter-American Tropical Tuna Commission, FAO and OSPESCA. It is expected that these entities will participate and contribute to the TDA/SAP process (see section "Strategic allies" in the PRODOC).<br>2. At project start there will be initiation workshops with national stakeholders on each participating country. In addition, the pilot interventions will hold start-up meetings with local stakeholders on each country. These meetings will allow to engage with representatives of the main fisheries organisations (see section "stakeholder engagement" in the PRODOC.<br>3. Fisheries representatives will directly participate in the TDA/SAP process (see section "Strategic allies" in the PRODOC).<br>4. Fisheries organisations, like other key stakeholders, will be duly informed of project progress and lessons through the various communication channels to be used (see outputs 2.3 and 5.1 in the PRODOC).<br>5. The TDA/SAP process and the pilots on billfish recreational fisheries and marine spatial planning will apply a Strategic Environmental and. Social Assessment (SESA) approach to identify and manage possible risks of economic displacement.<br>6. Apply the recommendations from the indigenous peoples plan (which will be prepared at the project start). | | |
| 5 | Risk 5. Costa Rican fishers unwilling to participate in pilot | April 2020 | Social and environmental | Potential effect. Opposition to pilot intervention in Costa Rica.<br>I = 3 | 1. The project team will support Costa Rican authorities in the process of adopting the National Action Plan for Large | Principal technical advisor & UNDP country office in Costa Rica | Without change |

| # | Description | Date Identified | Risk Category | Impact & Probability[76] | Risk Treatment / Management Measures | Risk Owner | Status[77] |
|---|---|---|---|---|---|---|---|
| | intervention on management of tuna and tuna-like species[78]. | | | P = 4 | Pelagic Fisheries during the first year of project implementation.<br><br>2. The project team will approach the Chamber of Long-liners to identify ways to facilitate dialogue between them and the government authorities.<br><br>3. The Chamber of Long-liners will be duly informed of project progress and lessons through the various communication channels to be used. | | |
| 6 | Risk 6. Negative impacts on critical habitats and/or legally protected areas. | April 2020 | Social and environmental | Potential effect. The value of critical habitats and MPAs is not adequately recognised in TDA/SAP process and MSP pilot interventions.<br>I = 4<br>P = 1 | 1. The project was designed to ensure that the value of critical habitats is recognised and that MPAs are the foundation for zoning to safeguard what is most ecologically important, biologically diverse, or vulnerable.<br><u>Management measures</u><br>1. Ensure that the TDA/SAP process is built upon a Strategic Environmental and Social Assessment (SESA) approach.<br>2. Ensure that the conservation value and contribution to blue growth of critical habitats and MPAs is discussed in the TDA/SAP process and included into the TDA and SAP (see paragraphs 99 and 105 of the PRODOC).<br>Ensure that the MSP pilot intervention safeguard that the value of critical habitats is recognised and that MPAs are used as the foundation for zoning to safeguard what is most ecologically important, biologically diverse, or vulnerable (see paragraphs 125, 147, 158, 170 and 180 of the PRODOC). | Specialist in marine resources management | Without change |

78 In Costa Rica the fisheries sector and the government have had strong confrontations over the past years.

| # | Description | Date Identified | Risk Category | Impact & Probability[76] | Risk Treatment / Management Measures | Risk Owner | Status[77] |
|---|---|---|---|---|---|---|---|
| 7 | Risk 7. Impacts of climate variability and climate change. | April 2020 | Social and environmental | Potential effect. Disruption or delay in project activities.<br>I = 3<br>P = 4 | Management measures<br>3. The project unit will ensure that the effects of climate variability and climate change will be analysed in the TDA and that the SAP incorporate appropriate adaptation measures and aligns, as much as possible, with the Nationally Determined Contributions (NDCs) of the participating countries (see paragraphs 99 and 105 and Table 11 of the PRODOC)<br>4. Annual workplans will be adjusted, as needed, to cope with the impacts of ENSO events during project implementation (see Table 11 of the PRODOC). | Principal technical advisor | Without change |
| 8 | Risk 8. Difficulty to materialize cofinancing due to the impacts of COVID-19 on national economies. | April 2020 | Financial | Potential effect. Reduced cofinancing contributions to the project.<br>I = 3<br>P = 5 | 1. Maintain fluid communication with key project partners to identify difficulties in materializing cofinancing.<br>2. Encourage project partners to maintain as much as possible their contributions to the project.<br>3. Seek opportunities of collaboration with other ongoing projects and initiatives to obtain contributions that can add to project cofinancing. | operations manager and UNDP country offices | Increasing |

Annex 7: Terms of reference for project board and key personnel (see separate file).

Annex 8. Stakeholders Analysis (see separate file).

Annex 9: Stakeholders engagement plan (see separate file).

Annex 10: Gender analysis (see separate file).

Annex 11: Gender Action Plan (see separate file).

Annex 12:  GEF core indicators (see separate file).

Annex 13: GEF 7 taxonomy (see separate file).

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Annex 15. Definitions.

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| Biodiversity hotspot | A region that feature exceptional concentrations of species with exceptional levels of endemism, and that face exceptional degrees of threat (Myers, 1988; Mittermeier et al., 1999). | Foco crítico de biodiversidad | Una región que presenta concentraciones excepcionales de especies con niveles excepcionales de endemismo, y que enfrentan grados excepcionales de amenaza (Myers, 1988; Mittermeier et al., 1999). |
| Blue economy | Comprises the range of economic sectors and related policies that together determine whether the use of oceanic resources is sustainable (World Bank & UN DESA, 2017). | Economía azul | Comprende la diversidad de sectores económicos y las políticas relacionadas que en conjunto determinan si el uso de los recursos oceánicos es sostenible (World Bank & UN DESA, 2017). |
| Civil Society Organizations | The multitude of associations around which society voluntarily organizes itself and which represent a wide range of interests and ties. These can include community-based organisations, indigenous peoples' organisations and non-government organisations (OECD, 2006). | Organizaciones de la sociedad civil | La multitud de asociaciones alrededor de las cuales la sociedad se organiza voluntariamente y que representan una amplia gama de intereses y vínculos. Estas pueden incluir organizaciones comunitarias, organizaciones de pueblos indígenas y organizaciones no gubernamentales (OECD, 2006) |
| Co-financing | Co-financing means financing that is additional to GEF project financing, and that supports the implementation of a GEF-financed project or program and the achievement of its objective(s). GEF policy on co-financing. Approved on 26 June 2018. | Cofinanciamiento | Cofinanciamiento significa financiamiento adicional al financiamiento del GEF, y que respalda la implementación de un proyecto o programa financiado por el GEF y el logro de su(s) objetivo(s). Política del GEF sobre cofinanciamiento. Aprobada el 26 de junio de 2018. |
| Combined delivery report (CDR) | A mandatory official report which reflects the incurred and agreed expenses and funds utilized on a project. | Informe combinado (CDR) | Un informe oficial obligatorio que refleja los gastos y fondos incurridos y acordados que han sido utilizados en un proyecto. |

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| Direct beneficiaries | Direct beneficiaries are those who will receive goods or services from the project. | Beneficiarios directos | Beneficiarios directos son aquellos que recibirán bienes o servicios del proyecto. |
| Direct project costs (DPC) | These are costs that are incurred by UNDP that are execution-driven and are incurred for, and can be traced in full to, the delivery of project inputs. DPCs normally relate to operational and administrative support activities carried out by UNDP offices on behalf of Direct Implementation Modality (DIM) or country office support to National Implementation Modality (NIM) projects, such as: (a) human resources activities, including recruitment of project personnel, issuance of project personnel contracts, (b) costs incurred in the process of undertaking procurement activities of project goods and services, and (c) finance transactions that are performed on behalf of an implementing partner.<br><br>The UNDP Cost Recovery Policy states that the costs of any DPC incurred by UNDP need to be recovered on the basis of estimated actual costs expected to be incurred, or on a per-transaction basis using the Universal Price List (UPL) or the Local Price List and should be charged directly to the project budget. | Costos directos de proyecto (DPC) | Estos son los costos en los que incurre el PNUD que son requeridos para la ejecución y se incurren para, y se pueden rastrear en su totalidad, la entrega de los insumos del proyecto. Los DPC normalmente se relacionan con actividades de apoyo operacional y administrativo realizadas por las oficinas del PNUD como parte de la modalidad de implementación directa (DIM) o el apoyo de la oficina de país a proyectos de modalidad de implementación nacional (NIM), tales como: a) actividades de recursos humanos, incluida la contratación de personal del proyecto, emisión de contratos de personal del proyecto, (b) costos incurridos en el proceso de adquisición de bienes y servicios del proyecto, y (c) transacciones financieras que se realizan a nombre de un socio implementador.<br>La política de recuperación de costos del PNUD establece que los costos de cualquier DPC incurridos por el PNUD deben recuperarse sobre la base de los costos reales estimados que se espera incurrir, o por transacción utilizando la lista universal de precios (UPL) o la lista de precios local, y debe cargarse directamente al presupuesto del proyecto. |
| Direct project services (DPS) | These are operational or administrative support activities that are carried out by UNDP offices to facilitate the execution of a project. These services are requested by the implementing partner and agreed | Servicios directos de proyecto (DPS) | Son actividades de apoyo operacional o administrativo que son realizadas por las oficinas de PNUD para facilitar la ejecución de un proyecto. Estos servicios son solicitados por el socio implementador y acordados |

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| | through a letter of agreement (LOA). The amount of these services is called direct project costs (DPC). | | mediante una carta de acuerdo (LOA). El importe de estos servicios se denomina costos directos de proyecto (DPC). |
| Ecosystem approach | The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Thus, the application of the ecosystem approach will help to reach a balance of the three objectives of the Convention: conservation, sustainable use, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources (Decision V/6 of the Convention on Biological Diversity) | Enfoque ecosistémico | El enfoque ecosistémico es una estrategia para el manejo integrado de la tierra, el agua y los recursos vivos que promueve la conservación y el uso sostenible de manera equitativa. Por lo tanto, la aplicación del enfoque ecosistémico ayudará a alcanzar un equilibrio entre los tres objetivos de la Convención: la conservación, el uso sostenible, y la distribución justa y equitativa de los beneficios derivados de la utilización de los recursos genéticos (Decisión V/6 del Convenio sobre la Diversidad Biológica) |
| Ecosystem based adaptation | Ecosystem-based adaptation is the use of biodiversity and ecosystem services as part of an overall adaptation strategy to help people to adapt to the adverse effects of climate change. | Adaptación basada en ecosistemas | La adaptación basada en ecosistemas es definida como la utilización de la biodiversidad y los servicios de los ecosistemas, como parte de una estrategia más amplia de adaptación, para ayudar a las personas a adaptarse a los efectos adversos del cambio climático. |
| GEF Project Implementation Report (PIR) | This is an annual report that GEF agencies must submit to the GEF Secretariat by June 30 of a set fiscal year. The report must include, at the minimum: basic data, project status, rating project performance, and risk rating. A fiscal year at the GEF starts on 1 July and ends on 30 June of the following calendar year. | Informe de ejecución de proyecto GEF (PIR) | Este es un informe anual que agencias del GEF deben presentar a la Secretaría del GEF antes del 30 de junio de un año fiscal determinado. El informe debe incluir, como mínimo: datos básicos, estado del proyecto, desempeño del proyecto de calificación y calificación de riesgo. Un año fiscal en el GEF comienza el 1 de julio y finaliza el 30 de junio del siguiente año calendario. |
| Gender equality | Refers to the equal rights, responsibilities and opportunities of women and men and girls and boys. | Igualdad de género | Se refiere a la igualdad de derechos, responsabilidades y oportunidades de las mujeres y los hombres y las niñas y |

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| | Equality does not mean that women and men will become the same but that women's and men's rights, responsibilities and opportunities will not depend on whether they are born male or female. Gender equality implies that the interests, needs and priorities of both women and men are taken into consideration—recognizing the diversity of different groups of women and men. Gender equality is not a 'women's issue' but should concern and fully engage men as well as women. Equality between women and men is seen both as a human rights issue and as a precondition for, and indicator of, sustainable people-centred development (PNUD, 2014). | | los niños. la igualdad no significa que las mujeres y los hombres se conviertan en lo mismo, sino que los derechos, las responsabilidades y las oportunidades de las mujeres y los hombres no dependerán del sexo con que nacieron. la igualdad de género supone que se tendrán en cuenta los intereses, las necesidades y las prioridades tanto de las mujeres como de los hombres, reconociéndose la diversidad de los diferentes grupos de mujeres y de hombres. la igualdad de género no es un "problema de la mujer" sino que debería preocupar tanto a hombres como a mujeres y atraer su participación plena. la igualdad entre las mujeres y los hombres se considera una cuestión tanto de derechos humanos como una condición previa para el desarrollo sostenible centrado en las personas y un indicador de éste (PNUD, 2014). |
| Gender marker | The UNDP Gender Marker is a tool that rates gender mainstreaming and equality at the activity level on a scale from zero to three. Projects must rate all project activities in terms of how they contribute to gender equality and women's empowerment. Each activity must be allocated a gender rating of 0, 1, 2 or 3, as follows:<br>1. Activities that have gender equality as a principal objective should be rated 3;<br>2. Activities that have gender equality as a significant objective should be rated 2; | Indicador de género | El indicador de género del PNUD es una herramienta que califica la transversalización de género y la igualdad al nivel de actividades, en una escala de cero a tres. Los proyectos deben calificar todas las actividades del proyecto en términos de cómo contribuyen a la igualdad de género y el empoderamiento de las mujeres. A cada actividad se le debe asignar una calificación de género de 0, 1, 2 o 3, de la siguiente manera:<br>1. Las actividades que tienen la igualdad de género como objetivo principal deben tener una calificación de 3; |

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| | 3. Activities that will contribute in some way to gender equality, but not significantly, should be rated 1; and<br>4. Activities that are not expected to contribute noticeably to gender equality should be rated 0. | | 2. Las actividades que tienen la igualdad de género como un objetivo importante deben tener una calificación de 2;<br>3. Las actividades que contribuirán de alguna manera a la igualdad de género, pero no de manera significativa, deben tener una calificación de 1; y<br>4. Las actividades que no se espera que contribuyan notablemente a la igualdad de género deben tener una calificación de 0. |
| Human development | A process of enlarging people's choices. The most critical of these wide-ranging choices are to live a long and healthy life, to be educated and to have access to resources needed for a decent standard of living. Additional choices include political freedom, guaranteed human rights and personal self-respect (UNDP, 1990). | Desarrollo humano | Es un proceso mediante el cual se amplían las oportunidades de los individuos, las más importantes de las cuales son una vida prolongada y saludable, acceso a la educación y el disfrute de un nivel de vida decente. Otras oportunidades incluyen la libertad política, la garantía de los derechos humanos y el respeto a sí mismo (UNDP, 1990). |
| Implementing agency | Also called "GEF Agency", it is responsible for the implementation of the project, which "entails oversight of project execution to ensure that the project is being carried out in accordance with agreed standards and requirements". GEF Agencies are accountable to the GEF Council for their GEF-financed activities. GEF Agencies are responsible for project cycle management services and corporate activities. | Agencia implementadora | También llamada "Agencia GEF", es responsable de la implementación del proyecto, que "implica la supervisión de la ejecución del proyecto para garantizar que este se lleve a cabo de acuerdo con los estándares y requisitos acordados". Las agencias GEF son responsables ante el Consejo del GEF por sus actividades financiadas por el GEF. Las agencias GEF son responsables de los servicios de gestión del ciclo del proyecto y actividades corporativas. |
| Implementing partner | The entity responsible and accountable for managing a project, including the monitoring and evaluation of | Socio implementador | La entidad responsable y que rinde cuentas por la administración del proyecto, incluyendo el monitoreo y |

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| | project interventions, achieving project outcomes, and for the effective use of GEF resources. A single Implementing Partner is designated to manage each project. According to Article 17 of UNDP's financial regulations, an implementing partner is "the entity to which the Administrator has entrusted the implementation of UNDP assistance specified in a signed document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in such document." | | evaluación de las intervenciones del proyecto, el logro de los resultados, y el efectivo uso de los recursos del GEF. Sólo un socio implementador se designa para cada proyecto. De acuerdo con el Artículo 17 del reglamento financiero del PNUD, un socio implementador es "la entidad a la cual el Administrador ha confiado la implementación de la asistencia del PNUD especificada en un documento firmado junto con la asunción de plena responsabilidad y responsabilidad por el uso efectivo de los recursos del PNUD y la entrega de resultados, como se establece en dicho documento". |
| | In GEF terminology the implementing partner is called "project executing entity", an organization that executes a GEF Project or Program, or portions of it, under the supervision of a GEF Agency. | | En la terminología del GEF, el socio implementador se denomina "entidad ejecutora del proyecto", una organización que ejecuta un proyecto o programa del GEF, o partes de él, bajo la supervisión de una agencia del GEF. |
| Key stakeholders | Key stakeholders are those with whom the project's outputs will be directly worked. | Actores clave | Actores clave son aquellos con los que directamente se trabajarán los productos del proyecto. |
| National implementation modality (NIM) | National authorities undertake the functions and activities of the project. The implementation of the projects requires that the national institution act as "implementing partner". | Modalidad de implementación nacional (NIM) | Las autoridades nacionales llevan a cabo las funciones y actividades del proyecto. La implementación de los proyectos requiere que la institución nacional actúe como "socio implementador". |
| Non-state entities | Entities that are independent of the government such as civil society organizations, farmers associations or community groups. | Entidades no estatales | Entidades que son independientes del gobierno, tales como organizaciones de la sociedad civil, asociaciones de agricultores o grupos comunitarios. |

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| Project partner | An entity that directly contributes to the execution of the project. | Socio del proyecto | Es una entidad que contribuye directamente a la ejecución del proyecto. |
| Responsible party | An entity with specialized skills that provides goods and/or services to the project, carry out project activities and/or produce outputs using the project budget. | Parte responsable | Una entidad con habilidades especializadas que proporciona bienes y/o servicios al proyecto, realiza actividades del proyecto y/o produce productos utilizando el presupuesto del proyecto. |
| SAP development team | Team of technical specialists appointed to undertake the key development steps for the SAP. It should include specialists in technical, legal, financial and public policy issues. The SAP formulation team should also include members of the TDA development team for continuity of the TDA/SAP process (GEF IW:LEARN, 2013). | Equipo de desarrollo del SAP | Equipo de especialistas técnicos designados para llevar a cabo los pasos clave de desarrollo del SAP. Debe incluir especialistas en temas técnicos, legales, financieros y de políticas públicas. El equipo de formulación del SAP también debe incluir miembros del equipo de desarrollo de TDA para asegurar la continuidad del proceso TDA / SAP (GEF IW:LEARN, 2013). |
| Social inclusion | Social inclusion is defined as the process of improving the terms of participation in society, particularly for people who are disadvantaged, through enhancing opportunities, access to resources, voice and respect for rights (UN, 2016). | Inclusión social | La inclusión social se define como el proceso para mejorar los términos de la participación en la sociedad, especialmente para las personas desfavorecidas, mediante la mejora de las oportunidades, el acceso a los recursos, la voz y el respeto de los derechos (UN, 2016). |
| Standard letter of agreement between UNDP and the government for the provision of support services, abbreviated (LOA) | This Letter is used when a government ministry/institution or an international governmental organization cooperates with UNDP to carry out activities when UNDP provides support services to a NIM project. | Carta de acuerdo estándar entre el PNUD y el gobierno para la prestación de servicios de apoyo (LOA) | Esta carta se utiliza cuando un ministerio / institución del gobierno o una organización gubernamental internacional coopera con el PNUD para llevar a cabo actividades cuando el PNUD presta servicios de apoyo a un proyecto NIM. |

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| Strategic Action Programme | The SAP is an agreed, multinational framework for strategic actions to protect the coastal and marine environment. The SAP contains a series of policy, legislative, socio-economic, and other actions to be undertaken at regional level, with the aim of enhancing the management of the ecosystems concerned and to address the priority transboundary problems. Endorsed at the highest level, it establishes clear priorities for action to resolve the priority problems which were identified in the TDA. The preparation of a SAP is a cooperative process among the countries of the region (GEF IW: LEARN, 2013; GEF LME: LEARN, 2018). | Programa de Acción Estratégica (SAP) | El SAP es un marco multinacional acordado de acciones estratégicas para proteger el medio ambiente costero y marino. El SAP contiene una serie de medidas políticas, legislativas, socioeconómicas y de otro tipo que se llevarán a cabo a nivel regional, con el objetivo de mejorar la gestión de los ecosistemas en cuestión y abordar los problemas transfronterizos prioritarios. Avalado al más alto nivel, establece prioridades claras de acción para resolver los problemas prioritarios que se identificaron en el TDA. La preparación de un SAP es un proceso cooperativo entre los países de la región (GEF IW: LEARN, 2013; GEF LME: LEARN, 2018). |
| Support services to national implementation | This is where the implementing partner and UNDP have agreed that UNDP will provide support services to the project on the basis of an agreement with the government on the provision of services by UNDP (standard letter of agreement between UNDP and the government for the provision of support services, abbreviated LOA). | Servicios de apoyo a la implementación nacional | Aquí es cuando el socio implementador y el PNUD han acordado que el PNUD brindará servicios de apoyo al proyecto sobre la base de un acuerdo con el gobierno para la prestación de servicios por parte del PNUD (carta de acuerdo estándar entre el PNUD y el gobierno para la prestación de servicios de apoyo, abreviada LOA). |
| Sustainable event | A sustainable event is one designed, organised and implemented in a way that minimises potential negative impacts and leaves a beneficial legacy for the host community and all involved (UNEP, 2012). | Evento sostenible | Un evento sostenible es aquel diseñado, organizado e implementado de una manera que minimice los posibles impactos negativos y deje un legado beneficioso para la comunidad de acogida y todos los involucrados (UNEP, 2012). |
| Sustainable human development | The expansion of the substantive freedoms of people today while making reasonable efforts to avoid seriously | Desarrollo humano sostenible | La expansión de las libertades sustantivas de las personas hoy en día, mientras se hacen esfuerzos |

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| | compromising those of future generations (UNDP, 2011). | | razonables para evitar comprometer seriamente a las generaciones futuras (UNDP, 2011). |
| TDA development team | The TDA development team should be a broadly representative interdisciplinary technical body that represents the countries participating in the project and that will participate in the key development steps for the TDA. The team should be broadly representative of stakeholders but entirely technical in nature (GEF IW: LEARN, 2013). | Equipo de desarrollo del TDA | El equipo de desarrollo del TDA debe ser un grupo técnico interdisciplinario ampliamente representativo que represente a los países que participan en el proyecto y que participarán en los pasos clave de desarrollo del TDA. El equipo debe ser ampliamente representativo de los actores clave, pero de naturaleza completamente técnica. (GEF IW: LEARN, 2013). |
| TDA/SAP process | The development of a Transboundary Diagnostic Analysis (TDA) followed by the formulation of a Strategic Action Programme (SAP) is a highly collaborative process that has proven to be a major strategic planning tool for GEF International Waters projects (GEF IW: LEARN, 2013). | Proceso TDA/SAP | El desarrollo de un Análisis Diagnóstico Transfronterizo (TDA) seguido de la formulación de un Programa de Acción Estratégica (SAP) es un proceso altamente colaborativo que ha demostrado ser una importante herramienta de planificación estratégica para los proyectos GEF del portafolio de Aguas Internacionales (GEF IW: LEARN, 2013). |
| Transboundary Diagnostic Analysis (TDA) | A TDA is a factual report addressing the scientific and technical assessment of an international waters area. The TDA uses the best available verified scientific and technical information to assess the nature and severity of transboundary environmental issues and threats, causes and impacts in the socio-economic, political and institutional context of the region in question (GEF IW: LEARN, 2013; GEF LME:LEARN, 2018). | Análisis Diagnóstico Transfronterizo (TDA) | Un TDA es un informe basado en hechos que aborda la evaluación científica y técnica de un área de aguas internacionales. El TDA utiliza la mejor información científica y técnica verificada disponible para evaluar la naturaleza y la gravedad de los problemas ambientales transfronterizos, las amenazas, las causas y los impactos en el contexto socioeconómico, político e institucional de la región en cuestión (GEF IW: LEARN, 2013; GEF LME:LEARN, 2018). |
| Unique visitors | A count of how many different people access a Web site. It refers to the number of distinct individuals | Visitas únicas | Un recuento de cuántas personas diferentes acceden a un sitio web. Se refiere a la cantidad de personas |

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| | requesting pages from the website during a given period, regardless of how often they visit. | | distintas que solicitan páginas del sitio web durante un período determinado, independientemente de la frecuencia con la que las visitan. |
| Universal Price List (UPL) | This is a menu of standardized services available to entities from all UNDP´s offices and their corresponding transaction cost. | Lista Universal de Precios | Es un menú de servicios estandarizados disponible para las entidades de todas las oficinas del PNUD y su costo de transacción correspondiente. |
| Visit | A visit is one individual visitor who arrives at a web site and proceeds to browse. A visit counts all visitors, no matter how many times the same visitor may have been on the site. | Visita | Una visita es un visitante individual que llega a un sitio web y procede a navegar. Una visita cuenta a todos los visitantes, sin importar cuántas veces el mismo visitante haya estado en el sitio. |
| Women's empowerment | Women's empowerment has five components: Women's sense of self-worth; their right to have and to determine choices; their right to have access to opportunities and resources; their right to have the power to control their own lives, both within and outside the home; and their ability to influence the direction of social change to create a more just social and economic order, nationally and internationally.<br><br>The concept of empowerment is related to gender equality but distinct from it. The core of empowerment lies in the ability of a woman to control her own destiny. This implies that to be empowered women must not only have equal capabilities (such as education and health) and equal access to resources and opportunities (such as land and employment), they must also have the agency to use those rights, capabilities, resources and opportunities to make strategic choices and decisions | Empoderamiento de las mujeres | El empoderamiento de las mujeres tiene cinco componentes: el sentido de autoestima de la mujer; su derecho a ejercer y determinar opciones; su derecho a tener acceso a oportunidades y recursos; su derecho al poder para controlar su propia vida, tanto dentro del hogar como fuera de éste; y su capacidad para determinar la orientación del cambio social para crear un orden económico y social más justo a nivel nacional e internacional.<br><br>El concepto de empoderamiento guarda relación con la igualdad de género, pero se distingue de éste. el fundamento del empoderamiento reside en la capacidad de una mujer de controlar su propio destino. esto supone que, para estar empoderadas, las mujeres no sólo deben tener las mismas capacidades (como la educación y la salud) y el mismo acceso a los recursos y oportunidades (como la tierra y el empleo), sino que |

(such as are provided through leadership opportunities and participation in political institutions. And to exercise agency, women must live without the fear of coercion and violence (Grown et al., 2005; PNUD, 2014).

también deben tener los medios para utilizar esos derechos, capacidades, recursos y oportunidades a fin de ejercer opciones y tomar decisiones estratégicas (como las que brindan las oportunidades de liderazgo y la participación en las instituciones políticas) para valerse de esos medios, las mujeres deben vivir sin miedo a la coacción y a la violencia (Grown et al., 2005; PNUD, 2014).

Annex 16: Memoirs of consultation meetings during project preparation.

Annex 17: COVID-19 opportunities and challenges for project implementation.

**Challenges**

| Short-term (project start) | Medium-term (mid-term) | Long-term (end-of-project) |
|---|---|---|
| Risk of infection restrict in-person work.<br><br>Travel restrictions (e.g., lockdowns, travel bans) limit in-person meetings and field work. | Continued risk of infection and restrictions in the participating countries because of delays in vaccination plans. | Delayed project implementation |
| Limited / unreliable internet access limit remote collaborative work, stakeholder engagement / consultation and meetings. | | |
| Reduced stakeholder engagement because they focus their interest and efforts into economic recovery. | | |
| Difficulty to materialise co-financing because countries focus budget expenditure into health services and pandemic recovery actions. | | |
| Need to assign budget resources to implement biosecurity protocols and strengthen capabilities for web-based collaboration. | | |
| Increased cost of goods and services may occur. | | |

**Opportunities**

| Short-term (project start) | Medium-term (mid-term) | Long-term (end-of-project) |
|---|---|---|
| Increased awareness of how biodiversity loss is a key driver of and human-driven tragedies. | | |
| Increased awareness of the importance of biodiversity for future human health, well-being and economic prosperity, | | |
| Public and private interest of incorporating biodiversity considerations into post COVID-19 recovery strategies. | | |
| Development and implementation of post COVID-19 recovery strategies in participating countries | → | |

**Project actions**

Component 1.

1. The TDA will consider the impacts of the COVID-19 pandemic on PACA´s blue economy and the SAP will integrate, as much as possible, the countries´ recovery strategies related to blue growth.
2. For TDA, each national diagnostic analysis will document (i) the impacts of the COVID-19 pandemic on coastal populations and key blue economic sectors such as fisheries, aquaculture and coastal and marine tourism, and (ii) adopted post-crisis recovery strategies.
3. For SAP, ensure it is connected with pertinent national and regional post-COVID recover strategies.

Component 2.

1. The pilot interventions will document pertinent COVID-19 impacts to provide inputs to the TDA/SAP process.
2. The billfishes' pilot will document the impact of the COVID-19 pandemic on the billfish recreational fishing and related tourism value chain. The regional plan will include, as appropriate, pertinent post COVID-19 recovery actions.

3. The MSP pilot intervention (with site actions in Mexico, Costa Rica, Panama, and Ecuador). The initiation workshop will include sharing information about the impacts of the COVID-19 pandemic and possible implications for MSP. On each site intervention: (i) document the main impacts of the COVID-19 pandemic on the key coastal and marine sectors and the corresponding recovery strategies and plans, and (ii) mainstream pertinent post COVID-19 recovery measures on the instruments and actions to be implemented.
4. The cetacean conservation pilot will (ii) document COVID-19 pandemic impacts on whale watching and related tourism and recovery measures under implementation and (ii) mainstream post COVID-19 recovery measures into the regional guidelines.

Risk mitigation actions

1. In-person work will be encouraged “only” if sanitary and legal conditions allow it (e.g., personnel are vaccinated, project partners start their in-person activities, mobility restrictions are removed) and if personal conditions of each individual allow it (e.g., children not able to start school yet, living with elderly people in higher risk of not coping well with the COVID-19, among others).
2. Prepare and implement guidelines for in-person meetings under COVID-19 scenario based on advice from the World Health Organization, the US Centres for Disease Control and Prevention (CDC) and the Ministries of Publich Health of the participating countries.
3. Develop and implement biosecurity plans for in-person meetings.
4. The project will encourage virtual work whenever. Project personnel, local partners and communities will be trained in the use of virtual methods for meetings and will be given the tools to use them. The project will use, as much as possible, the virtual communication means that local stakeholders prefer (e.g., FaceTime, WhatsApp video calls).
5. Maintain fluid communication with key project partners to identify difficulties in materializing cofinancing. The project will encourage project partners to maintain as much as possible their contributions to the project. In addition, the project will seek opportunities of collaboration with other ongoing projects and initiatives to obtain contributions that can add to project cofinancing.
6. Undertake, as necessary, budget reviews to assign resources for implementation of biosecurity protocols and strengthening capabilities for web-based collaboration.