



Towards Joint Integrated, Ecosystem-based Management of the Pacific Central American Coastal Large Marine Ecosystem (PACA)

Part I: Project Information

GEF ID

10076

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

CBIT **No**

NGI **No**

Project Title

Towards Joint Integrated, Ecosystem-based Management of the Pacific Central American Coastal Large Marine Ecosystem (PACA)

Countries

Regional, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Costa Rica

Agency(ies)

UNDP

Other Executing Partner(s)

WWF

Executing Partner Type

CSO

GEF Focal Area

Multi Focal Area

Taxonomy

Climate Change Adaptation, Climate Change, Focal Areas, Ecosystem-based Adaptation, International Waters, Biomes, Mangrove, Coral Reefs, Large Marine Ecosystems, Transboundary Diagnostic Analysis and Strategic Action Plan Preparation, Coastal, Strengthen institutional capacity and decision-making, Influencing models, Transform policy and regulatory environments, Demonstrate innovative approach, Convene multi-stakeholder alliances, Indigenous Peoples, Stakeholders, Local Communities, Beneficiaries, Civil Society, Community Based Organization, Non-Governmental Organization, Academia, Type of Engagement, Consultation, Partnership, Participation, Information Dissemination, Communications, Awareness Raising, Private Sector, Individuals/Entrepreneurs, Large corporations, SMEs, Gender results areas, Gender Equality, Access and control over natural resources, Participation and leadership, Gender Mainstreaming, Sex-disaggregated indicators, Women groups, Gender-sensitive indicators, Learning, Capacity, Knowledge and Research, Indicators to measure change, Theory of change, Adaptive management, Capacity Development

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 0

Submission Date

12/12/2020

Expected Implementation Start

8/2/2021

Expected Completion Date

7/31/2025

Duration

48In Months

Agency Fee(\$)

678,984.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
IW-1-1	Objective 1. Strengthening Blue Economy opportunities. Strategic Action 1.1: Sustaining healthy coastal and marine ecosystems	GET	6,877,626.00	52,501,839.92
BD-1-1	Objective 1. Mainstream biodiversity across sectors as well as within production landscapes and marine habitat	GET	269,583.00	2,182,500.00
Total Project Cost(\$)			7,147,209.00	54,684,339.92

B. Project description summary

Project Objective

To promote ecosystem-based management of the Pacific Central American Large Marine Ecosystem through the strengthening of regional governance.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
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Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
1. Governance instruments improved at regional level for joint management of PACA	Technical Assistance	<p>Outcome 1. Common understanding of the regional LME challenges and opportunities supported by the participant countries.</p> <p>Outcome 2. Collaborative framework and governance arrangements adopted by the participating countries to implement PACA's SAP</p>	<p>1.1. Transboundary Diagnostic Analysis (TDA) of the Pacific Central American Coastal Large Marine Ecosystem prioritizes threats to LME, their immediate and root causes.</p> <p>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.</p> <p>2.2 Collaborative framework and governance arrangements to implement PACA's SAP endorsed by participating countries.</p> <p>2.3. Strategy for awareness raising, participation and articulation</p>	GET	2,840,060.08	22,081,178.28

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
2. Initial on-the ground pilot active actions to address common key issues and to advance collaborative work and replication	Technical Assistance	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. 3.2. Best practice and lessons from the pilots systematized, accessible and available to all stakeholders in the region	GET	2,621,851.00	21,822,619.50

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
3. Knowledge management	Technical Assistance	<p>Outcome 4. Collaborative information system developed with key indicators on PACA's condition and SAP implementation</p> <p>Outcome 5. Lessons on collaborative actions to manage PACA shared in the region and worldwide (south-south cooperation).</p>	<p>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.</p> <p>5.1. Website for dissemination of lessons and best practice, linked to partners? portals and IW: LEARN.</p> <p>5.2. Project lessons documented and disseminated.</p>	GET	1,363,646.24	8,434,565.15
Sub Total (\$)					6,825,557.32	52,338,362.93
Project Management Cost (PMC)						
		GET	321,651.68	2,345,976.99		

Project Management Cost (PMC)

Sub Total(\$)	321,651.68	2,345,976.99
Total Project Cost(\$)	7,147,209.00	54,684,339.92

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Private Sector	FECOP Costa Rica	In-kind	Recurrent expenditures	200,000.00
GEF Agency	UNDP Costa Rica	In-kind	Recurrent expenditures	12,000.00
Recipient Country Government	INCOPECA Costa Rica	In-kind	Recurrent expenditures	2,400,000.00
Recipient Country Government	MINAE Costa Rica	In-kind	Recurrent expenditures	1,000,000.00
Recipient Country Government	MAAE Ecuador	In-kind	Recurrent expenditures	5,432,299.73
Recipient Country Government	SRP Ecuador	In-kind	Recurrent expenditures	8,760,842.88
Recipient Country Government	MARN El Salvador	In-kind	Recurrent expenditures	1,574,880.00
Recipient Country Government	DIPESCA Guatemala	In-kind	Recurrent expenditures	608,647.41
Recipient Country Government	MARN Guatemala	Grant	Investment mobilized	946,077.67
Recipient Country Government	MARN Guatemala	In-kind	Recurrent expenditures	241,438.65
Private Sector	Private sector Sport Fishing Guatemala	Grant	Investment mobilized	120,000.00

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	CONANP Mexico	In-kind	Recurrent expenditures	500,000.00
Other	LANCIS Mexico	In-kind	Recurrent expenditures	175,000.00
Recipient Country Government	CONAPESCA Mexico	In-kind	Recurrent expenditures	4,548,000.00
Recipient Country Government	PROFEPA Mexico	In-kind	Recurrent expenditures	30,465.54
Recipient Country Government	SCT Mexico	In-kind	Recurrent expenditures	11,649,169.15
Recipient Country Government	SEMAEDES Oaxaca Mexico	In-kind	Recurrent expenditures	223,373.90
Recipient Country Government	SEMAHN Chiapas Mexico	In-kind	Recurrent expenditures	199,404.38
Recipient Country Government	SEMAR Mexico	In-kind	Recurrent expenditures	422,146.69
Recipient Country Government	SEMARNAT Colima Mexico	In-kind	Recurrent expenditures	1,403.31
Recipient Country Government	SEMARNAT Oaxaca Mexico	In-kind	Recurrent expenditures	690.61
Recipient Country Government	ARAP Panama	In-kind	Recurrent expenditures	3,200,000.00

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	MiAmbiente Panama	Grant	Investment mobilized	11,332,000.00
Civil Society Organization	Panacetacea Panama	In-kind	Recurrent expenditures	56,000.00
Civil Society Organization	Panacetacea Panama	Grant	Investment mobilized	304,000.00
Recipient Country Government	Panama Canal Authority	In-kind	Recurrent expenditures	146,500.00
Recipient Country Government	OSPESCA	In-kind	Recurrent expenditures	600,000.00
Total Co-Financing(\$)				54,684,339.92

Describe how any "Investment Mobilized" was identified

Investment mobilized defined by cofinanciers will be detailed during implementation as no more details were provided by the parties.

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)
UNDP	GET	Regional	International Waters	International Waters	6,877,626	653,374
UNDP	GET	Panama	Biodiversity	BD STAR Allocation	269,583	25,610
Total Grant Resources(\$)					7,147,209.00	678,984.00

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **false**

PPG Amount (\$)

154,338

PPG Agency Fee (\$)

14,662

Agency	Trust Fund	Country	Focal Area	Programmin g of Funds	Amount(\$)	Fee(\$)
UNDP	GET	Regional	International Waters	International Waters	154,338	14,662
Total Project Costs(\$)					154,338.00	14,662.00

Core Indicators

Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	180,965,900.00		

Indicator 5.1 Number of fisheries that meet national or international third party certification that incorporates biodiversity considerations

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Type/name of the third-party certification

Indicator 5.2 Number of Large Marine Ecosystems (LMEs) with reduced pollutions and hypoxia

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)
1	1	0	0

LME at PIF	LME at CEO Endorsement	LME at MTR	LME at TE
<u>Pacific Central American Coastal</u>	<u>Pacific Central American Coastal</u>		<input type="checkbox"/>

Indicator 5.3 Amount of Marine Litter Avoided

Metric Tons (expected at PIF)	Metric Tons (expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 7 Number of shared water ecosystems (fresh or marine) under new or improved cooperative management

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Shared water Ecosystem	Pacific Central American Coastal	Pacific Central American Coastal		
Count	1	1	0	0

Indicator 7.1 Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Pacific Central American Coastal	1	1		<input type="checkbox"/>
Select SWE				
Select SWE				<input type="checkbox"/>

Indicator 7.2 Level of Regional Legal Agreements and Regional management institution(s) (RMI) to support its implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Pacific Central American Coastal	1	1		<input type="checkbox"/>
Select SWE				

Indicator 7.3 Level of National/Local reforms and active participation of Inter-Ministerial Committees (IMC; scale 1 to 4; See Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Pacific Central American Coastal	1	1		<input type="checkbox"/>
Select SWE				

Indicator 7.4 Level of engagement in IWLEARN through participation and delivery of key products(scale 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Pacific Central American Coastal	1	1		
Select SWE				

Indicator 8 Globally over-exploited fisheries moved to more sustainable levels

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
82,000.00	82,000.00		

Fishery Details

The improvement will come mostly from the Fishery Improvement Projects and certification of 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.

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	100,000	2,083,126		
Male	150,000	2,042,487		
Total	250000	4125613	0	0

Part II. Project Justification

1a. Project Description

Describe any changes in alignment with the project design with the original PIF

Summary of changes

1.

There are no changes in alignment in the PRODOC with respect to the PIF. The project focus on developing regional governance agreements for the Pacific Central American Coastal Large Marine Ecosystem. During project preparation it was agreed that the institutional basis to build upon will be the Central American Integration System (SICA, www.sica.int). At PIF two regional pilots were proposed: billfish management plan and marine spatial planning (the sites were not decided). During project preparation the sites for the regional marine spatial planning pilot intervention were selected (Mexico, Costa Rica, Panama and Ecuador) and the specific interventions were developed. A third new pilot on cetacean conservation was incorporated into the project, following the request from the Panamanian government to use STAR resources for this purpose. STAR resources will be used to finance the pilot in Panama and regional resources will be used to link those results to the common interest of the participating countries on advancing sound whale-watching. This is considered a minor amendment of the budget approved for the PIF, due to this extra STAR resources.

2. Nine countries share PACA; seven will participate in the project. During project preparation there were efforts to involve Colombia in the project, interest was manifested but there was no formal confirmation. The focal points of the Central American countries are willing to engage Nicaragua into the project. Therefore, the budget for the TDA/SAP process accounts for the participation of eight countries, then leaving space to include either Nicaragua or Colombia during project implementation.

1a. Project Description.

1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

1. The Pacific Central American Coastal Large Marine Ecosystem (PACA) is a valuable source of natural resources and ecosystem services for nine countries: Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Colombia and Ecuador. It extends from southern Mexico to the Gulf of Guayaquil in Ecuador, encompassing about 1,996,659 km² of coastal and marine habitats. PACA integrates five marine ecoregions and high conservation value species like blue whales (*Balaenoptera musculus*), humpback whales (*Megaptera novaeangliae*) and marine turtles. Also, 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*).

2. About 245.4 million people live in the nine bordering countries, 59.8 million in the coastal provinces and about 17.1 million people 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, in 2014 the value of the regional tuna fishery of the Eastern Pacific Ocean was estimated in USD1.1 billion to fishermen and about USD5.8 billion at the final point of sale. Also, shipping and port operations are a main economic activity since PACA is crossed by main routes of global marine traffic due to the influence of the Panama Canal.

3. The Transboundary Waters Assessment Programme (TWAP) found that PACA's overall risk factor is high^[1], 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.

4. 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.

5. 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.

6. The root cause analysis was prepared and agreed with delegates from the participating countries during project preparation (**FIGURE 1** and **FIGURE 2**). 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 1**). 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.

[1] Using a five-point scale: very low, low, medium, high, and very high.

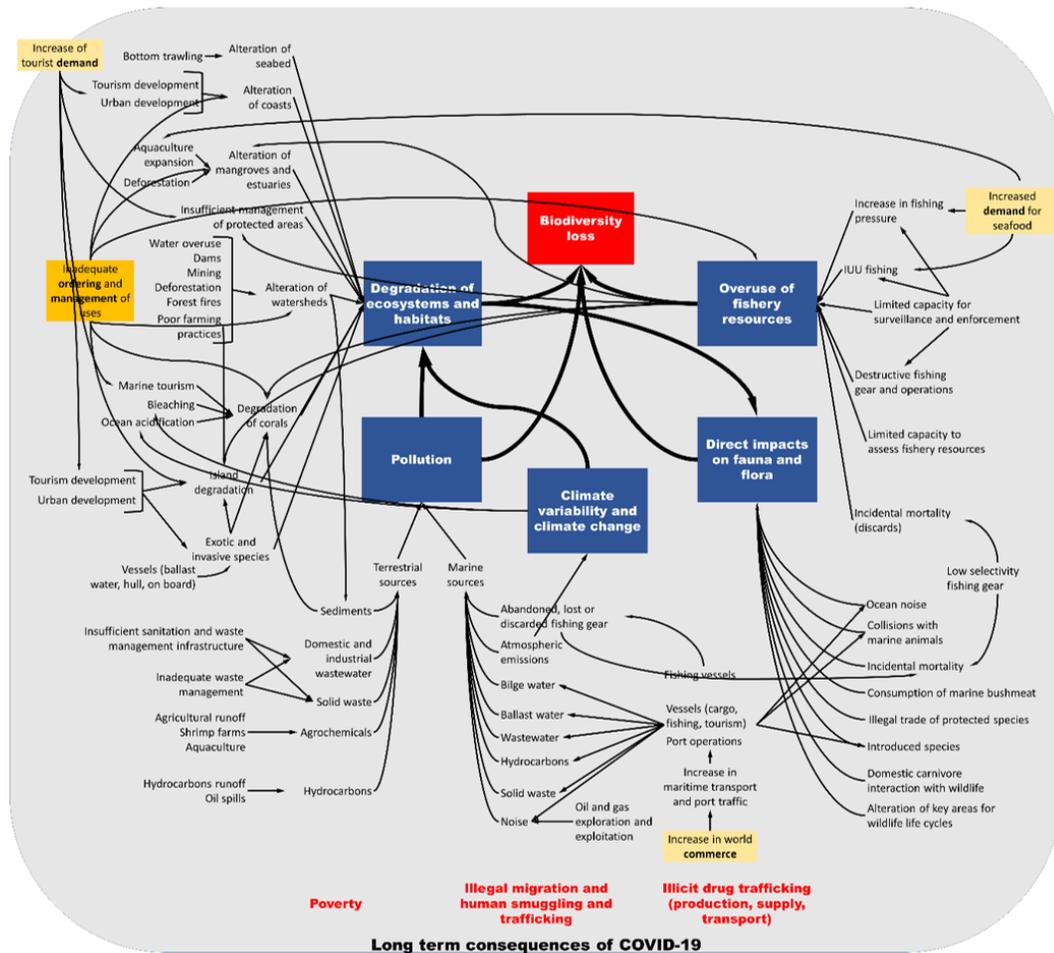


Figure 1. PACA root cause analysis.

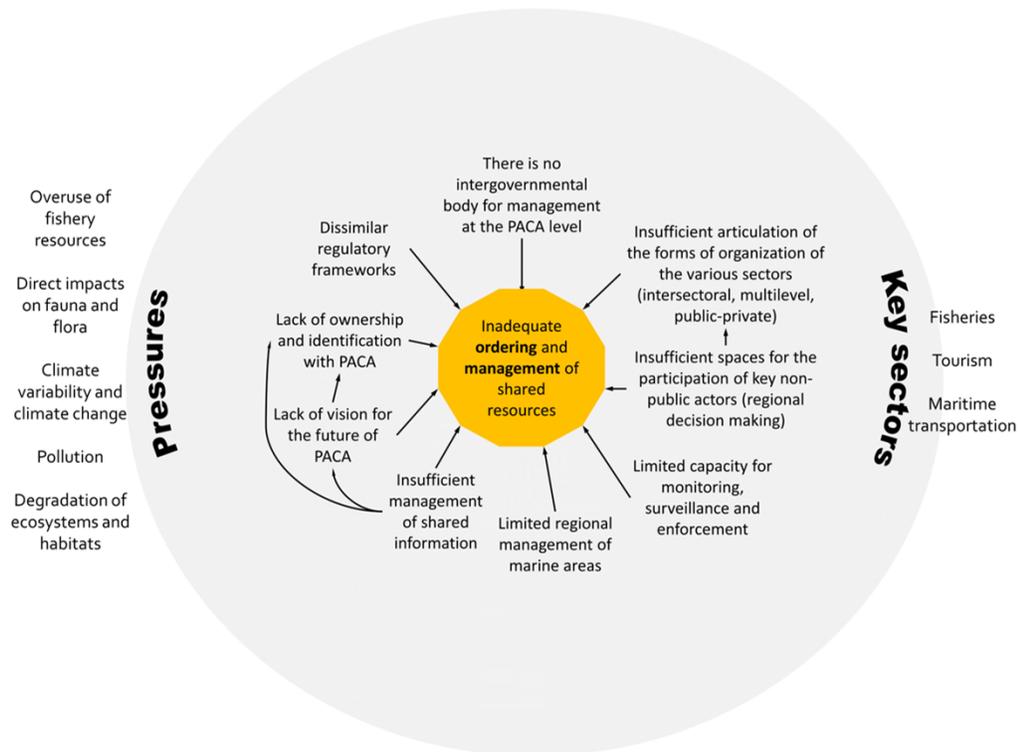


Figure 2. Causes of the inadequate ordering and management of shared resources.

Immediate causes

1. Pollution from land-based and marine sources

1. 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.

2. 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 34.2 10³ t of nitrogen and 4.1 10³ 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.

3. 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).

4. 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-Céspedes et al., 2004; Acuña-González et al., 2004; Nielsen & Quesada, 2006; Pomerance, et al., 2012; Rodríguez et al., 2014; Cubero, 2014).

5. 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.

6. 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.

7. 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).

8. 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; Seltnerich, 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.

9. 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).

10. 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).

11. 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).

12. 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; Gonzalez-Lozano et al., 2006; Gonzalez-Macias et al., 2007; Gonzalez-Macias et al., 2009).

2. Degradation of coastal and marine ecosystems and habitats.

13. 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.

14. 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.

15. There are about 854,000 ha of mangroves along PACA's coastline, mostly concentrated in Colombia, Panama, Mexico and Ecuador (Table 1). 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 persists. 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).

16. 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 1. Mangrove area in PACA.

Country from North to South	Mangrove area (ha)	Year	Source
Mexico	153,813 ^[a]	2010	Rodríguez-Zúñiga et al., (2012)
Guatemala	17,670.56	2012	MARN (2013)
El Salvador	40,000 ^[b]	NA	MARN (2014)
Honduras	42,012	1998	Sanchez & Guevara (2000)
Nicaragua	30,546.76 ^[c]	2006	MARENA (2010)
Costa Rica	37,044	2013	SINAC (2014)
Panama	154,427 ^[d]	2007	Spalding et al., (2010) ANAM & ARAP (2013)
Colombia	230,239.2	2013	INVEMAR (2014)
Ecuador	148,230.23	2006	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.			

17. 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).

18. 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 (Garza-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 (Garza-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).

3. Overuse of fishery resources.

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 3). 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

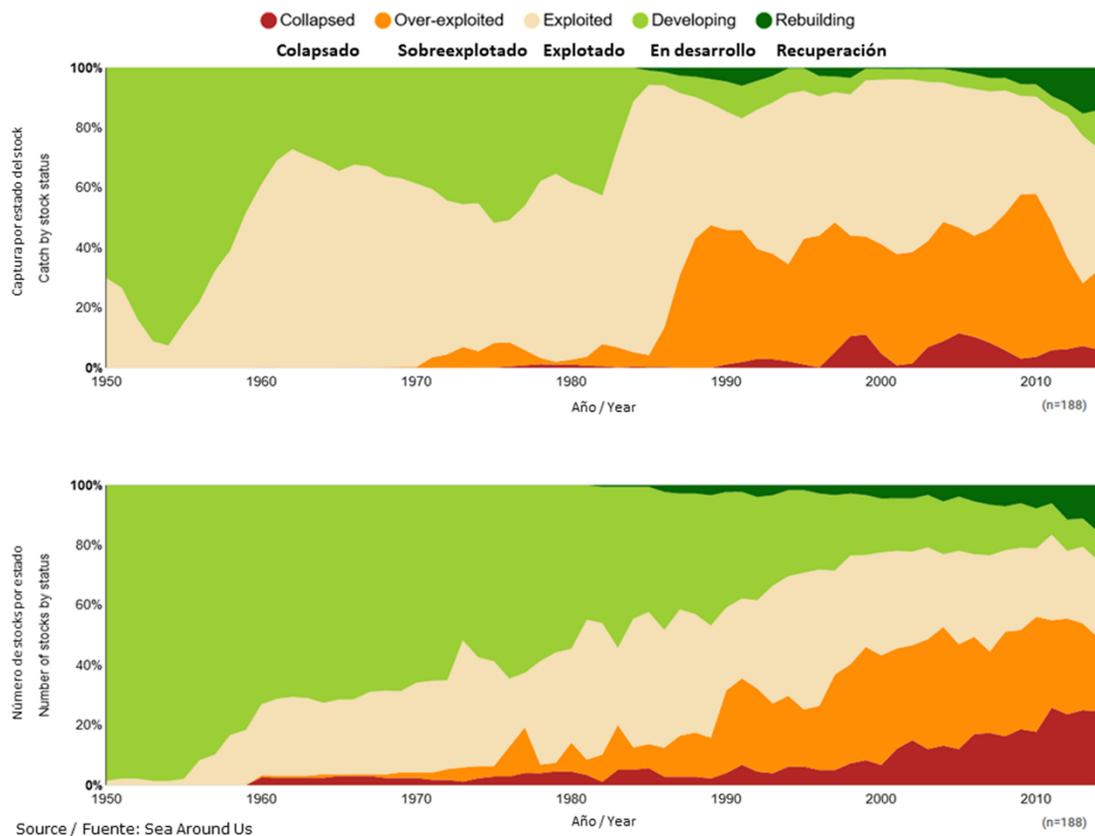


Figure 3. Number and capture by stock status (1950-2014).

1. 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
2. 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.
3. According to the estimates of Sea Around Us, PACA's reconstructed catch is about a third larger than the reported catch (**FIGURE 4**). 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.
4. 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).

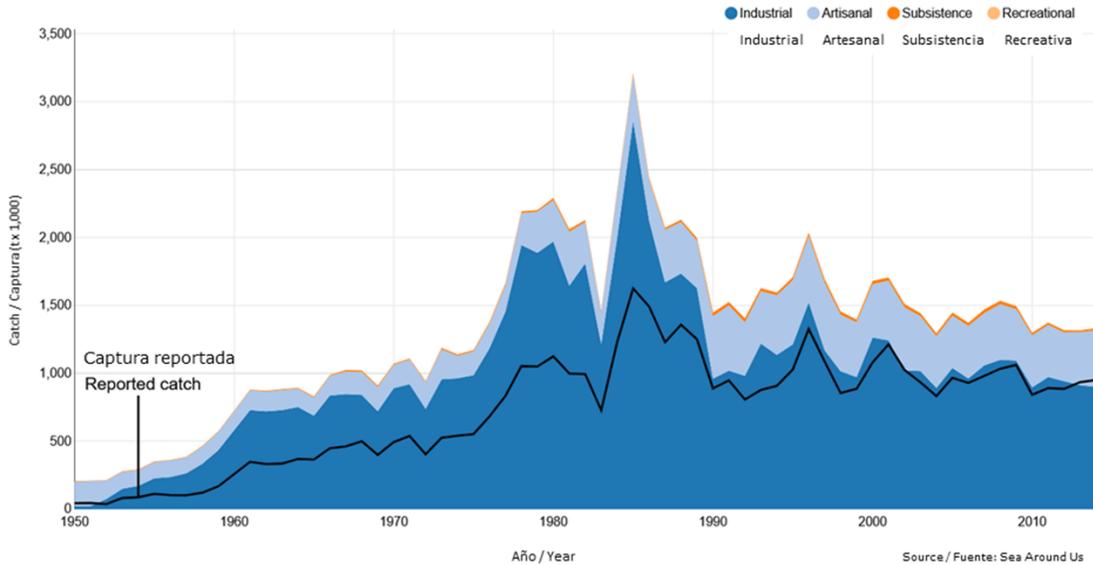


Figure 4. Total reported catch (line) and estimates of actual catch (reconstructed catch) by fishing sector.

1. 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.

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

3. 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).

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

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

6. Alteration of reef communities by abandoned fishing gear and marine debris (Figueroa-Pico et al., 2016).
7. Injuries and mortality of cetaceans by vessel strikes (Waerebeek et al., 2007).
8. Stress and changes of individual and social behaviour caused by ocean noise (Peng et al., 2015).
9. Harassment of animals during whale watching (Capella Alzueta et al., 2001).
10. Consumption of marine bushmeat like sea turtle eggs and meat (Medina, 2014).

5. Climate change.

11. 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).

12. 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).

13. 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

14. Global trends influence the situation in PACA:

15. 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.

16. 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.

17. 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 (J?gerbrand et al., 2019).

18. A fourth root cause is inadequate ordering and management of marine shared resources (**FIGURE 1** and **FIGURE 2**), 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 topics[1] (like IATTC and OSPESCA for fisheries) or geographic regions[2]², 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.

19. Other causes are:

20. Dissimilar regulatory frameworks among the nine countries.

21. Limited capacity for monitoring, surveillance and enforcement in coastal and marine areas.

22. Limited collaborative regional management of marine areas[3]³.

23. Insufficient management of shared information.

24. Insufficient articulation of the forms of organisation of the various sectors.

25. Insufficient spaces for participation of non-public actors.

26. 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 emerging initiatives like:

? 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

? 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.

27. 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.

Externalities

28. The scenario is influenced by critical externalities:

29. Poverty affects social dynamics, makes people vulnerable, and contributes to exacerbate behaviours like preferring short-term gains, poaching and consumption of marine bushmeat.

30. 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 (Ramirez & 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).

31. 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.

32. 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.

33. 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%.

34. 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.

35. COVID-19 has disrupted key blue production sectors that are related to the root causes of the PACA scenario (**FIGURE 1**). 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; G?ssling et al., 2020).

36. 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.

Barriers

37. 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.

38. 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.

39. PACA has been assessed by Heileman (2009), UNEP (2006)[4]⁴, UNEP (2006a)[5]⁵, 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.

40. 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.

41. The existing inter-sectoral experience is mostly site-specific. There have been major undertakings to advance multi-country inter-sectoral management[6]⁶ 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.

42. 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.

43. IOC-UNESCO & UNEP (2016) assessment of governance risk factors[7]⁷ was medium[8]⁸ for engagement, low for completeness, and very high for integration.

44. Existing platforms are:

a. The Inter-American Tropical Tuna Commission, a Regional Fisheries Management Organisation (RFMO) focused on tuna fisheries[9]⁹ 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[10]¹⁰.

b. 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).

- c. 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).
- d. 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: Galapagos (Ecuador), Isla del Coco (Costa Rica), Coiba (Panama), Malpelo and Gorgona (Colombia).
- e. 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.
- f. 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^[11]. The action plan was adopted in 2002 but has not been implemented. The convention has not entered into force^[12] and, apparently, there is no interest on reactivating this cooperation mechanism.

2) the baseline scenario and any associated baseline projects

45. As explained before, the current baseline scenario is complex (**FIGURE 1** and **FIGURE 2**), PACA risk score is high (IOC-UNESCO & UNEP, 2016). It ranks 16^[13] out of the 64 inhabited LMEs, and has a higher risk level than the neighbouring LMEs of the region^[14]. Also, the Ocean Health Index is very low (59.14^[15]) indicating that this LME is not delivering adequate benefits to the local population (IOC-UNESCO & UNEP, 2015).

46. 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).

47. 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.

3) the proposed alternative scenario with a brief description of expected outcomes and components of the project

48. Solving the range of issues occurring in the Pacific Central-American Coastal Large Marine Ecosystem is beyond the means of the present project considering the scope of interventions which will be needed. However, the present GEF project can be a catalyst by assisting the countries to set the foundation for collaborative transboundary management of this large marine ecosystem.

49. The 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 5** and **FIGURE 6**). 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 1**), but the basis of this project is that improved transboundary marine governance will catalyse a range of improvements along the causal chain.

50. 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 5** and **FIGURE 6**). 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.

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

- i. Some training of key stakeholders on ecosystem-based management of large marine ecosystems and blue growth.
- ii. Some pilot interventions to generate learning on key issues of the LME.
- iii. A collaborative information system for long-term monitoring and reporting of PACA's condition.

iv. The objective of the project is to promote ecosystem-based management of the Pacific Central American Large Marine Ecosystem through the strengthening of regional governance. The project is organized in three components and five outcomes. In total, ten outputs will be generated (**TABLE 2**). The three components are:

? 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).

? 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.

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

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

[2] 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.

[3] 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.

[4] Includes information for the area between Mexico and Colombia.

[5] Includes information for Ecuador and Peru.

[6] 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.

[7] 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.

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

[9] 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.

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

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

[12] 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.

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

[14] 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.

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

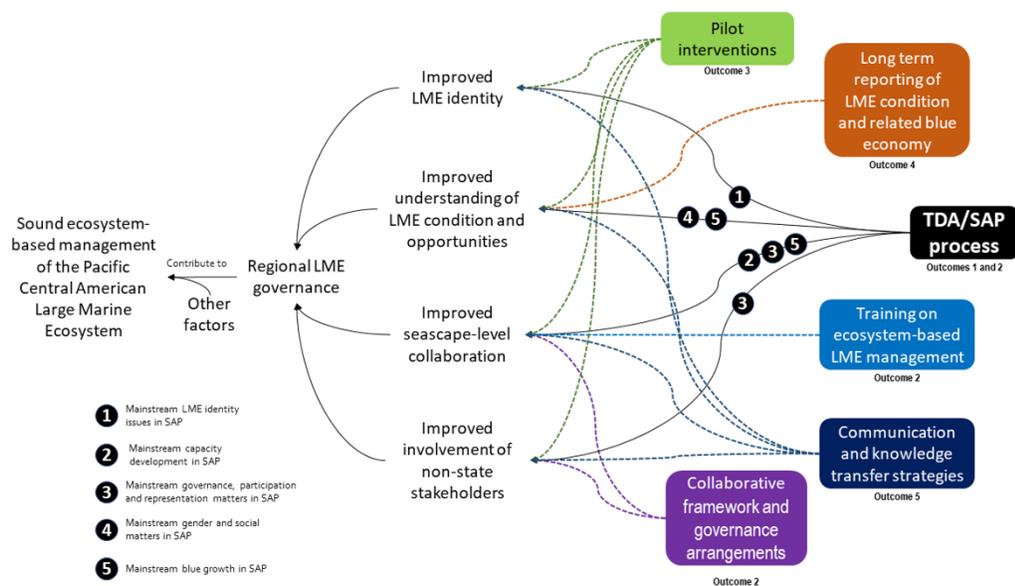


Figure 5. Theory of change for the PACA project.

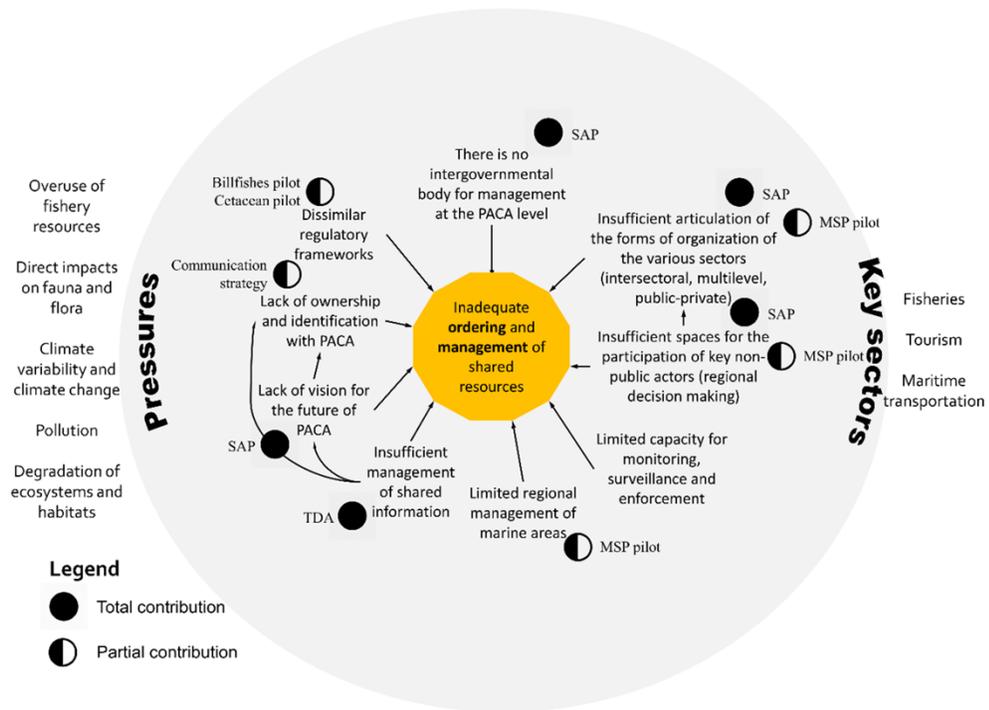


Figure 6. Contribution of project interventions to address the causes of the inadequate ordering and management of shared resources.

Table 2. 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

Outcomes	Outputs
<p>Outcome 2. Collaborative framework and governance arrangements adopted by the participating countries to implement PACA's Strategic Action Programme.</p>	<p>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.</p>
	<p>2.2 Collaborative framework and governance arrangements to implement PACA's SAP endorsed by participating countries.</p>
	<p>2.3. Strategy for awareness raising, participation and articulation among key decision-makers and stakeholders.</p>
	<p>2.4. Training of key stakeholders (public and private) on ecosystem-based management of large marine ecosystems.</p>
<p>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.</p>	<p>3.1. Three pilot interventions on common key issues of the Pacific Central American Coastal Large Marine Ecosystem implemented.</p> <p>3.1.1. Conservation and management of billfishes</p> <p>3.1.2. Marine spatial planning.</p> <p>3.1.3. Cetacean conservation</p>
	<p>3.2. Best practice and lessons from the pilots systematized, accessible and available to all stakeholders in the region</p>
<p>Outcome 4. Collaborative information system developed with key indicators on PACA's condition and SAP implementation</p>	<p>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.</p>
<p>Outcome 5. Lessons on collaborative actions to manage PACA shared in the region and worldwide (south-south cooperation).</p>	<p>5.1. Website for dissemination of lessons and best practice, linked to partners' portals and IW: LEARN.</p> <p>5.2. Project lessons documented and disseminated.</p>

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

1. 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.

2. 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.**

3. The 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.

4. This component will be driven by the project coordinator (CDP) in close collaboration with the specialist in marine resources management (EMR) and the gender and participation specialist (EGP).

5. 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.

6. The 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 7**).

7. 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.

8. 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 project preparation (**FIGURE 7**). The main adaptations are:

a. The project will contact with 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).

b. 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).

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

d. 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.

e. 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 project preparation and are included in the project budget. On each country the consultant team will be selected through a national contest and contracted by the implementing partner.

f. 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.

g. 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).

h. 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.

i. 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.

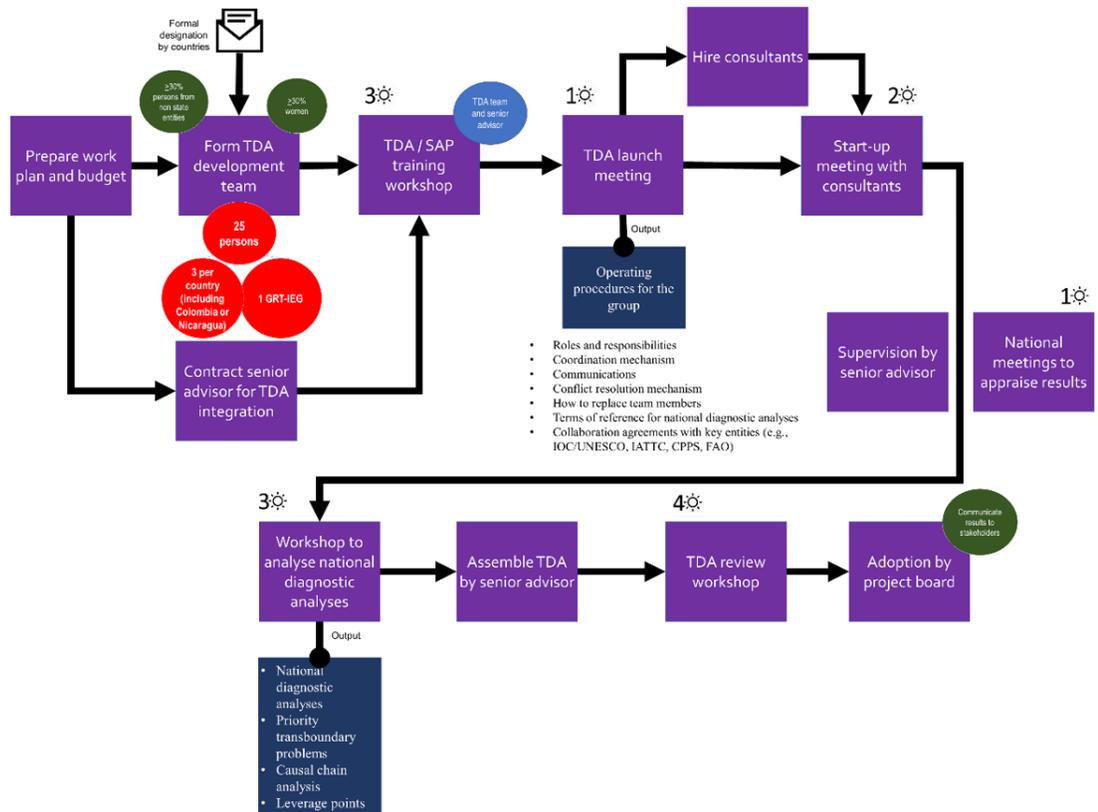


Figure 7. Road map for the development of the transboundary diagnostic analysis.

1. The TDA will be adopted by the 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.

2. 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 43) once it is operational.

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

3. Four interlinked outputs will contribute to construct the regional collaborative and governance arrangements to advance the management of the large marine ecosystem (**TABLE 2**). 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 project will execute actions for awareness raising (output 2.3) and training on ecosystem-based management of large marine ecosystems (output 2.4).

4. During 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.

5. 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.

6. The SAP process was adapted during project preparation (**FIGURE 8**). The main adaptations are:

a. 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.

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

c. 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 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, and **(iii) that it connects with pertinent post-COVID recover strategies.**

d. 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).

7. 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.

8. 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.

9. 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 43) 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.

10. 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.

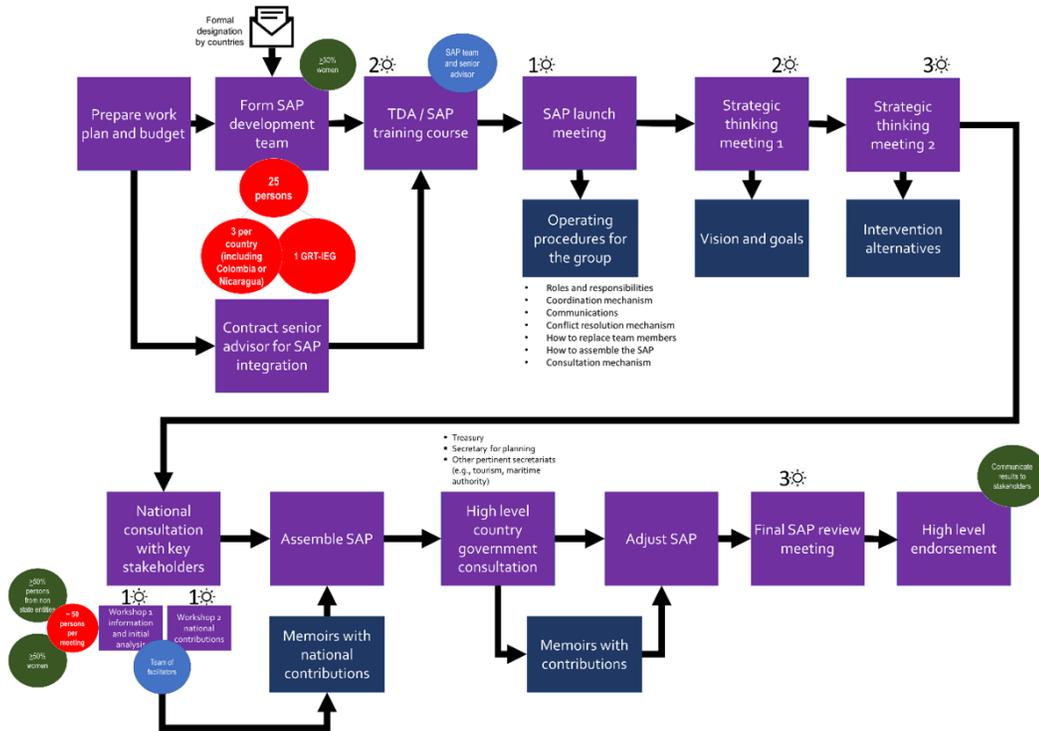


Figure 8. Road map for the development of the strategic action programme.

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

1. During SAP preparation, the project coordinator in collaboration with members of the technical committee will draft a regional collaboration agreement for SAP implementation within the framework of SICA.
2. The proposed agreement will be reviewed on the high-level country government consultation meetings (FIGURE 8) 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 project implementation.

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

3. In the second quarter of 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.

4. 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 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.

5. To contribute to develop capacities in support of LME management the 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 project start:

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

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

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

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

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

11. 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.

12. 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 3**). The experience and lessons from the pilots will provide inputs to the TDA/SAP process and will serve to prepare three regional instruments:

- ? regional plan for the management of sailfish and marlin recreational fisheries (family Istiophoridae),
- ? regional guidelines for marine spatial planning in PACA, and
- ? regional guidelines for whale watching in PACA.

13. 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 3. 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	LANCIS
	Site 2. Costa Rica	14	Management plan for surface long-line and greenstick fishery for large pelagic fish (tuna, mahi mahi and swordfish) by the medium-scale and advanced commercial fleets.	INCOPECSA
	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.

1. 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:

? 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).

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

? 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).

? 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).

2. 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, striped 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%).

3. 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).

4. 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).

5. 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.

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

7. 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%.

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

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

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

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

12. 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 project will support data collection in all countries and will organise national and regional workshops to consolidate and analyse information.

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

- i. 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. 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.
- ii. Consolidate information about fishing fleets and related tourism facilities. Censuses and surveys will be used to:
 - a. Prepare a record of recreational and commercial fishing vessels that capture billfishes.
 - b. Estimate temporal and spatial fishing effort of these fleets.
 - c. Estimate the number of sex-disaggregated fishers and related jobs.
 - d. Prepare a record of related tourism facilities: marinas, piers, accommodation, fuelling stations, and vessel repair and maintenance facilities.
 - e. Estimate direct and indirect sex-disaggregated employment related to billfish recreational fishing and related tourism.
 - f. Document the impact of the COVID-19 pandemic on the billfish recreational fishing and related tourism value chain.
- iii. Comparative analysis of fishing regulations related to billfishes in the area.
- iv. Draft a regional plan for the conservation and management of sailfish and marlin recreational fisheries through a participatory process. 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.

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

15. 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).

16. 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.

17. 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."

18. 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:

- i. legislation that mandates MSP, which is called Marine Ecological Planning (General Law of Ecological Balance and Environmental Protection), and
- ii. 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.

19. 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.

20. 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 3**). 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 & Douvère (2009) and Ehler (2014), will be used during pilot implementation.

21. The pilot will be implemented in four sites with different situations and characteristics:

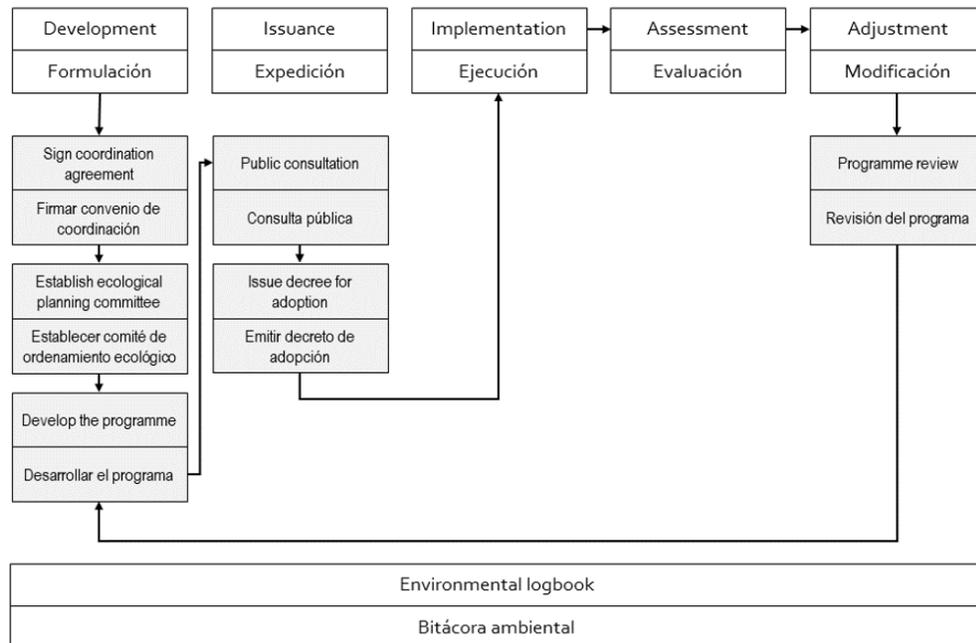
- i. Mexico. To undertake the process of preparing a proposal for a Marine Ecological Management Programme for the South-Central Pacific Region.
 - ii. Costa Rica. To prepare the management plan, including spatial planning, to operationalise the zoning for fishing of tuna and tuna-like species.
 - iii. Panama. To prepare the marine spatial plan for the area of influence of Coiba National Park and its Special Zone of Marine Protection.
 - iv. Ecuador. To prepare integrated coastal management plans and management plans for the sea beach and adjacent strip for three municipalities.
22. 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.
 23. 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).
 24. 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 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.
 25. 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.

26. 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 9**, a detailed account is found in SEMARNAT (2006).
27. The National Strategy for Ecological Zoning of the Territory in Seas and Coasts (SEMARNAT, 2007) established four marine regions for ecological zoning (**FIGURE 10**). 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).

28. In 2011 the TEZ process was initiated in the South-Central Pacific Region[1]. 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.
29. The present 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 9).
30. 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).

[1] The logbook of the process is 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 9. Territorial ecological zoning process in Mexico.



Figure 10. Marine regions for ecological zoning in Mexico. Modified from SEMARNAT.

1. 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 high tide line which is administered by SEMARNAT; on this area temporary concessions / permits can be issued for uses like food stands and tourist facilities.
2. Four states have indigenous population in coastal areas: Colima, Michoacan, 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).
3. Four lines of work will be developed for 14 months:
 - i. 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.
 - ii. 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.

iii. Prepare the territorial ecological zoning model and corresponding ecological management programme.

- iv. Present the proposal to the ecological planning committee for analysis and endorsement.
4. 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 for the exploitation of tuna and tuna-like species in the Exclusive Economic Zone of the Costa Rican Pacific Ocean.

5. In 2014, Decree 38681 (modified in 2016 and 2018) established management measures for the exploitation of tuna and tuna-like species[1] in Costa Rica's Pacific Ocean EEZ, including spatial planning. Four areas (polygons) were established for exclusive use of Costa Rican fleets (FIGURE 11). 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[2] 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.
6. 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). 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.
7. 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 (INCOPECA 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.
8. 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).

9. 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:
 - ? 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 INCOPECSA.
 - ? 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.
10. 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 INCOPECSA and MINAE will not change (Bravo, 2019).
11. 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.
12. The present 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:
 - ? 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
 - ? a participation and consultation mechanism for the management of the fishery based on the governance mechanism for marine areas was established (Decree 41775).
13. 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.
14. Three lines of work will be developed during 14 months:
 - i. 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 INCOPECSA for approval. It is envisioned that this committee will be the basis for negotiating and agreeing the management plan.
 - ii. 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.

iii. Participatory process to prepare the management plan with private and public stakeholders.

This includes:

- ? Agreeing on the objectives (short, medium and long-term).
- ? Agreeing on the intervention strategy.
- ? Validate the draft plan with key stakeholders.
- ? Formal approval of the plan by INCOPECSA's board.

[1] 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).

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

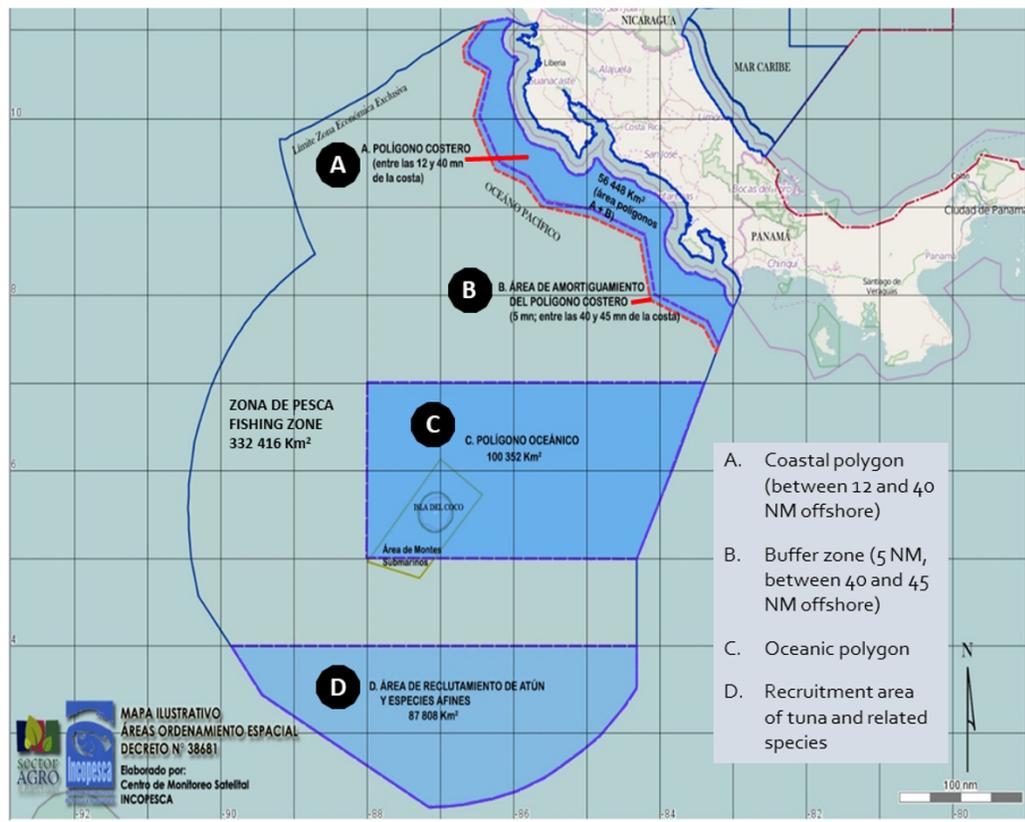


Figure 11. Zoning for fishing of tuna and tuna-like species in Costa Rica's Pacific Ocean Exclusive Economic Zone according to decree 38681-MAG-MINAE of 2014.

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

1. 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 12). It covers about 12,224 km². 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.
2. 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 Ladrões, and Islas Secas (Rasmussen & Palacios, 2013). Seven internationally significant Key Biodiversity Areas are in the gulf: Quebrada Mellicita-Charco Azul, David mangroves, Bah?a Honda, Golfo de Montijo Wetlands, C?baco Island, Coiba National Park and Cerro Hoya National Park.
3. 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 km² (Cunningham et al., 2013).



Figure 12. Gulf of Chiriqui in Panama.

1. 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.
2. Coiba National Park (CNP) has particular conditions. It contains the largest coral reef in the eastern Pacific Ocean (17 km²) 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).

3. 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 established the national park and a complementary Special Zone of Marine Protection (SZMP) which included Isla Montuosa and Hannibal Bank. This law also created:
 - ? A co-management mechanism, the Directive Council with 12 members representing public entities, adjacent municipalities, fishers' organizations, environmental NGOs and the University of Panama.
 - ? 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.
4. 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 13, Table 4).
5. The CNP and its SZMP have very diverse reef fauna (clown fishes, 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 Marshall 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).

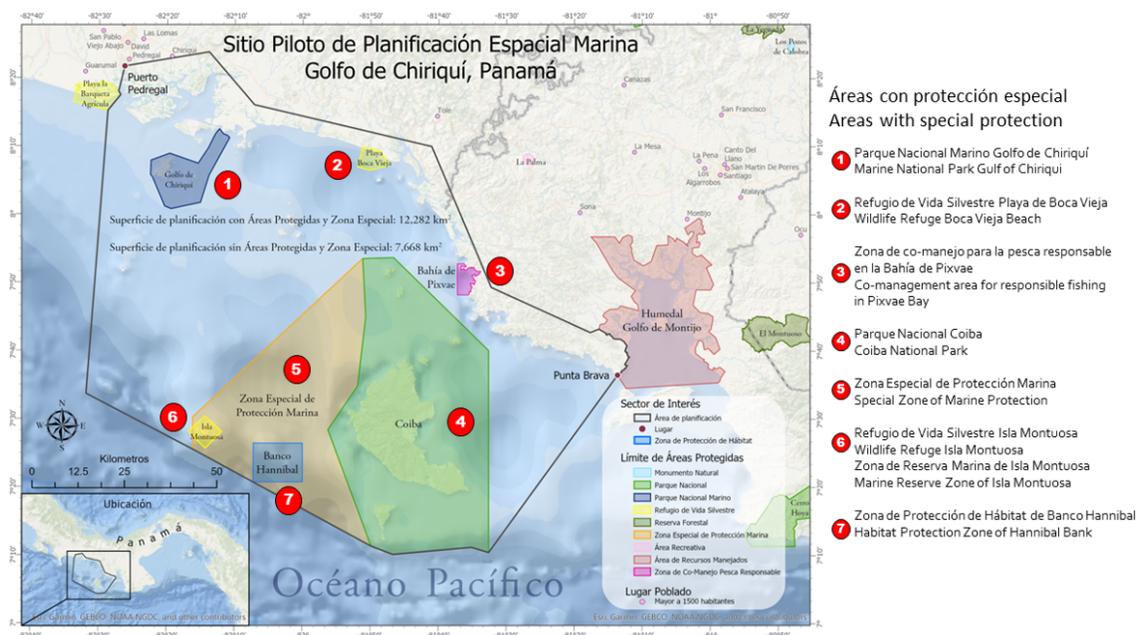


Figure 13. Area for the marine spatial planning exercise in the Gulf of Chiriquí (Panama).

Table 4. Protected areas included in the zone for the marine spatial planning exercise.

	Área protegida Protected area	Año de creación Year of establishment	Superficie Surface
1	Parque Nacional Marino Golfo de Chiriquí Marine National Park Gulf of Chiriquí	1994	212.2 km ² (195.02 km ² marina / marine)
2	Refugio de Vida Silvestre Playa de Boca Vieja 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 Co-management area for responsible fishing in Pixvae Bay	2019	34.11 km ²
4	Parque Nacional Coiba Coiba National Park	1991	2,701.3 km ² (2,165.43 km ² marina / marine)
5	Zona Especial de Protección Marina Special Zone of Marine Protection	2004	1,783.3 km ²
6	Refugio de Vida Silvestre Isla Montuosa Wildlife Refuge Isla Montuosa	2008	1.36 km ² tierra / land + 0.003704 km ² marina / marine
	Zona de Reserva Marina de Isla Montuosa Marine Reserve Zone of Isla Montuosa	2018	37.75 km ²
7	Zona de Protección de Hábitat de Banco Hannibal	2018	143.17 km ²

1. 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.
2. 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 13**). 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).
3. The present 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 13**). The participatory process to be undertaken will contribute to facilitate multi-stakeholder dialogue and agreements to reduce conflict and to protect biodiversity resources.
4. Three lines of work will be developed for 14 months:
 - i. Strengthen participative governance for the area. This includes:
 - a. 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.
 - b. 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.
 - c. Facilitate the establishment of an Inter-Institutional Coordination Platform (IICP).
 - ii. Develop a participatory process to define the zoning scheme for the area of socioeconomic influence of the CNP and its SZMP. This includes:
 - a. 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.
 - b. 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.

- c. Compile and process information from scientific and technical sources like bathymetry maps, current patterns, biodiversity maps, shipping routes and economic and demographic data.
 - d. 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.
 - e. Prepare the zoning plan for the area of socioeconomic influence of the CNP and its SZMP.
 - f. Draft a marine spatial plan for the area based on agreements among stakeholders like administrative structure, decision-making process, assessment, and review process.
 - g. Prepare a proposal for financial strategy to sustain management actions in the area and review it with stakeholders.
 - h. Consolidate the marine spatial plan for the area and submit it for government endorsement.
- iii. Promote communication, scalability, and replication. This includes:
- a. 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.
 - b. Inform stakeholders and the general public about the pilot purpose and activities, including initiation and closing events.
 - c. Document pilot results and lessons learned and disseminate them through a range of channels (e.g., social media, infographics).



Figure 14. 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.

1. 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).
2. 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.

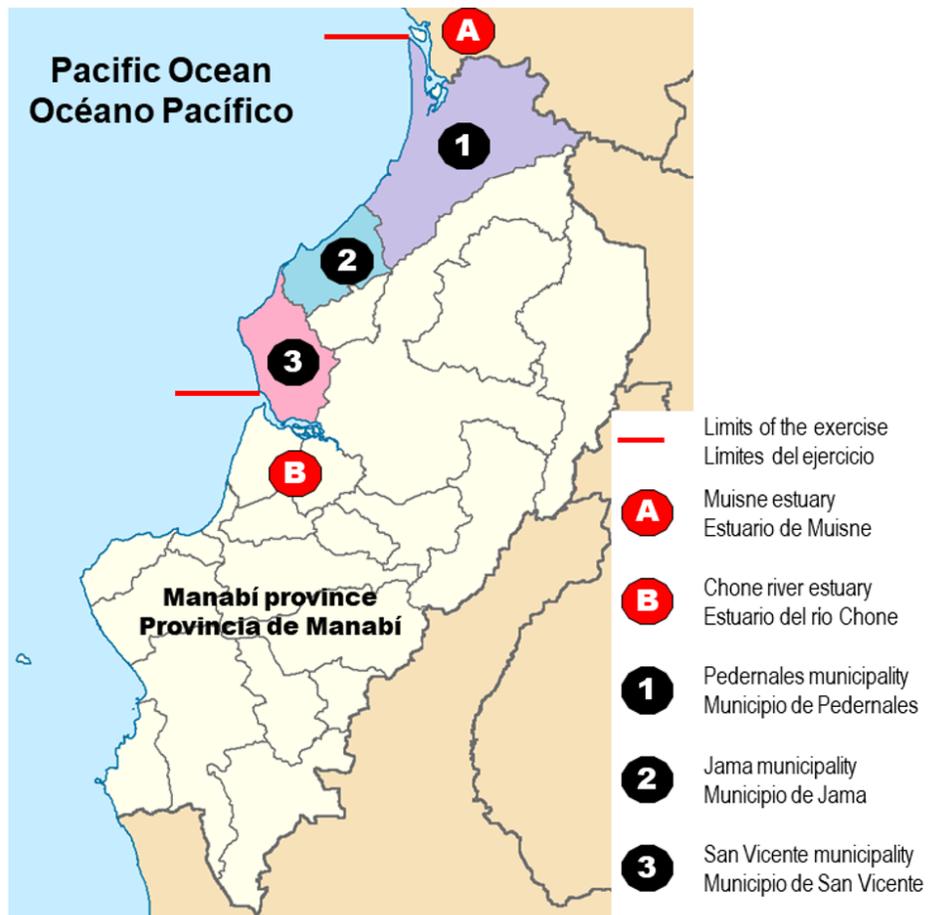


Figure 15. Area for the marine spatial planning exercise in Ecuador.

1. These instruments state that:
 - i. 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.
 - ii. 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.
 - iii. 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.
 - iv. 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.
 - v. 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.
2. 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.
3. The present project will allow to prepare the first Ecuadorian ICMP and MPBAS. This will facilitate to gain experience and generate lessons for future developments.
4. 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.
5. ICMP and MPBAS plans will be developed in three municipalities of the Manab? province (six plans in total): Pedernales, Jama and San Vicente (**FIGURE 15**). 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.
6. 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.
7. The following lines of work will be developed for 18 months:
 - i. Develop a participatory process to draft the management plan for the ocean strip (a single planning unit). This includes:
 - a. 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.

b. Compile and process information of the ocean strip like bathymetry maps, habitats, sea turtle nesting beaches, current patterns, fishing areas.

- c. **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.**
 - d. 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. Incorporate, **as appropriate, considerations for post COVID-19 recovery of blue activities like coastal and marine tourism and fisheries.**
 - e. Prepare the marine spatial plan for the ocean strip and divide it into integrated coastal management plans for each municipality.
 - f. Validate individual plans with local stakeholders on each municipality.
 - g. Prepare and sign at least two interagency agreements to implement actions on the ocean strip.
 - h. Throughout the process inform interested parties about advances and achievements.
- ii. 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:
- a. 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.
 - b. 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.**
 - c. Assemble and analyse the information to identify critical areas and uses (e.g, sensitive habitats), conflicts and opportunities for development.
 - d. **Validate the analysis and participatively develop a zoning scheme for the beach. Include, as appropriate, post COVID-19 recovery measures.**
 - e. 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.
 - f. Submit the MPBAS for endorsement of the municipal council.
 - g. Throughout the process inform interested parties about advances and achievements.
- iii. Mainstream gender considerations into the planning processes. This includes:
- a. 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.

- b. 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.
- c. 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.
- d. Ensure that:
 - All meetings will be designed to facilitate participation of women and men, mutual respect, and collective decision-making.
 - All communications, press materials, documents and plans use inclusive and gender-inclusive language.

Pilot 3. Cetacean conservation.

8. 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 Galapagos 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 2020[1]. Also, De Weerd 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).
9. 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).
10. 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; Felix & 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).

11. 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).
12. 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 3**). 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).
13. 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 & I?guez, 2008). Until 2014, there were 11 coastal communities that operated whale watching tours on Panama's Pacific coast (**FIGURE 16**). 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).
14. 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:
 - i. 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 12** and **FIGURE 17**) in collaboration with the communities that do whale watching in those sites: (1) Boca Chica, (2) Montijo, (3) Pedasi, and (4) Isla Contadora (**FIGURE 16**). This collaborative approach is expected to contribute to community awareness.
 - ii. 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.

[1] <https://happywhale.com/individual/35501;enc=104734>



Figure 16. Localities that operate whale watching on the Pacific coast of Panama.

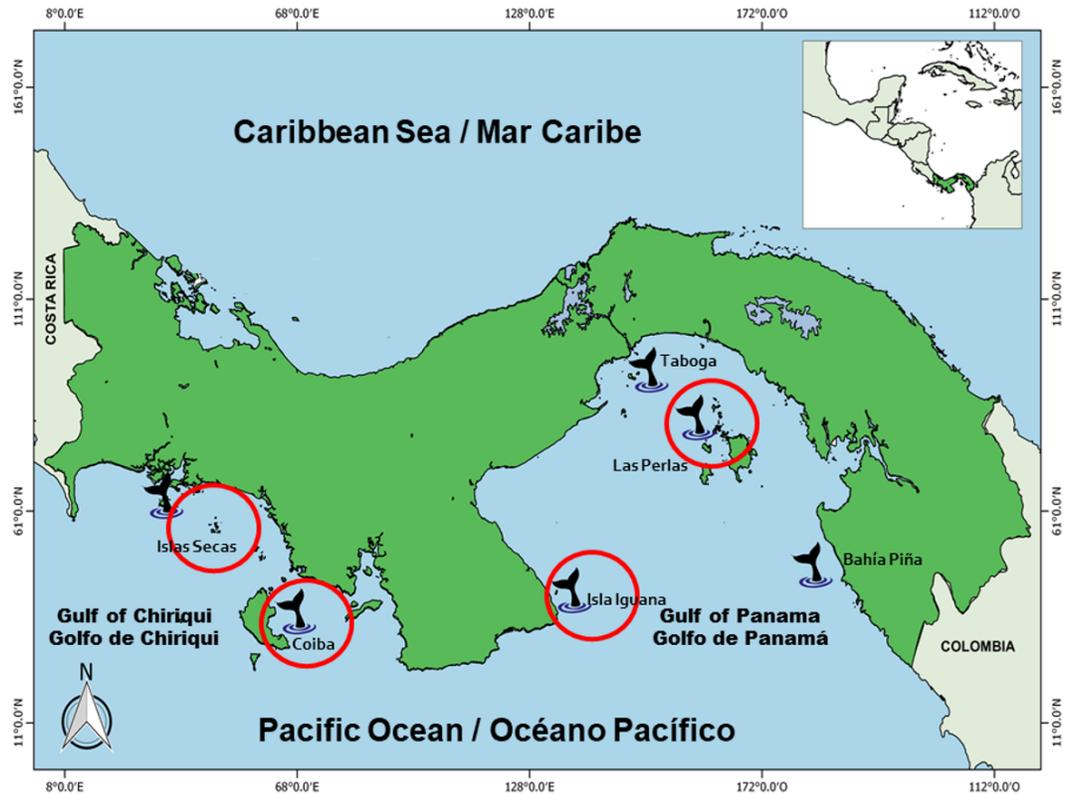


Figure 17. Whale watching sites to assess the marine soundscape.

1. 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).
2. The following lines of work will be developed during 12 months:
3. 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.
4. Characterise the marine soundscape in four sites with high conservation value that are used for whale watching (**FIGURE 17**). 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:

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

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

iii. 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.

iv. Strengthen awareness and information of tourist operators:

5. 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.

6. 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.

7. 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.

8. 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.

9. The EMC will organise onsite meetings with local key stakeholders to capture their lessons during pilot implementation (see paragraph 190).

Women contributions

10. Under the supervision of the EGP, three consultants will simultaneously undertake the following tasks:
 - i. 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.
 - ii. 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.
 - iii. 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.
11. These reports will be published as 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 85).

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

12. 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.

13. 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 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.

14. 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 161), the Panamanian updated guidelines (see paragraph 161), and national and international guidelines to draft regional guidelines for whale watching in PACA. The draft guidelines will be open for comments of project partners and interested parties and then reviewed in a regional workshop. The final guidelines will be submitted for endorsement of the 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

15. This component will focus on developing a collaborative information system to sustain long-term reporting of PACA's situation, and to document and share 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.

16. During year 1, in parallel to the development of collaboration agreements with relevant entities (paragraph 71), 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.

17. The proposed suite of PACA's core indicators will be revised in a regional workshop with the 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.

18. Towards the end of year 2, when TDA is complete, the 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 project partners and interested parties.

19. The CDP 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 185). 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 project board for endorsement.

20. 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).

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

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

? Document and disseminate project lessons.

22. At least 1% of GEF financing will support IW: LEARN activities such as setting and hosting a project website (see paragraph 183), share project achievements and lessons (output 5.2) and support participation in relevant events and GEF biennial international waters conferences (IWC) (see paragraph 197).

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

Project communication strategy

23. At 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:

- a. annual work plans that will be jointly implemented and evaluated, and
- b. protocols and procedures for collaboration and joint actions.

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

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

- a. 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.

b. Four guidelines about:

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

? [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 \(CDC\)](#)[1].

? Behaviour and use of inclusive language with gender perspective[2].

? Organization of inclusive events with gender perspective.

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

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

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

Project website

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

30. 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

31. 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.

32. 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.

33. During the final year the administration of the portal will be transferred to a project partner, to be decided by the project board based on the signed collaboration agreements.

Output 5.2. Project lessons documented and disseminated.

34. 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.

35. 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.

36. Mid-term and final onsite meetings for self-assessment and reflection will be organised with local key stakeholders and direct beneficiaries of each pilot interventions (Table 3). 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.

37. 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.

38. 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.

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

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

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

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

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

41. 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.

42. 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.

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

4) alignment with GEF focal area and/or Impact Program strategies

44. The project will contribute to objective 1 of the International Waters portfolio of GEF-7 (Strengthening National Blue Economy Opportunities), in particular strategic action 1.1. sustaining healthy coastal and marine ecosystems. The project will contribute to formulate and formalise cooperative legal and institutional frameworks built on the TDA/SAP approach. It integrates the blue economy concept and therefore it is foreseen that the SAP will be in synchrony with the developing regional and national efforts.

5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

45. The baseline situation is that the condition of the Pacific Central American Coastal Large Marine Ecosystem has clear symptoms of deterioration. Important global trends influence negatively the situation in PACA, contributing to generate a very complex scenario. At the national level the countries have made important advances to conserve marine biodiversity but current activities do not address the lack of regional governance and collaboration to comprehensively manage shared marine resources. In addition, existing instruments are insufficient to sustain formal regional action to advance on transboundary management of the large marine ecosystem.

46. GEF resources will be crucial to support a major and strategic endeavour to construct the institutional arrangements to sustain collaborative transboundary management (i.e., a Strategic Action Programme formally adopted by the seven participating countries). The TDA/SAP process will be the main tool. An exercise of deep collaborative and inclusive analysis and strategic planning will warrant the mainstreaming of fundamental elements such as the ecosystem approach at the LME scale, transboundary ocean governance, participation and representation. 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 management at the LME scale. In addition, it is envisioned that the SAP will be the basis for future actions at the local and national levels.

47. The key contributions of this project will be:

? To prepare a participatory situation analysis and to develop agreed collaborative mechanisms to establish a long-term reporting mechanism based on key indicators of the natural and human conditions of the LME (outcomes 1, 2 and 4).

? To raise awareness of key stakeholders about LME-scale processes, the need of collaborative ecosystem-based management and blue economy (outcomes 1, 2, 4 and 5).

? To gain hands-on experience and partnerships on collaborative action to address pressing common problems (outcomes 1, 2 and 3).

? To construct governance arrangements to implement ecosystem-based management at the LME-scale (outcome 2).

48. The alternative scenario will be 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. It is expected that joint action will reduce PACA's overall risk factor (currently high) and contribute to conserve valuable biodiversity and sustain the range of ecosystem services that this LME provides.

49. The project will build upon a range of existing experience and ongoing initiatives from a range of entities. For example, the TDA will use information and experience generated from regional and national projects like Coastal Fisheries Initiative- Latin America (GEF ID 9124), sustainable management of bycatch in Latin America and Caribbean trawl fisheries (REBYC-II LAC) (GEF ID 5304) and Sustainable Management of Tuna Fisheries and Biodiversity Conservation in the Areas Beyond National Jurisdiction (ABNJ) (GEF ID 4581), from bait to plate: strengthening sustainable fisheries to safeguard marine biodiversity and food security (GEF ID 9613) and conservation and Sustainable Use of Biodiversity in Coastal Marine Production Landscapes (GEF ID 9804) .

50. The project will also collaborate with a range of organisations working key regional matters like FAO, IOC/UNESCO (in particular the Marine Spatial Planning Programme), IATTC, CPPS, NOAA and Global Fishing Watch. The countries will build upon their previous experience with the development of the TDA/SAP process in the Gulf of Mexico, the Gulf of California and the Caribbean. Finally, there will be close collaboration with the CLME+ project (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 (GEF ID 9592) to learn about the experience on SAP development and implementation.

6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

51. The project will contribute to improve conservation of about 199.6 million hectares of marine area which includes a range of interconnected ecosystems that sustain endemic and high conservation value fauna and flora. For example:

? 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).

? Sea turtles. The region's largest nesting aggregations 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 List) in Playa Grande in Costa Rica.

? 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 (*Ardeenna creatopus*). Sabine's gull breeds in the Arctic 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 (Felix et al., 2019).

52. It will also contribute to sustain the livelihoods of about 17.1 million people who live in the 228 coastal municipalities that border PACA, which are the population most related to the use of the natural resources of this LME.

53. Global benefits will be demonstrated through increased regional cooperation which will lead to (i) enhanced protection of biodiversity of global importance (e.g., highly migratory fish stocks, whales and apex predators), (ii) reduced transboundary pollution, and (iii) stable and more productive fishery resources.

7) innovativeness, sustainability and potential for scaling up. ?

54. The main innovations from the present project are:

? To build a TDA/SAP process and to construct collaborative LME-scale governance arrangements in a complex scenario.

? To examine methods and tools to advance marine spatial planning in the region. The project will generate regional guidelines for marine spatial planning in PACA that will be useful to other regions.

? To assess the contribution of recreational billfish fisheries to national economies and to the conservation of these fishes. The project will generate a regional plan for the management of sailfish and marlin recreational fisheries.

? To explore the use of marine acoustic landscape evaluation as a tool for marine mammal conservation.

? To develop collaborative arrangements for long-term reporting of PACA's situation.

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

56. Social sustainability. 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. 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.

57. Institutional sustainability. The project is anchored in the environment and fisheries authorities and the ministries of foreign affairs of the participating countries. 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 project board and three key entities (i.e., OSPESCA, CCAD, COMMCA) will be key project partners. 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. 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.

58. Financial sustainability. 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.

59. 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.

60. 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.

[1]<https://www.cdc.gov/coronavirus/2019-ncov/community/large-events/considerations-for-events-gatherings.html>

[2] 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).

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

Included in Annex E of the present document.

1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

The stakeholder engagement plan is Annex 9 of the PRODOC.

During the PPG phase, a process of information and consultation with key stakeholders from the participating countries was implemented through the following activities:

Regional Workshops

In order to make consultations and technical contributions to the design of the PPG, 3 regional workshops were held. They were implemented with the participation of the designated focal points of each country from the Ministry of Foreign Affairs, Environment, as well as the GEF focal points of each country (*the memoirs of regional consultations are found in Annex 17 of the PRODOC*).

The regional meetings were as follows:

- 1st Inception Regional Workshop for the preparation of the project document (PPG), August 8- 9, 2019, in Mexico City.
- 2nd Regional Workshop for Logical Framework of the project document, December 5 -6, 2019, in Panama City.
- 3rd Regional Workshop final phase of preparation of the project document, January 23 and 24, 2020, in Mexico City.

National consultations

National consultation workshops were held in each participating country. These workshops were held in order to inform and consult the most relevant national stakeholders with regards to the implementation of the project.

The participating stakeholders for the workshops were identified with a general draft of potential actors at the country level. This first list was fed mainly by meetings with focal points and project partners, as well as Internet surveys. This preliminary list was presented and fed by attendees of the First Regional Workshop of the Project held in Mexico City in August, 2019. Subsequently, other information was integrated from the lists of first national consultation workshops. In addition, extra information was obtained from other meetings related in the PPG design process

The national workshops were held in two segments: the first, to present information on the project concept (PIF), to identify the barriers that limit the governance management of the large marine ecosystem and to define common and cross-border problems; the second, to present the project design, causal chain, theory of change, and to get inputs regarding pilot interventions.

The workshops were held with an audience of approximately 20 persons each country. The workshops used several documents and methodological tools designed by the PPG formulating team for this purpose. In total, there were 11 workshops led by UNDP offices in collaboration with the focal points designated for the project in each country (the memoirs of national consultations are found in Annex 17 of the PRODOC).

The workshops were held on the following places and dates:

Country	First National Consultation Workshop	Second National Consultation Workshop
Costa Rica	September 18th	December 2th
Ecuador	September 12th	November 21st
El Salvador	September 11th	<i>Not executed</i>
Guatemala	September 18th	October 31st
Honduras	<i>Not executed</i>	<i>Not executed</i>
Mexico	September 18th	November 2nd
Panama	September 9th	November 20th

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

1. The stakeholders analysis and the stakeholders engagement plan are in Annexes 8 and 9 of the PRODOC. The gender and participation specialist (EGP) of the project team 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 project.
2. 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 of the PRODOC). 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.
3. The formal involvement of key actors will begin with the project initiation workshops with national stakeholders on each participating country. 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.
4. A TDA development team (Figure 7) 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:
 - i. A percentage of at least 30% of non-state entities independent of the government such as civil society organisations, producer associations or community groups.
 - ii. At least 30% of women.
5. 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.
6. An SAP development team (Figure 8) 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
7. 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:
 - i. First national workshop to present the first draft of the SAP and to receive initial comments, and
 - ii. Second national workshop to receive detailed recommendations and contributions.
8. 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.
9. 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).
10. The TDA/SAP process is very demanding, it will require:
 - i. significant effort of the members of the development teams,
 - ii. prepare adequate information tools for the consultation meetings to facilitate the understanding of the process and the contents,
 - iii. 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.

11. 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).

12. 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 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:

? 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.

? The Communications specialist (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.

? The knowledge management specialist (EMC) will prepare a knowledge transfer strategy linked to the stakeholders engagement plan 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 190).

13. Eight general barriers for stakeholder participation were identified, Table 6 summarise these barriers and the proposed mitigation actions.

Table 5. 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	Mexico	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 where 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, Ng?be-Bugl? people that use playa Zapotal	1,053	Stakeholders that operate in the zone. fishers, tourism operators, diving tours operators, hoteliers, Ng?be-Bugl? 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		

Table 6. 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

14. The indigenous peoples plan will be prepared at project start; it must confirm the presence of IPs and it will define the applicable requirements/procedures for free, prior, and informed consent (FPIC) 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.

15. 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.

Twenty-four indigenous peoples are geographically located in the coastal states of the Mesoamerican Pacific, but only 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.

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor;

Co-financier; Yes

Member of project steering committee or equivalent decision-making body; Yes

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

The gender analysis is Annex 11 of the PRODOC.

The gender analysis and the gender action plan are in Annexes 11 and 12 of the PRODOC.

The gender analysis found that:

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.

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%).

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%).

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.

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.

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

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).

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.

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

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

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.

For adequate regional representation in decision making, a representative 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.

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.

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.

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.

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.

A TDA development team 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.

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.

A SAP development team 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.

There will be 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.

The Gender and Participation Specialist (EGP) and the Communication Specialist 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.

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.

The pilot interventions (output 3.1) will contribute to the development of regional information about the participation and contributions of women 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.

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 project board and in the future to be agreed and endorsed by the pertinent national authorities on each country.

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

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women

Does the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

Description	Type[1]	Impact and probability [2]	Mitigation measures	Responsible	Status[3]
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Description	Type[1]	Impact and probability [2]	Mitigation measures	Responsible	Status[3]
<p>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.</p>	<p>Political</p>	<p>I = 3 P = 5 Substantial risk</p>	<p>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.</p>	<p>Project coordinator with support of UNDP country offices (as needed)</p>	<p>Without change</p>

Description	Type[1]	Impact and probability [2]	Mitigation measures	Responsible	Status[3]
<p>Risk 2. Limited to indigenous peoples? participation and involvement during the implementation of the marine spatial planning pilot intervention and other project activities.</p>	<p>Social and environmental</p>	<p>I = 3 P = 3 Moderate risk</p>	<p>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.</p>	<p>Gender and participation specialist</p>	<p>Without change</p>
<p>Risk 3. Limitations to women participation and involvement.</p>	<p>Social and environmental</p>	<p>I = 3 P = 3 Moderate risk</p>	<p>Implement the gender action plan and monitor and analyse the project's gender-related indicators</p>	<p>Gender and participation specialist</p>	<p>Without change</p>

Description	Type[1]	Impact and probability [2]	Mitigation measures	Responsible	Status[3]
<p>Risk 4. Concern from ocean-going fishers that a regional agreement could lead to stricter fishing regulations and possible economic displacement.</p>	<p>Social and environmental</p>	<p>I = 3 P = 3 Moderate risk</p>	<p>- 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.</p> <p>- 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.</p> <p>- 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.</p> <p>- Fishers organisations</p>	<p>Project coordinator</p>	<p>Without change</p>

Description	Type[1]	Impact and probability [2]	Mitigation measures	Responsible	Status[3]
Risk 5. Costa Rican fishers unwilling to participate in pilot intervention on management of tuna and tuna-like species	Political	I = 3 P = 4 Moderate risk	<ol style="list-style-type: none"> 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. 2. The project team will approach the Chamber of Long-liners to identify ways to facilitate dialogue between them and the government authorities. 3. The Chamber of Long-liners will be duly informed of project progress and lessons through the various communication channels to be used. 	Project coordinator & UNDP country office in Costa Rica	Without change

Description	Type[1]	Impact and probability [2]	Mitigation measures	Responsible	Status[3]
<p>Risk 6. Negative impacts on critical habitats and/or legally protected areas.</p>	<p>Social and environmental</p>	<p>I = 4 P = 1 Moderate risk</p>	<p>? 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.</p> <p>Management measures</p> <p>? Ensure that the TDA/SAP process is built upon a Strategic Environmental and Social Assessment (SESA) approach.</p> <p>? 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).</p> <p>- 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).</p>	<p>Specialist in marine resources management</p>	<p>Without change</p>

Description	Type[1]	Impact and probability [2]	Mitigation measures	Responsible	Status[3]
Risk 7. Impacts of climate variability and climate change.	Social and environmental	I = 3 P = 4 Moderate risk	<p>Management measures ? 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)</p> <p>Annual workplans will be adjusted, as needed, to cope with the impacts of ENSO events during project implementation (see Table 11 of the PRODOC).</p>	Project coordinator	Without change
Risk 8. Difficulty to materialize cofinancing due to the impacts of COVID-19 on national economies	Financial	I = 3 P = 5 Substantial risk	<ol style="list-style-type: none"> 1. Maintain fluid communication with key project partners to identify difficulties in materializing cofinancing. 2. Encourage project partners to maintain as much as possible their contributions to the project. 3. Seek opportunities of collaboration with other ongoing projects and initiatives to obtain contributions that can add to project cofinancing. 	Project coordinator and UNDP country offices	Increasing

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

[2] 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.

[3] Finished, reducing, increasing, without change.

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

Implementing agency

1. UNDP is accountable to the GEF for the implementation of this project[1]. 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.

Implementing partner

2. The Implementing Partner[2] for this project is **WWF Guatemala/Mesoamerica**. This agency was selected through a competitive process that followed the conditions agreed by the delegates of the participating countries. 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 decisions will be taken together by UNDP and the project board. This will be detailed in the agreement to be signed with the implementing partner.
3. The UNDP country office in Costa Rica will be the direct point of contact for the Implementing Partner and will oversee the execution of the pertinent agreement.
4. 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.
- b. Risk management as outlined in this Project Document;

- c. Procurement of goods and services, including human resources;
- d. Financial management, including overseeing financial expenditures against project budgets;
- e. Approving and signing the multiyear workplan;
- f. Approving and signing the combined delivery report at the end of the year; and,
- g. Signing the financial report or the funding authorization and certificate of expenditures.

Responsible Parties

- 5. The implementing partner will enter into a written agreement / contract with each of the responsible parties that will provide goods and services to the project, carry out project activities and produce project outputs. The responsible parties are accountable directly to the implementing partner.
- 6. The responsible parties were designated by the participating countries during project preparation. The following organisations will be responsible parties:
 - i. The Organizaci?n del Sector Pesquero y Acu?cola del Istmo Centroamericano (OSPESCA) will be responsible for executing the regional pilot on conservation and management of billfishes (output 3.1.2) and to produce a regional management plan for sailfish and marlin fisheries (family Istiophoridae).
 - ii. The Laboratorio Nacional de Ciencias de la Sostenibilidad (LANCIS) de la Universidad Nacional Aut?noma de M?xico (UNAM) will be responsible for executing 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. Its work will be supervised by SEMARNAT.
 - iii. The Instituto Costarricense de Pesca y Acuicultura (INCOPECA) will be responsible for executing national activities in Costa Rica as part of the regional pilot on marine spatial planning (output 3.1.1) and to produce the management plan for the tuna, dorado and swordfish fishery caught with surface longline and green stick by Costa Rica's medium-scale and advanced commercial fleet in the EEZ.
 - iv. MarViva will be responsible for executing national activities in Panam? as part of the regional pilot on marine spatial planning (output 3.1.1) and to produce the marine spatial planning plan for the area of influence of the Coiba National Park and the special marine protection zone. Its work will be supervised by MiAmbiente.

- v. Conservation International Ecuador (CI-Ecuador) will be responsible for executing national activities in Ecuador as part of the regional pilot on marine spatial planning (output 3.1.1) and to produce (i) three municipal beach management plans and (ii) three marine area management strategies for the 12 nautical miles of the Pedernales, Jama and San Vicente municipalities. Its work will be supervised by MAAE.
- vi. The Ministry of Environment (MiAmbiente) will be responsible for executing the national pilot on strengthening whale watching tourism in Panama, to be funded with resources from the GEF-7 STAR country allocation, and to produce the regional guidelines for whale watching in PACA.

Project stakeholders and target groups

8. The 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.
9. Representatives of SG-SICA and STM-COMMCA will be part of the project 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.
10. There will be mid and end meetings with the key stakeholders and direct beneficiaries of each pilot intervention (see paragraph 190). In these meetings, the progress will be jointly reviewed, and comments, feedback and recommendations will be received for the execution of the project.

Project organisation structure

11. The project organisation structure is presented in **FIGURE 18**.

[1] UNDP is the 'GEF Agency' described in the GEF policies.

[2] 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.

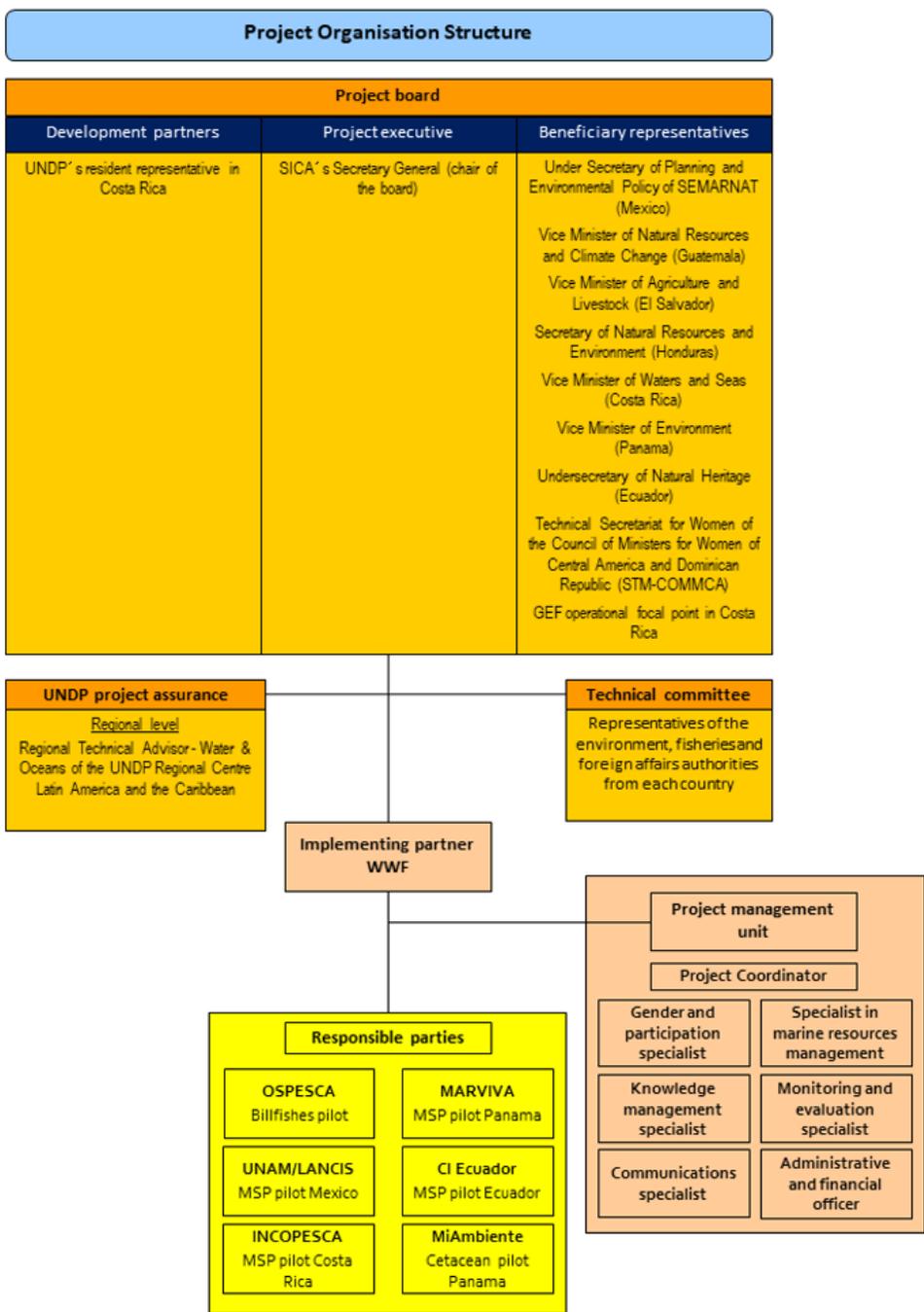


Figure 18. Project organization chart.

Project Board

1. The Project Board (also called Project Steering Committee) is responsible for making by consensus, management decisions when guidance is required by the project coordinator, 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.
2. 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.
3. Specific responsibilities of the Project Board include:
 - a. Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
 - b. Address project issues as raised by the project coordinator;
 - c. Provide guidance on new project risks, and agree on possible mitigation and management actions to address specific risks;
 - d. Agree on project coordinator's tolerances as required, within the parameters set by UNDP-GEF, and provide direction and advice for exceptional situations when the project coordinator's tolerances are exceeded;
 - e. Advise on major and minor amendments to the project within the parameters set by UNDP-GEF;
 - f. Ensure coordination between various donor and government-funded projects and programmes;
 - g. Ensure coordination with various government and international organisations and their participation in project activities;
 - h. Track and monitor co-financing for this project;
 - i. Review the project progress, assess performance, and appraise the Annual Work Plan for the following year;
 - j. Appraise the annual GEF project implementation report (PIR), including the quality assessment rating report;
 - k. Ensure commitment of human resources to support project implementation, arbitrating any issues within the project;
 - l. Review combined delivery reports (CDR) prior to certification by the implementing partner;
 - m. Provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
 - n. Address project-level grievances;
 - o. 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.
4. In addition, in this project, it is the responsibility of the Project Board to:
 - i. Observe the development of the TDA / SAP process;
 - ii. Keep informed high-level authorities (e.g., ministries, office of the president) of the development and achievements of the TDA / SAP process;
 - iii. Adopt the TDA that is submitted by the TDA development team; and
 - iv. Coordinate the steps for the high-level endorsement of the SAP.
5. The Project Board will be formed by eleven persons (**FIGURE 18**). 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 UNDP Regional Technical Advisor - Water & Oceans will participate in the board meetings as part of its quality assurance role to provide advice and guidance. The coordinator of the project will act as secretary of the committee (board secretariat), but without vote. 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 of the PRODOC.
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 General Secretariat.
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 supplier.
10. Specific responsibilities of the executive, as part of the above responsibilities for the Project Board, are:
 - i. Ensure that there is a coherent project organisation structure and logical set of plans;
 - ii. Set tolerances in the annual workplan and other plans as required for the project coordinator;

- iii. Monitor and control the progress of the project at a strategic level;
- iv. Ensure that risks are being tracked and mitigated as effectively as possible;
- v. Brief relevant stakeholders about project progress;
- vi. Organise and chair Project Board meetings.

Beneficiary representatives

11. 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:

? Country representatives (**TABLE 7**),

? A delegate from the Technical Secretariat for Women of the Council of Ministers for Women of Central America and Dominican Republic, and

? The GEF operational focal point in Costa Rica.

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

- i. Prioritize and contribute beneficiaries' opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- ii. Ensure that the specification of the beneficiary's needs is accurate, complete and unambiguous;
- iii. 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;
- iv. Guarantee that the impact of potential changes is evaluated from the beneficiary point of view;
- v. Warrant that the risks to the beneficiaries are frequently monitored.

Development Partner

13. 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.

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. The Project Board cannot delegate any of its quality assurance responsibilities to the project coordinator. 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 of the Project Management function.

15. At the regional level, the quality assurance will be executed by the Regional Technical Advisor - Water & Oceans of UNDP Regional Centre Latin America and the Caribbean.
16. The UNDP quality assurance team, among other actions, will revise and analyse project reports and the draft annual workplan and budget, after they are pre-approved by the Technical Committee and before they are submitted to the Project Board and will make recommendations to optimize the project performance.

Table 7. Country representatives on the project board.

Country (from north to south)	Principal board member	Alternate board member
Mexico	Under Secretary of Planning and Environmental Policy of SEMARNAT	Coordinator General of Operation and Institutional Strategy of CONAPESCA
Guatemala	Vice Minister of Natural Resources and Climate Change of Guatemala	Vice Minister of Agricultural Health and Regulations of Guatemala
El Salvador	Vice Minister of Agriculture and Livestock	Vice Minister of Environment and Natural Resources
Honduras	Secretary of Natural Resources and Environment	Under Secretary of Natural Resources and Environment
Costa Rica	Vice Minister of Waters and Seas	Executive President of INCOPECSA
Panama	Vice Minister of Environment	Administrator Aquatic Resources Authority of Panama
Ecuador	Undersecretary of Natural Heritage	Under Secretary of Fisheries Resources

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 General or its equivalent, accredited in writing and with decision-making power, may be delegated.

Technical committee

17. The Technical Committee is an inter-institutional multinational coordination space. Its main roles are to:
- ? Ensure fluid inter-sectoral communication and collaboration within and among the countries.
 - ? Provide technical guidance to the project coordinator and the project unit to support the achievement of the project outcomes.
 - ? Review and pre-approve the annual work plan and its corresponding budget before they are submitted for consideration of the Project Board.
 - ? Appraise and comment the draft PIR before it submitted for consideration of the Project Board.
 - ? Agree on the TDA and SAP before they are submitted to the Project Board.
18. The 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). 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 of the PRODOC.
19. The members of the 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.

Project Management Unit

20. The project management unit is headed by the project coordinator (CDP) and includes seven members (**FIGURE 18**) 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.

The members of the 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.

Project coordinator

1. The project coordinator 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 Project coordinator, who must be different from any Implementing Partner's representative in the Project Board.
2. The project coordinator'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 Project coordinator 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.

3. The project coordinator 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.
4. The CDP 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). The CDP will oversee the implementation of the TDA / SAP process and, among other tasks, will be responsible for the development of the governance arrangements to implement the SAP (outcomes 1 and 2).
5. The terms of reference of the CDP are found in Annex 7, specific responsibilities include:
 - i. Manage the overall conduct of the project.
 - ii. Plan the activities of the project and monitor progress against the approved workplan.
 - iii. Execute activities by managing personnel, goods and services, training and low-value grants (if applicable), including drafting terms of reference and work specifications, and overseeing all contractors' work.
 - iv. Monitor events as determined in the project monitoring plan, and update the plan as required.
 - v. Provide support for completion of assessments required by UNDP, spot checks and audits.
 - vi. Manage requests for the provision of UNDP financial resources through funding advances, direct payments or reimbursement using the Funding Authorization and Certificate of Expenditures (FACE) form.
 - vii. Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports.
 - viii. Monitor progress watch for plan deviations and make course corrections when needed within project board-agreed tolerances to achieve results.
 - ix. Ensure that changes are controlled, and problems addressed.
 - x. Perform regular progress reporting to the project board as agreed with the board, including measures to address challenges and opportunities.
 - xi. Prepare and submit financial reports to UNDP on a quarterly basis.
 - xii. Manage and monitor the project risks ? including social and environmental risks - initially identified and submit new risks to the project board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log;

xiii. Capture lessons learned during project implementation, in close collaboration with the knowledge management specialist.

xiv. Prepare revisions to the multi-year workplan, as needed, as well as annual and quarterly plans if required.

xv. Prepare the inception report no later than two weeks after the inception workshop.

xvi. Ensure that the indicators included in the project results framework are monitored annually in advance of the GEF PIR submission deadline so that progress can be reported in the GEF PIR.

xvii. Prepare the GEF PIR.

xviii. Assess major and minor amendments to the project within the parameters set by UNDP-GEF.

xix. Monitor implementation plans including the gender action plan (Annex 12 of the PRODOC), stakeholder engagement plan (Annex 9), and any environmental and social management plans.

xx. Monitor and track progress against the GEF core indicators.

xxi. Support the Mid-term review (MTR) and Terminal Evaluation (TE) process.

Thematic specialists

6. There will be six thematic specialists (**FIGURE 18**), who will coordinate specific outcomes and will work together with the responsible parties, project partners and other participating entities. These persons will have cross-cutting functions to all project outcomes but will also have specific duties.
 - i. The gender and participation specialist (EGP) will be responsible for promoting and coordinating the effective participation of diverse key stakeholders, direct beneficiaries, and local groups, as well as the implementation of the stakeholder engagement plan and the gender action plan. In addition, this person, together with the specialist in marine resources management, will be equally responsible for the preparation of the TDA and the SAP.
 - ii. The specialist in marine resources management (EMR) will be responsible for ensuring that conservation and sustainable management of PACA's natural resources are adequately addressed in the project. This person, together with the EGP, will be equally responsible for coordinating the preparation of the TDA and SAP. Also, this person will be responsible for overseeing the implementation of the pilot interventions (Table 2).
 - iii. The knowledge management specialist (EMC) will ensure that learning and experiences are systematically documented and disseminated. This person will (i) develop and maintain the project's website, (ii) develop the portal to house the long-term reporting of the condition of PACA and (iii) coordinate the development and adoption of indicators about PACA's condition.
 - iv. The communications specialist (ECM) will be a part-time post responsible for ensuring that key stakeholders receive vital information about the purpose and development of the project. This person will (i) prepare and implement the project's communication strategy, and (ii) ensure that all communications and documents use inclusive, intercultural-sensitive and gender-inclusive language.

- v. The monitoring and evaluation specialist (EME) will coordinate actions to document and monitor the project activities and will be directly responsible of the execution of the monitoring and evaluation plans. In addition, this person will support that learning is thoroughly documented.
- vi. The administrative and financial officer (ADM) will provide administrative, logistic and financial support for project execution .

7. *Consistency with National Priorities.* Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

- National Action Plan for Adaptation (NAPA) under LDCF/UNFCCC
- National Action Program (NAP) under UNCCD
- ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury
- Minamata Initial Assessment (MIA) under Minamata Convention
- National Biodiversity Strategies and Action Plan (NBSAP) under UNCBD
- National Communications (NC) under UNFCCC
- Technology Needs Assessment (TNA) under UNFCCC
- National Capacity Self-Assessment (NCSA) under UNCBD, UNFCCC, UNCCD
- National Implementation Plan (NIP) under POPs
- Poverty Reduction Strategy Paper (PRSP)
- National Portfolio Formulation Exercise (NPFE) under GEFSEC
- Biennial Update Report (BUR) under UNFCCC
- Others

7. The project is consistent with the national biodiversity strategies of the participating countries (from north to south):

- a. Mexico's National Biodiversity Strategy 2016-2030.
- b. Guatemala's National Biodiversity Strategy and action plan 2012-2022 issued in 2012.
- c. El Salvador's National Biodiversity Strategy issued in 2000 and updated in 2013
- d. Honduras's National Biodiversity Strategy and action plan 2018-2022.

- e. Costa Rica's National Biodiversity Strategy and action plan 2016-2025 issued in 2016.
 - f. Panama's National Biodiversity Strategy 2018-2030.
 - g. Ecuador's National Biodiversity Strategy and Action Plan 2015-2030.
8. The project is also consistent with the national fisheries policies and regulations, and the following national policies (from north to south):
- ? Mexico's National Seas and Coasts Policy issued in 2012.
 - ? Costa Rica's National Sea Policy 2013-2028, issued in 2013.
 - ? Ecuador's Ocean and Coastal Policies issued in 2014.

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

1. The project is consistent with the national biodiversity strategies of the participating countries (from north to south):
- a. Mexico's National Biodiversity Strategy 2016-2030.
 - b. Guatemala's National Biodiversity Strategy and action plan 2012-2022 issued in 2012.
 - c. El Salvador's National Biodiversity Strategy issued in 2000 and updated in 2013
 - d. Honduras's National Biodiversity Strategy and action plan 2018-2022.
 - e. Costa Rica's National Biodiversity Strategy and action plan 2016-2025 issued in 2016.
 - f. Panama's National Biodiversity Strategy 2018-2030.

g. Ecuador's National Biodiversity Strategy and Action Plan 2015-2030.

2. The project is also consistent with the national fisheries policies and regulations, and the following national policies (from north to south):

? Mexico's National Seas and Coasts Policy issued in 2012.

? Costa Rica's National Sea Policy 2013-2028, issued in 2013.

? Ecuador's Ocean and Coastal Policies issued in 2014.

3. The project is consistent with the following regional policies and instruments:

? Fisheries and aquaculture integration policy 2015 - 2025 (OSPESCA, 2015), approved on March 2015 by Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama and Dominican Republic. This is a comprehensive policy that includes, among other elements, regional governance and management and climate change. This regional policy is implemented through a number of regional regulations.

? The Convention for the Strengthening of the Inter-American Tropical Tuna Commission Established by the 1949 Convention between the United States of America and the Republic of Costa Rica (denominated the "Antigua Convention"). This convention is the basis of the IATTC and covers the regional management 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. The regional management is implemented through resolutions adopted by consensus by the participating parties.

? The regional protocols and agreements adopted by the parties of the CPPS. These include, among others, protocols on pollution from land-based sources marine protected areas. In addition, CPPS administer the Regional Seas Action Plan for the South-east Pacific (approved in 1981). The action plan includes six lines of work: (a) marine mammals, (b) marine turtles, (c) marine protected areas, (d) marine pollution, (e) marine debris, and (f) mangroves.

? The regional environmental strategy 2015 ? 2020 (CCAD, 2014) and the regional strategy on climate change (CCAD & SICA, 2010) adopted by CCAD. Both instruments incorporate actions for the coastal and marine environment and resources.

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

1. Component 3 of the proposed project focus on knowledge management (see text from paragraph 211 onwards). It has three core elements:

(i) To set up the foundation for a long-term reporting mechanism about the condition of the large marine ecosystem (outcome 4). This includes to agree a set of core indicators (environmental, social, economic), to develop a collaborative framework for the provision of information and analysis, and the construction of collaboration agreements with key national and international entities to formalise their contribution to the process.

(ii) To capture and transmit the lessons from the project (outcome 5). For this purpose, the approach will be to have a knowledge management specialist (EMC) as part of the project team. This person will prepare a project strategy for knowledge transfer and will closely collaborate with the communications specialist (ECM) and the gender and participation specialist (EGP) to ensure that this strategy has synergy with the following project instruments: (a) the project communication strategy, (b) the strategy for awareness raising, participation and articulation among key decision-makers and stakeholders (output 2.3), and (c) the stakeholders engagement plan. Lessons will be captured during project implementation and transferred to key audiences through the communication channels and social networks of the project partners, IW LEARN and the project's website. Several activities have been mainstreamed into the workplan to identify, document and analyse lessons. For example, pilot interventions have a set of onsite meetings with local key stakeholders to identify and documents lessons learned (output 3.2).

Project lessons will be compiled into three learning documents (provisional titles):

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

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

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

There will also be a memoir which will summarise the project experience, complemented by three short videos to summarise achievements and lessons.

(iii) To transmit lessons from previous projects. The TDA/SAP process will build upon the experience gained in other regions. The strategy for awareness raising, participation and articulation among key decision-makers and stakeholders (output 2.3) will be the means to transmit lessons and key concepts from other transboundary governance processes. Key experience identified so far is from the Caribbean and north Brazil shelf, the Gulf of Mexico and the Humboldt current LME.

2. The time line for component 3 is in the multiyear workplan (Annex 3 of the PRODOC). The budget allocation for component 3 is USD1,171,232.48. The details are in section IX of the PRODOC.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

1. The monitoring and evaluation plan is described in section VI and Annex 5 of the PRODOC. The budgeted plan is as follows:

Monitoring and Evaluation Plan and Budget			
GEF M&E requirements	Responsible Parties	Indicative costs (USD)	Time frame
Inception Workshop	Implementing Partner Project Coordinator	33,396	Within 60 days of CEO endorsement of this project.
Inception Report	Project Coordinator	None	Within 90 days of CEO endorsement of this project.
Monitoring of indicators in project results framework	Project Coordinator will oversee national institutions/agencies charged with collecting results data.	None	Annually prior to GEF PIR. This will include GEF core indicators.
GEF Project Implementation Report (PIR)	Regional Technical Advisor UNDP Country Office in the host country Project Coordinator	None	Annually typically between June-August. The costs of UNDP CO and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.
Monitoring all risks (Atlas risk log)	Project Coordinator	None	On-going.
Monitoring of stakeholder engagement plan	Project gender and participation specialist	None	On-going.
Monitoring of gender action plan	Project gender and participation specialist	None	On-going.
Project Board Meetings	Implementing Partner Project Coordinator	51,018	Annually.
Reports of Project Board Meetings	Implementing Partner Project Coordinator	None	Annually.
Lessons learned and knowledge generation	Project Coordinator	57,552	Onsite meetings with stakeholders implementing pilot interventions, and meeting to identify gender lessons from project implementation
Supervision missions	UNDP Country Office in the host country	None	Annually. The costs of UNDP CO and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.
Oversight missions	UNDP-GEF RTA and UNDP-GEF Directorate	None	Troubleshooting as needed. The costs of UNDP CO and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

Monitoring and Evaluation Plan and Budget			
GEF M&E requirements	Responsible Parties	Indicative costs (USD)	Time frame
Independent Mid-term Review (MTR) and management response	UNDP Evaluation Specialists and independent evaluation consultants.	33,000	Add date included on cover page of Project Document Only oversight can be charged to the GEF Fee.
Independent Terminal Evaluation (TE) and management response	UNDP Evaluation Specialists and independent evaluation consultants.	38,500	Add date included on cover page of Project Document Only oversight can be charged to the GEF Fee.
TOTAL indicative COST Excluding oversight/project assurance costs.		213,466	2.98% of project budget

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

1. The main social and economic benefits from the project will be:
 - a. To foster regional agreements and collaboration arrangements for ocean governance of shared marine resources.
 - b. To support awareness raising to advance a blue economy approach. The SAP will identify transboundary and shared problems as well as opportunities for blue growth at the LME scale.
 - c. To contribute to mainstream the ecosystem-based management approach into collaborative marine management.
 - d. To aid to build ocean citizenship by providing information and hands on experience to link everyday lives and activities to the condition of the coastal and marine realm.
 - e. To encourage women participation into the TDA/SAP process and the governance of PACA, and to make visible the contribution of women into the coastal tourism and fisheries supply chains.
2. The pilot interventions will generate the following benefits:

Billfishes pilot

This intervention will contribute to build a regional perspective of billfish recreational fisheries and the shared resource base. It is envisioned that this will contribute to the development or strengthening of operations and regulations to conserve billfishes.

Marine Spatial Planning pilot

In Mexico, the intervention will contribute to establish an agreed mechanism to assign uses in the marine South-Central Pacific Region. This will in turn aid to reduce conflicts, to open opportunities for new blue growth initiatives like ocean aquaculture or sustainable energy production, and to conserve key habitats.

In Costa Rica, the intervention will contribute to facilitate the operation of the long-line medium-scale and advanced commercial fleets which target large pelagic fish. The mainstreaming of sustainable measures like no-take-zones, procedures for bycatch release and the use of green stick will assist to (i) improve the fisheries performance and acceptance in the sustainable seafood market, and (ii) the conservation of migratory large pelagic fish.

In Panama, the intervention will contribute to establish an agreed zoning scheme for the activities that currently pressure the Coiba National Park and the Special Zone of Marine Protection (e.g., recreational fishing, diving, commercial fishing). This will in turn contribute to reduce existing conflicts among user groups and to protect key areas.

In Ecuador, the intervention will aid to develop participatory agreements and mechanisms for the use and conservation of the coastal border in three municipalities. This will reduce conflicts among user groups, facilitate the operation of tourist-related activities and reduce pressure to the natural system (e.g., improved management of litter and beach carrying capacity). The three municipalities will also advance on the development of a management plan for the coastal marine zone (three nautical miles offshore and one kilometre inland from the high tide line). This is a new requirement to coastal municipalities introduced in 2019. The use of the ocean strip is not entirely under municipal jurisdiction, therefore local governments will benefit from an exercise of interagency analysis and building collaborative agreements.

Cetacean pilot

This intervention will generate information to strengthen the awareness and information of whale watching tourist operators. This, together with the training to be provided, will in turn improve the performance of the operations (e.g., reducing bad practices like animal harassment) and make them recognised in the sustainable tourism sector. The improved operations will also contribute to reduce pressure on marine mammals, mainly humpback whales and dolphins.

3. The number of direct and indirect beneficiaries of the pilot intervention is presented in **TABLE 8**.

Table 8. Direct and indirect beneficiaries from the pilot interventions.

Pilot	Countries	Direct beneficiaries	Number	Indirect beneficiaries	Number
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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	Mexico	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 where 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, Ngabe-Bugle people that use playa Zapotal	1,053	Stakeholders that operate in the zone. fishers, tourism operators, diving tours operators, hoteliers, Ngabe-Bugle 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		

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification *

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

Project Information

<i>Project Information</i>	
1. Project Title	Towards joint management of the Pacific Central American Coastal large marine ecosystem (PACA)
2. Project Number	PIMS 6273
3. Location (Global/Region/Country)	Pacific Central America LME involving Central American countries and Ecuador and Mexico. Nine countries border PACA, seven participate in the project (from North to South): Mexico, Guatemala, El Salvador, Honduras, Costa Rica, Panama, and Ecuador.

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

QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?

Briefly describe in the space below how the Project mainstreams the human-rights based approach

The project will develop the collaborative framework and governance arrangements to sustain regional actions among the countries that share the Pacific Central American Coastal large marine ecosystem (PACA). The project will create spaces for respectful regional multi-level dialogue among key stakeholders (government, private sector, civil society organisations and academia) and the necessary communication, coordination and decision-making mechanisms to advance ecosystem-based management of PACA.

The core of the project will be the preparation and adoption of the following participatory multi-country strategic planning instruments: the Transboundary Diagnostic Analysis (TDA) (and a subsequent long-term reporting mechanism) and the Strategic Action Programme (SAP). The project will ensure that the processes to develop the mentioned instruments are participatory, inclusive and transparent. For this, the members of the TDA and SAP development teams will include at least 30% of women and 30% of representatives of non-state entities. In addition, the draft SAP will be submitted for consultation with key stakeholders on each of the participating countries. At these consultation meetings, the project will aim that at least 50% of participants are women and 50% represent non-state entities (as reflected in the project results framework). The TDA will identify the needs of local people and vulnerable groups, as well as the opportunities for inclusive blue growth and the promotion of sustainable livelihoods. The SAP will, as much as possible, be in accordance with regional and national poverty-reduction strategies and blue economy initiatives and will be fully aligned with the 2030 Sustainable Development Agenda. The project will support two regional pilot interventions on marine spatial planning and management of sailfish and marlin fisheries, and a national pilot in Panama on protection of whales. These interventions are designed to be highly participative, ensuring that all stakeholders have a voice, raise concerns and contribute their experience, lessons and ideas. Ultimately these interventions will generate a regional plan for the management of the sailfish and marlin fisheries and regional guidelines for marine spatial planning and whale watching that will benefit a range of local beneficiaries.

Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment

From the project's gender analysis, it is known that women are key stakeholders in many activities that occur within the Pacific Central American Coastal Large Marine Ecosystem. These activities range from direct collection of cockles in mangroves and invertebrates on tidal pools, to running restaurants and hotels, to administer marine protected areas, to head local governments and public entities, among others. However, their contributions to these sectors are not visible and understood. As for national and regional decision-making representative bodies, women's participation exists but it is still marginal. Despite knowing that women are present, their interests and needs are underrepresented and therefore, there are very limited public policies that promote their participation, this in turn limit their access to benefit-sharing of the development of the LME.

The project's gender action plan integrates the following to encourage multi-level women's participation, equity and empowerment:

- (1) Affirmative measures have been integrated to encourage women's participation in the TDA and SAP development teams as well as generation of specific gender information to be included in the TDA. Also, the project will aim that at least 50% of the participants on SAP consultation meetings are women.
- (2) To promote adequate regional representation of women in the decision-making bodies of the project. For this, quotas have been established to ensure participation in the project board and technical committee.
- (3) To support the preparation of regional guidelines to strengthen participation of women in the governance of PACA with OSPESCA's Regional Working Group on Gender Equality and Equity in fisheries and aquaculture. The guidelines will be submitted to SICA's Council of Ministers for Women of Central America and Dominican Republic (COMMCA).
- (4) To document and understand the contributions and participation of women in the three pilot interventions, that is into (i) the billfishes recreational fishing supply chain, (ii) the whale watching value chain and (iii) marine spatial planning decision-making.

Finally, following UNDP hiring and procurement procedures gender equality will be taken into consideration when sourcing staff and consultants. The project team will include a gender and participation specialist to follow up all the measures established in the gender action plan and its indicators (GAPIs), as well as to support the TDA/SAP elaboration processes ensuring the inclusion of the gender dimension.

It is important to mention that all the previous is explicitly mainstreamed in the project documents ensuring the required budget allocation in every case.

Briefly describe in the space below how the Project mainstreams environmental sustainability

The project seeks to promote ecosystem-based management of the Pacific Central American Large Marine Ecosystem through the strengthening of regional governance. The global environment problem that the project seeks to address is biodiversity loss. Valuable biodiversity (e.g., marine turtles, humpback whales, coral reefs and endemic marine fauna) is threatened by: (i) degradation of ecosystems and habitats, (ii) pollution, (iii) overuse of fishery resources, (iv) direct impacts on fauna and flora and (v) climate variability and climate change. It is not possible to address all these issues at the national level in the participating countries and there is no regional agreement for marine environment conservation in this region. Therefore, the project will develop a participatory multi-country strategic planning process (the TDA/SAP process) that will construct the governance arrangements for collaborative management of PACA. The project will aim to have a collaboration agreement for SAP implementation built upon the framework of the Central American Integration System (SICA) and signed by the participating countries. In doing so the project will mainstream ecosystem-based management in this large marine ecosystem as well as an inclusive and participatory blue growth approach. Three pilot interventions will be implemented, these will facilitate multi-country hands-on experience on key blue growth tools. From these pilots the project will generate a regional plan for the management of sailfish and marlin fisheries, regional guidelines for marine spatial planning in PACA and regional guidelines for whale watching.

Part B. Identifying and Managing Social and Environmental Risks

<p>QUESTION 2: What are the Potential Social and Environmental Risks?</p> <p><i>Note: Describe briefly potential social and environmental risks identified in Attachment 1 ? Risk Screening Checklist (based on any ?Yes? responses). If no risks have been identified in Attachment 1 then note ?No Risks Identified? and skip to Question 4 and Select ?Low Risk?. Questions 5 and 6 not required for Low Risk Projects.</i></p>	<p>QUESTION 3: What is the level of significance of the potential social and environmental risks?</p> <p><i>Note: Respond to Questions 4 and 5 below before proceeding o Question 6</i></p>	<p>QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?</p>
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<i>Risk Description</i>	<i>Impact and Probability (1-5)</i>	<i>Significance (Low, Moderate, High)</i>	<i>Comments</i>	<i>Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.</i>
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<i>Risk Description</i>	<i>Impact and Probability (1-5)</i>	<i>Significance (Low, Moderate, High)</i>	<i>Comments</i>	<i>Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.</i>
<p>Risk A. Limited indigenous peoples' participation and involvement during the implementation of the marine spatial planning pilot intervention and other project activities.</p> <p>[Standard 6, questions 6.1, 6.2, 6.4]</p>	<p>I = 3</p> <p>P =3</p>	<p>Moderate</p>	<p>The project will implement a regional pilot intervention on coastal and marine spatial planning. The area of influence of pilot sites include various indigenous people localities in Mexico and a site that is seasonally used by an indigenous community in Panama (Ngabe Bugle community).</p>	<p>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.</p>

<i>Risk Description</i>	<i>Impact and Probability (1-5)</i>	<i>Significance (Low, Moderate, High)</i>	<i>Comments</i>	<i>Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.</i>
<p>Risk B. Limitations to women participation and involvement</p> <p>[Principle 2, question 3].</p>	<p>I = 3 P = 3</p>	<p>Moderate</p>	<p>Women have limited participation on decision making bodies related to the key sectors (as identified in the gender analysis prepared during the project preparation phase).</p>	<p>During the development of the project, a gender analysis was undertaken, and a gender action plan & budget were prepared based on that analysis. That plan, which is in Annex 7 of the PRODOC, outlines the management measures that will be undertaken to address this risk and leverage it for multiple benefits. The project results framework has explicitly mainstreamed gender dimensions with the correspondent budget; confirming that the gender action plan can be implemented during project lifetime.</p> <p><u>Management measures</u></p> <p>? Implement the gender action plan and monitor and analyse the project's gender-related indicators. See gender section on question 1 above.</p> <p>? A gender specialist will be part of the project unit. This person will ensure that gender and social issues are mainstreamed into the TDA/SAP process and the governance arrangements for transboundary management of the large marine ecosystem.</p> <p>? There will be close collaboration with the Technical Secretariat for Women of the Council of Ministers for Women of Central America and Dominican Republic (an entity of SICA).</p>

<i>Risk Description</i>	<i>Impact and Probability (1-5)</i>	<i>Significance (Low, Moderate, High)</i>	<i>Comments</i>	<i>Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.</i>
<p>Risk C. Concern from ocean-going fishers that a regional agreement could lead to stricter fishing regulations and possible economic displacement</p> <p>[Standard 1, question 1.7; Standard 5, question 5.2].</p>	<p>I = 3 P = 3</p>	<p>Moderate</p>	<p>Fishers who undertake oceanic fisheries (mainly tuna and large pelagic fish) may be concerned about the implications of developing a regional agreement to manage PACA. The two regional pilot interventions directly address fisheries issues (marine spatial planning and recreational billfishes).</p> <p>This risk is based on the fact that the development of a collaborative framework and governance arrangements to implement PACA's SAP could generate suspicions about possible limitations for fisheries activities in the Eastern Pacific Ocean, particularly among groups that develop oceanic fisheries like tuna and large pelagic fish which capture migratory species along several fishing</p>	<p>? 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.</p> <p>? 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.</p> <p>? 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.</p> <p>? Fishers organisations participated in the two national consultation workshops held on each participating country during project preparation.</p> <p><u>Management measures</u></p> <p>To address fishers' concerns about stricter fisheries management regulations the following actions will be undertaken:</p> <p>? The project will liaise with key fisheries organisations like the Inter-American Tropical Tuna</p>

<i>Risk Description</i>	<i>Impact and Probability (1-5)</i>	<i>Significance (Low, Moderate, High)</i>	<i>Comments</i>	<i>Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.</i>
<p>Risk D. Negative impacts on critical habitats and/or legally protected areas.</p> <p>[Standard 1, question 1.1, 1.2].</p>	<p>I = 4</p> <p>P = 1</p>	Moderate	<p>The regional pilot on coastal and marine spatial planning (CMSP) will include in all national sites critical habitats (e.g., mangroves, coral reefs) and protected areas.</p> <p>During project preparation it was validated that at the regional level there will be no direct actions on coastal and marine protected areas (MPAs). These areas are key to blue growth and therefore will be a main topic of the TDA/SAP process.</p>	<p>? 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.</p> <p><u>Management measures</u></p> <p>? Ensure that the TDA/SAP process is built upon a Strategic Environmental and Social Assessment (SESA) approach.</p> <p>? 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).</p> <p>? 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).</p>

<i>Risk Description</i>	<i>Impact and Probability (1-5)</i>	<i>Significance (Low, Moderate, High)</i>	<i>Comments</i>	<i>Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.</i>
<p>Risk E. Impacts of climate variability and climate change.</p> <p>[Standard 2, question 2.2]</p>	<p>I = 3</p> <p>P = 4</p>	Moderate	<p>Probable impacts of climate variability and climate change were analysed. El Niño Southern Oscillation (ENSO) is the most conspicuous event. It has significant impacts on PACA's marine environment and related human activities, and it is very likely that climate change will generate more frequent and intense ENSO events. In addition, climate change will have numerous effects in PACA like coral bleaching, alteration of circulation patterns and changes in abundance and distribution of marine fauna.</p> <p>Project activities could be disrupted if an ENSO event develops during implementation. The most recent events were a very strong El Niño in 2015/2016 followed by a weak event in</p>	<p><u>Management measures</u></p> <p>? 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)</p> <p>? Annual workplans will be adjusted, as needed, to cope with the impacts of ENSO events during project implementation (see Table 11 of the PRODOC).</p>

<i>Risk Description</i>	<i>Impact and Probability (1-5)</i>	<i>Significance (Low, Moderate, High)</i>	<i>Comments</i>	<i>Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.</i>
QUESTION 4: What is the overall Project risk categorization?				
Select one (see SESP for guidance)			Comments	
<i>Low Risk</i>		?		
<i>Moderate Risk</i>		X		
<i>High Risk</i>		?		
QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?				
Check all that apply			Comments	
<i>Principle 1: Human Rights</i>		?		
<i>Principle 2: Gender Equality and Women's Empowerment</i>		X	Implement the gender action plan.	
<i>1. Biodiversity Conservation and Natural Resource Management</i>		X	Ensure that the TDA/SAP process is built upon a Strategic Environmental and Social Assessment (SESA) approach. Mainstream the value and contributions of critical habitats and MPAs into the TDA/SAP process and the pilot interventions and implement the stakeholder engagement plan.	
<i>2. Climate Change Mitigation and Adaptation</i>		X	Incorporate climate variability and climate change in all project interventions and into the TDA/SAP process.	
<i>3. Community Health, Safety and Working Conditions</i>		?		
<i>4. Cultural Heritage</i>		?		
<i>5. Displacement and Resettlement</i>		?		

<i>Risk Description</i>	<i>Impact and Probability (1-5)</i>	<i>Significance (Low, Moderate, High)</i>	<i>Comments</i>	<i>Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.</i>
	6. Indigenous Peoples		X	Prepare an indigenous people plan at project start.
	7. Pollution Prevention and Resource Efficiency		?	

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
6273 Annex 05 SESP PACA 30NOV2020_final	CEO Endorsement ESS	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

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

	Objective and Outcome Indicators	Baseline	Mid-term Target[1] <i>Expected level of progress before MTR process starts</i>	End of Project Target <i>Expected level when terminal evaluation undertaken</i>
	Mandatory Indicator 2: Number of indirect project beneficiaries disaggregated by sex (individual people)	0	<p>Number of indirect beneficiaries from pilot interventions and project activities[3]</p> <p>Billfishes 50,000 (ca., 40% women) MSP Mexico 27,428,548 (14,041,686 women, 13,386,862 men) MSP Costa Rica 243,898 (119,085 women, 124,813 men) MSP Panama 10,000 (8,450 women, 1,550 men) MSP Ecuador 1,141,904 (503,246 women, 638,658 men)</p> <p>Cetaceans 2000 (330 women, 1,670 men) Total 28,876,350</p>	<p>Population of coastal provinces / departments / states of the participating countries, once SAP has been endorsed.</p> <p>Mexico: 14,026,592 men, 14,681,627 women, 28,708,219 total Guatemala: 1,968,727 men, 2,062,021 women, 4,030,748 total El Salvador: 1,572,379 men, 1,770,202 women, 3,342,581 total Honduras: 327,418 men, 337,556 women, 664,974 total Costa Rica: 454,742 men, 437,930 women, 892,672 total Panama: 1,761,370 men, 1,753,616 women, 3,514,986 total Ecuador: 3,839,701 men, 3,866,374 women, 7,706,075 total Total 48,860,255</p>
	Mandatory GEF Core Indicators 3: Area of marine habitat under improved practices to benefit biodiversity (hectares).	0	> 50,000,000 ha	> 180,965,900 ha

	Objective and Outcome Indicators	Baseline	Mid-term Target[1] <i>Expected level of progress before MTR process starts</i>	End of Project Target <i>Expected level when terminal evaluation undertaken</i>
	Mandatory GEF Core Indicators 4: Globally over-exploited fisheries moved to more sustainable levels[3] (metric tons).	0	>40,000 t	>82,000 t
	Mandatory GEF Core Indicators 5: 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. 1. No progress on TDA development. 2. TDA developed. Transboundary issues agreed on based on limited analysis. 3. TDA developed. Transboundary issues agreed on based on solid analysis. 4. TDA adopted by project board	1	2	4

	Objective and Outcome Indicators	Baseline	Mid-term Target[1] <i>Expected level of progress before MTR process starts</i>	End of Project Target <i>Expected level when terminal evaluation undertaken</i>
	Mandatory GEF Core Indicators 7. Level of Strategic Action Program formulation and implementation. 1. No development of SAP. 2. SAP developed, including clear targets, commitments and time frames addressing key transboundary concerns. 3. SAP signed on at ministerial level. 4. Adoption of SAP into National Action Plans (NAPs) and/or SAP commitments incorporated within national sectoral plans.	1	1	3
Project component 1	<i>Governance instruments improved at regional level for joint management of PACA</i>			
Project Outcome 1 <i>Common understanding of the regional LME challenges and</i>	<i>Indicator 8: project specific</i> <i>Percentage of women and people from non-state entities[6] in the TDA Development team</i>	0	<i>Women ≥30%</i> <i>Non-state entities ≥30%</i>	<i>Women ≥30%</i> <i>Non-state entities ≥30%</i>

	Objective and Outcome Indicators	Baseline	Mid-term Target[1] <i>Expected level of progress before MTR process starts</i>	End of Project Target <i>Expected level when terminal evaluation undertaken</i>
opportunities supported by the participant countries.	<p>Indicator 9: project specific Level of development of long-term regional agreement to update the PACA status report</p> <ol style="list-style-type: none"> 1. No agreement/cooperation framework in place 2. Cooperation agreement negotiated but not yet signed 3. Cooperation agreement signed 4. Cooperation agreement under implementation 	1	2	3
Outputs to achieve Outcome 1	1.1. <i>Transboundary Diagnostic Analysis (TDA) of the Pacific Central American Coastal Large Marine Ecosystem prioritizes threats to LME, their immediate and root causes.</i>			
Outcome 2 Collaborative framework and governance arrangements adopted by the participating countries to implement PACA's SAP	<p>Indicator 10: project specific Level of Regional Governance Mechanism to support SAP implementation.</p> <ol style="list-style-type: none"> 1. No governance mechanism in place 2. Regional governance mechanism negotiated but not yet adopted 3. Countries adopt regional governance mechanism 4. Regional governance mechanism entered into force 	1	2	3 Governance mechanism for SAP implementation within the framework of SICA.
	<p>Indicator 11: project specific Number of people that participate in SAP consultation (percentage of women and non-state entities)</p>	0	0	≥400 people (women ≥50%[7], non-state entities ≥50%)

	Objective and Outcome Indicators	Baseline	Mid-term Target[1] <i>Expected level of progress before MTR process starts</i>	End of Project Target <i>Expected level when terminal evaluation undertaken</i>
	<p>Indicator I2: project specific Level of adoption of regional guidelines to strengthen participation of women in the governance of PACA. 1. No progress on development of guidelines. 2. Guidelines developed. 3. Guidelines presented to COMMCA 4. Guidelines endorsed by COMMCA</p>	1	1	3
Outputs to achieve Outcome 2	<p>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. 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.</p>			
Project component 2	<p>Initial on the ground pilot active actions to address common key issues and to advance collaborative work and replication</p>			

	Objective and Outcome Indicators	Baseline	Mid-term Target[1] <i>Expected level of progress before MTR process starts</i>	End of Project Target <i>Expected level when terminal evaluation undertaken</i>
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.	<p>Indicator I3: project specific Level of adoption of a regional plan for the management of sailfish and marlin recreational fisheries (family Istiophoridae)</p> <ol style="list-style-type: none"> 1. No progress on development of regional plan 2. Regional plan prepared 3. Regional plan presented to national fisheries authorities 4. Regional plan endorsed by national fisheries authorities 	1	2	3
	<p>Indicator I4: project specific Level of development of regional guidelines for marine spatial planning in PACA</p> <ol style="list-style-type: none"> 1. No progress on development of guidelines. 2. Guidelines developed. 3. Guidelines agreed by project board 4. Guidelines endorsed by pertinent national authorities on each country 	1	1	3

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

	Objective and Outcome Indicators	Baseline	Mid-term Target [1] <i>Expected level of progress before MTR process starts</i>	End of Project Target <i>Expected level when terminal evaluation undertaken</i>
Outcome 5 Lessons on collaborative actions to manage PACA shared in the region and worldwide (south-south cooperation).	<i>Indicator 17: project specific Number of people (men and women, by country) who have participated in events for dissemination of lessons and best practices (e.g., workshops, IWC)</i>	0	≥ 800 (>30% women)	≥ 1,600 (>30% women)
	<i>Indicator 18: project specific Number of visitors per month (annual average) recorded in the network of electronic platforms used to disseminate project's learnings and best practice</i>	Visits 0 Unique visits 0	Visits >2,000 Unique visits >1,500	Visits >4,000 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. 5.2. Project lessons documented and disseminated.			

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

[2] See Table 12.

[3] See Table 12.

[4] Area included in the marine spatial planning exercises

[5] 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.

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

[7] This is a challenging target, but the project will strive to achieve it.

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

GEFSEC

All comments were addressed during PIF review

STAP

Coordination. Is there an adequate mechanism to feed the lessons learned from earlier projects into this project, and to share lessons learned from it into future projects? not described

Response. The lessons from previous projects were mainstreamed during project preparation. The lessons from the CLME+, Gulf of Mexico and Humboldt LME projects were investigated and used in project development.

Knowledge management. What overall approach will be taken, and what knowledge management indicators and metrics will be used? no indicators and metrics identified

Response. The indicators for component 3 (knowledge management) were developed and agreed with the countries? focal points and are included into the results framework.

Knowledge management. What plans are proposed for sharing, disseminating and scaling-up results, lessons and experience? plans for knowledge management would benefit from an elaboration of mechanisms to promote exchange of lessons beyond documentation and online distribution of lessons, particularly with regard to the function of the proposed ?working groups? at regional scale. If done well, these could potentially provide an additional track for transboundary cooperation beyond the more formal intergovernmental links.

Response. Several measures have been mainstreamed to promote identification, documentation and dissemination of lessons. Working groups will be a mechanism of the project?s technical committee. However, the specific topics will be decided during project implementation.

STAP notes. Among targeted innovations, it aims for "new approaches to build collaborative management at the LME scale." In addition to additional work to provide quantitative measures of the full set of project targets, a key focus in full project preparation should be to delineate the planned innovations and methods for testing their effectiveness.

Response. The TDA/SAP process was modified to incorporate experience from other projects. The application of the TDA/SAP process is a new approach for the participating countries which had not been able before to agree on a regional mechanism for ocean governance.

STAP notes. Other elements, including stakeholder identification, gender equality and risks are addressed briefly but adequately for this stage; the STAP recommends a fuller treatment before CEO endorsement stage. Likewise, it will be important to develop a fuller treatment of lessons from earlier projects (within the region and in other LMEs) and how these have informed the project theory of change and activities.

Response. Gender and stakeholder analyses were developed and the findings used to adjust the project proposal. Also, as mentioned before, lessons from previous projects were used to enrich the theory of change and the project strategy.

STAP notes. Additionally, the plans for knowledge management would benefit from an elaboration of mechanisms to promote exchange of lessons beyond documentation and online distribution of lessons, particularly with regard to the function of the proposed ?working groups? at regional scale. If done well, these could potentially provide an additional track for transboundary cooperation beyond the more formal intergovernmental links.

Response. This was answered above.

Council at work program inclusion

France's Comments

The French chair wishes to highlight the existence of a regional initiative for the conservation of biodiversity and the sustainable use of marine and coastal resources. The CMAR project "Eastern Tropical Pacific Marine Corridor" establishes an appropriate regional framework facilitating the development and integral management of the corresponding marine corridor, consistent with the policies, legislation and related agreements of the four member countries of this initiative (Costa Rica, Panama, Colombia and Ecuador), in accordance with the relevant international conventions and agreements. Synergies must be developed between these two projects that pursue similar objectives.

Acknowledged. The participating countries considered the CMAR initiative during project preparation. During project implementation there will be pertinent collaboration. It has to be indicated that two of the five CMAR core MPAs are not within PACA's boundaries: Cocos island and the Galapagos archipelago.

Canada's Comments

? This initiative is definitely relevant for Central America and Guatemala in particular, especially on the Atlantic coast.

? Waste from all over Guatemala is currently entering Guatemalan rivers and being transported to the Atlantic coast where kilometers of garbage can be found clogging up the coast line. Much of this garbage is entering into the Honduran coastline and has caused tensions between the two countries.

? The problem is further impacted by the effects of climate change. Heavy rains and tropical storms wash even more garbage into Guatemalan rivers and out to the oceans.

? The Guatemalan government has begun to take actions to address the problem but requires both technical and financial assistance.

? Marine life and biodiversity along the coastline is negatively affected.

? The Project Identification Form (PIF) makes no mention of how this project will contribute to the achievement of the Aichi Biodiversity targets or its alignment with the Sustainable Development Goals. This is an area where additional consideration or information might be beneficial especially as the PIF does note that the project is consistent with the national biodiversity strategies of the participating countries.

Marine litter will be addressed as part of the TDA/SAP process. The project will not undertake specific actions on marine litter. However, at the core of the TDA/SAP process is a blue economy approach. The three regional pilot interventions will focus on (i) management and conservation of billfishes, (ii) marine spatial planning, and (iii) cetacean conservation.

The project will directly contribute to Aichi targets 1 and 4. In addition, the project will indirectly contribute to the following Aichi targets 6, 8, 9, 10, 11 and 14.

The project will directly contribute to SDGs 14, and will indirectly contribute to SDGs 5, 8, 10, 12 and 13.

United States Comments

Could the agency explain why specific linkages to and roles of the 14 indigenous peoples who will be engaged in the project preparation will not be identified until the PPG stage? This seems at odds with the statement that they will be included in the project preparation.

During PIF preparation there was not sufficient information to clearly identify indigenous peoples who used PACA resources. During project preparation 24 coastal indigenous peoples were identified; eight of them are related to the pilot intervention on marine spatial planning in Mexico and Panama. 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. Therefore, for the preparation of the TDA, each national diagnostic analysis will include the identification of coastal indigenous people that use the resources of PACA. The TDA/SAP process will actively seek engagement of pertinent groups and the pilot interventions on Mexico and Panama will

ensure participation of pertinent indigenous people. The project regional governance will be built upon the framework of the Central American Integration System (SICA). This is an opportunity to engage key stakeholders through SICA's participative mechanisms.

ANNEX C: Status of Utilization of Project Preparation Grant (PPG).
(Provide detailed funding amount of the PPG activities financing status
in the table below:

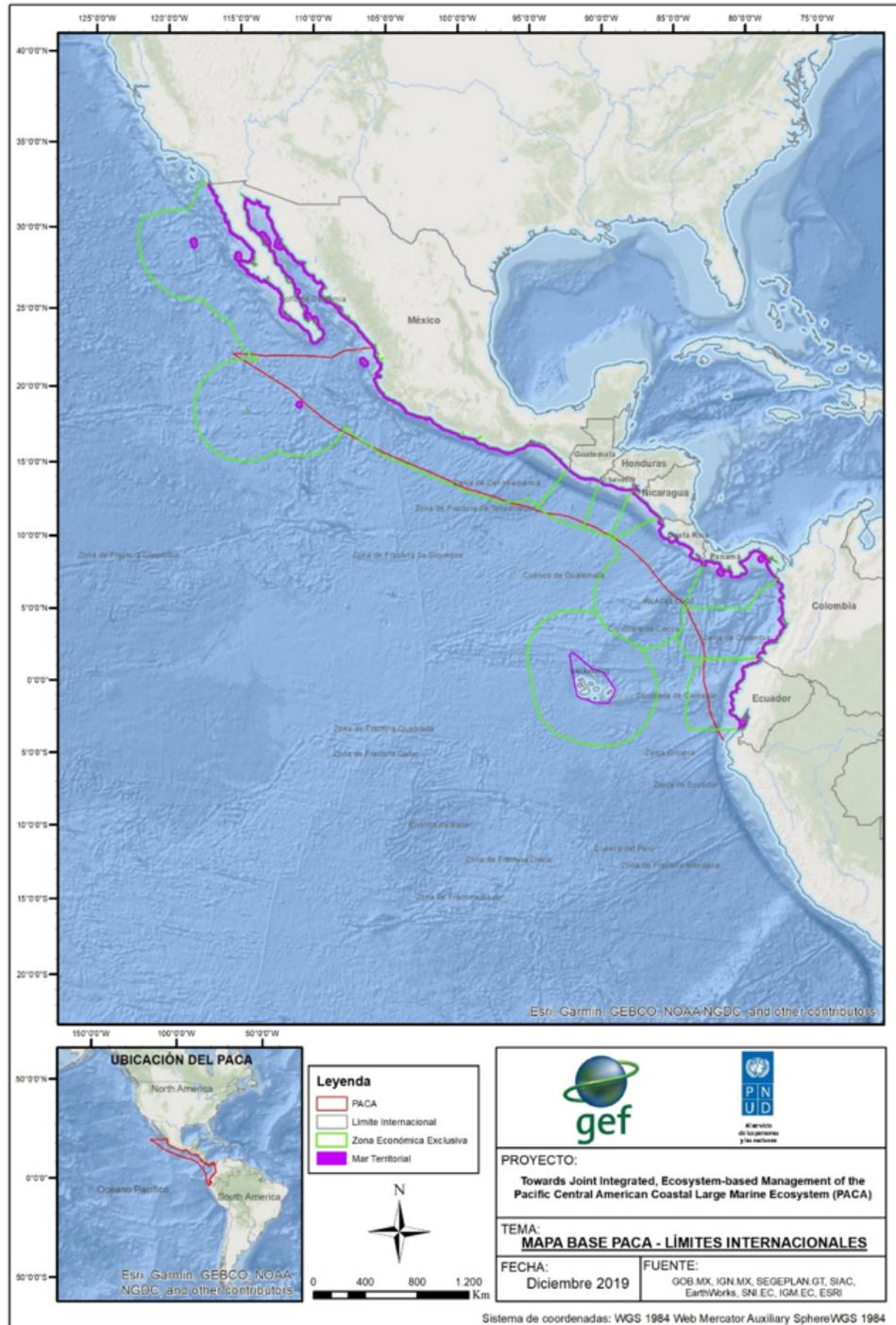
PPG Grant Approved at PIF: \$154,338			
<i>Project Preparation Activities Implemented</i>	<i>GETF/LDCF/SCCF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
Project preparation grant to finalize the UNDP-GEF project document for project ? Towards joint integrated, ecosystem-based management of the Pacific Central American Coastal Large Marine Ecosystem (PACA). ?	154,338	142,400.47	11,937.53
Total	154,338	142,400.47	11,937.53

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.

Annex E: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.



ANNEX E: Project Budget Table

Please attach a project budget table.

Expenditure Category	Detailed Description	Component (USDeq.)						Total (USDeq.)	Responsible Entity
		Component 1		Component 2	Component 3	Sub-Total	M&E		
		Sub-component 1	Sub-component 2	Sub-component 3	Sub-component 4				
									(Executing Entity receiving funds from the GEF Agency)[1]

<p>Equipment</p>	<p>6,500.00 Laptops and digital projector. Regional MSP pilot. Panama site. Funds will be administered by WWF and executed by MarViva (responsible party). 7,500.00 Digital cameras, GoPro cameras, digital projector. National pilot with STAR resources. Funds will be administered by WWF and executed by MarViva. 6,000 Computers and equipment for field work. Regional MSP pilot. Costa Rica site. Responsible party: INCOPECA, funds to be administered by WWF.</p>			<p>20,000</p>	<p>20,000</p>			<p>20,000</p>	<p>WWF Guatemala/Mesoamerica</p>
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Equip ment	<p>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). 20,000 SIG Planning software license for 10 users. Regional MSP pilot. Mexico site. Executed by LANCIS (responsible party). 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. 6,000 Laptops and printer. Regional MSP pilot. Ecuador site executed by Conservation International - Ecuador</p>	97,197	97,197	97,197	WWF Guatemala/Mesoamerica
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Equip ment	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
Equip ment	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

Contractual services- Individual	<p>For outcome 1: 97,983.60 Project coordinator. Time allocated to this outcome. 60,628.88 Gender and participation specialist. Time allocated to this outcome. 36,791.04 Specialist in marine resources management. Time allocated to this outcome. 25,084.16 Communications specialist. Time allocated to this outcome. 11,000.00 Translation of TDA document into English. 16,600.00 Editing of TDA document. Includes publishing in high quality PDF format. 1,100.00 Prepare TDA brief for decision makers (government authorities). Includes text editing and graphic design. 21,500.00 Prepare TDA dissemination versions for specific key stakeholders (fisheries, marine tourism, aquaculture</p>	251,119	251,119	251,119	WWF Guatemala/Mesoamerica
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Contractual services- Individual	<p>97,983.60 Project coordinator. Time allocated to this outcome.</p> <p>58,280.64 Gender and participation specialist. Time allocated to this outcome.</p> <p>36,791.04 Specialist in marine resources management. Time allocated to this outcome.</p> <p>23,084.16 Communications specialist. Time allocated to this outcome.</p> <p>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.</p> <p>11,000.00 Translation of SAP document into English. USD50/page (500 words in A4 page x USD0.1 per word) x 200 pages.</p> <p>6,600.00 Editing of SAP document. USD30/page x 200 pages</p>	314,479	314,479	314,479	WWF Guatemala/Mesoamerica
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Contractual services- Individual	117,580.32 Project coordinator. Time allocated to this outcome. 116,561.28 Gender and participation specialist. Time allocated to this outcome. 73,582.08 Specialist in marine resources management. Time allocated to this outcome. 46,168.32 Communications specialist. Time allocated to this outcome. 70,000.00 Pilot coordinator, administrative assistant. Regional pilot executed by OSPESCA (responsible party). 253,000. 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	848,948	848,948	848,948	WWF Guatemala/Mesoamerica
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Contractual services- Individual	<p>For outcome 1 and 2: 92,315.52 Knowledge Management specialist. Time allocated to these outcomes. 41,136.48 Monitoring and Specialist. Time allocated to these outcomes. For outcome 3: 54,848.64 Monitoring and evaluation specialist. Time allocated to this outcome. For outcome 4: 29,140.32 Gender and participation specialist. Time allocated to this outcome. 18,395.52 Specialist in marine resources management. Time allocated to this outcome. 69,236.64 Knowledge management specialist. Time allocated to this outcome. 20,568.24 Monitoring and evaluation specialist. Time allocated to this outcome. 11,542.08 Communications specialist</p>	296,047	296,047	41,136	337,183	WWF Guatemala/Mesoamerica

<p>Contractual services- Individual</p>	<p>For outcome 5: 29,140.32 Gender and participation specialist. Time allocated to this outcome. 18,395.52 Specialist in marine resources management. Time allocated to this outcome. 69,236.64 Knowledge management specialist. Time allocated to this outcome. 20,568.24 Monitoring and evaluation specialist. Time allocated to this outcome. 11,542.08 Communications specialist. Time allocated to this outcome.</p>				128,315	128,315	20,568		148,883	WWF Guatemala/Mesoamerica
<p>Contractual services- Individual</p>	<p>92,685.12 Project coordinator. Time allocated to this component. 128,684.16 Administrative and financial officer. Time allocated to this outcome.</p>					-		221,369	221,369	WWF Guatemala/Mesoamerica

Contractual services- Company	369,982.80										WWF Guatemala/Mesoamerica
	Contract national diagnostic analysis Mexico.										
	98,285.00										
	Contract national diagnostic analysis Guatemala.										
	94,161.10										
	Contract national diagnostic analysis El Salvador.										
	66,498.30										
	Contract national diagnostic analysis Honduras.										
	105,483.40	1,352,991				1,352,991			1,352,991		
	Contract national diagnostic analysis Costa Rica.										
153,051.80											
Contract national diagnostic analysis Panama.											
219,997.80											
Contract national diagnostic analysis Colombia / Nicaragua.											
245,531.00											
Contract national diagnostic analysis Ecuador.											

<p>Contractual services- Company</p>	<p>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.</p>			<p>58,800</p>		<p>58,800</p>			<p>58,800</p>	<p>WWF Guatemala/Mesoamerica</p>
<p>Contractual services- Company</p>	<p>11,000.00 Development of project website according to IW: LEARN guidelines, linked to web portals of project partners. 35,200.00 Maintenance and operation of project website (outsourced). 44,000.00 Development of web portal to host PACA's long-term reporting mechanism.</p>				<p>-</p>	<p>90,200</p>			<p>90,200</p>	<p>WWF Guatemala/Mesoamerica</p>

International Consultants	<p>For outcome 1: 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. 55,000.00 Senior advisor for TDA development. USD500/day x 100 working days. Travel expenses are included on the budget of each event.</p> <p>For outcome 2: 49,500.00 Senior advisor for SAP development. USD500/day x 90 working days. Travel expenses are included on the budget of each event. 7,700.00 TDA/SAP process trainer. Prepare and implement a regional training workshop (three days</p>	62,700	62,700	62,700	WWF Guatemala/Mesoamerica
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International Consultants	<p>For outcome 1: 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. 55,000.00 Senior advisor for TDA development. USD500/day x 100 working days. Travel expenses are included on the budget of each event.</p> <p>For outcome 2: 49,500.00 Senior advisor for SAP development. USD500/day x 90 working days. Travel expenses are included on the budget of each event. 7,700.00 TDA/SAP process trainer. Prepare and implement a regional training workshop (three days</p>	57,200	57,200	57,200	WWF Guatemala/Mesoamerica
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<p>International Consultants</p>	<p>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. 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.</p>			69,400	69,400			69,400	WWF Guatemala/Mesoamerica
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<p>International Consultants</p>	<p>19,800.00 Independent mid-term review. International consultant, honorarium about 18,000. 23,100.00 Independent final assessment. International consultant, honorarium about 21,000.</p>					-	42,900		42,900	WWF Guatemala/Mesoamerica
<p>Local Consultants</p>	<p>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.</p>	15,400				15,400			15,400	WWF Guatemala/Mesoamerica

Local Consultants	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>8,800.00 Consultant to draft regional guidelines for whale watching in</p>	348,350	348,350	348,350	WWF Guatemala/Mesoamerica
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Local Consultants	<p>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. 13,200.00 Independent mid-term review. National consultant (specialist), honorarium about 12,000. 5,500.00 Translation of midterm review report. 15,400.00 Independent final assessment. National consultant (specialist), honorarium about 14,000. 5,500.00 Translation of final assessment report.</p>	22,770	22,770	22,770	WWF Guatemala/Mesoamerica
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<p>Local Consultants</p>	<p>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. 13,200.00 Independent mid-term review. National consultant (specialist), honorarium about 12,000. 5,500.00 Translation of midterm review report. 15,400.00 Independent final assessment. National consultant (specialist), honorarium about 14,000. 5,500.00 Translation of final assessment report.</p>								<p>39,600</p>	<p>39,600</p> <p>WWF Guatemala/Mesoamerica</p>
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Training, Workshops, Meetings	<p>For outcome 1: 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. 3,960.00 TDA initiation workshop. Linked to TDA/SAP training workshop. Cost of one additional day of TDA development team (25 persons)</p>	209,286	209,286	209,286	WWF Guatemala/Mesoamerica
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Training, Workshops, Meetings	<p>For outcome 1: 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. 3,960.00 TDA initiation workshop. Linked to TDA/SAP training workshop. Cost of one additional day of TDA development team (25 persons)</p>	430,188	430,188	430,188	WWF Guatemala/Mesoamerica
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Training, Workshops, Meetings	<p>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. 13,200.00 Start-up meetings with</p>	624,790	624,790	624,790	WWF Guatemala/Mesoamerica
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Training, Workshops, Meetings	<p>For outcome 4: 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. 16,500.00 Short meetings to present and discuss with key partners the set of core indicators and framework for long-term monitoring</p>	59,488	59,488	59,488	WWF Guatemala/Mesoamerica
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Training, Workshops, Meetings	<p>For outcome 4: 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. 16,500.00 Short meetings to present and discuss with key partners the set of core indicators and framework for long-term monitoring</p>	-	282,766	282,766	WWF Guatemala/Mesoamerica
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Travel	<p>For outcome 1 22,000.00 Airplane tickets for project team. USD1,000/ticket x 5 tickets/year. 19,536.00 Reimbursement of travel expenses of project team. USD120/day x 37 days/year. 4,400.00 Land travel of project team in project area. For outcome 2: 22,000.00 Airplane tickets for project team. USD1,000/ticket x 5 tickets/year. 19,536.00 Reimbursement of travel expenses of project team. USD120/day x 37 days/year. 4,400.00 Land travel of project team in project area. 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</p>	45,936	45,936	45,936	WWF Guatemala/Mesoamerica
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Travel	<p>For outcome 1 22,000.00 Airplane tickets for project team. USD1,000/ticket x 5 tickets/year. 19,536.00 Reimbursement of travel expenses of project team. USD120/day x 37 days/year. 4,400.00 Land travel of project team in project area. For outcome 2: 22,000.00 Airplane tickets for project team. USD1,000/ticket x 5 tickets/year. 19,536.00 Reimbursement of travel expenses of project team. USD120/day x 37 days/year. 4,400.00 Land travel of project team in project area. 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</p>	67,760	67,760	67,760	WWF Guatemala/Mesoamerica
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Travel	<p>22,000.00 Airplane tickets for project team. USD1,000/ticket x 5 tickets/year. 19,536.00 Reimbursement of travel expenses of project team. USD120/day x 37 days/year. 4,400.00 Land travel of project team in project area. 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). 42,000 Travel expenses for three workshops to prepare multicriteria model. Travel expenses for two workshops to prepare socioeconomic models.</p>	361,666	361,666	361,666	WWF Guatemala/Mesoamerica
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<p>Travel</p>	<p>For outcome 4: 13,200.00 Airplane tickets for project team. USD1,000/ticket x 3 tickets/year. 5,808.00 Reimbursement of travel expenses of project team. USD120/day x 11 days/year. For outcome 5: 13,200.00 Airplane tickets for project team. USD1,000/ticket x 3 tickets/year. 5,808.00 Reimbursement of travel expenses of project team. USD120/day x 11 days/year. 2,200.00 Land travel of project team in project area.</p>				<p>19,008</p>	<p>19,008</p>			<p>19,008</p>	<p>WWF Guatemala/Mesoamerica</p>
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<p>Travel</p>	<p>For outcome 4: 13,200.00 Airplane tickets for project team. USD1,000/ticket x 3 tickets/year. 5,808.00 Reimbursement of travel expenses of project team. USD120/day x 11 days/year. For outcome 5: 13,200.00 Airplane tickets for project team. USD1,000/ticket x 3 tickets/year. 5,808.00 Reimbursement of travel expenses of project team. USD120/day x 11 days/year. 2,200.00 Land travel of project team in project area.</p>									<p>WWF Guatemala/Mesoamerica</p>
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<p>Travel</p>	<p>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). 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). 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). 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).</p>							<p>41,800</p>	<p>41,800</p>	<p>WWF Guatemala/Mesoamerica</p>
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Office Supplies	<p>6,000 Office supplies (e.g., paper, markers, pencils). Regional pilot executed by OSPESCA (responsible party). 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). 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. 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). 6,000 Field and office supplies. Regional MSP pilot. Costa Rica site.</p>	48,000	48,000	48,000	WWF Guatemala/Mesoamerica
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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

<p>Other Operating Costs</p>	<p>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). 15,000 Design and printing of information material. Regional MSP pilot. Mexico site. Executed by LANCIS (responsible party). 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). 17,200.00 Design and printing of educational and promotional material, including marine mammal guides. National pilot with STAR resources. Funds will be administered</p>	<p>132,200</p>	<p>132,200</p>	<p>132,200</p>	<p>WWF Guatemala/Mesoamerica</p>
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<p>Other Operating Costs</p>	<p>33,000.00 Contract preparation of communication materials to implement the project's communication strategy. USD7,500 per year.</p> <p>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.</p> <p>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</p>	-	89,100	89,100	WWF Guatemala/Mesoamerica
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Other Operating Costs	7,700 Online communications services					-		7,700	7,700	WWF Guatemala/Mesoamerica
Other Operating Costs	44,000.00 Annual financial audits. USD11,000/year.					-		44,000	44,000	WWF Guatemala/Mesoamerica
Grand Total		1,937,432.64	902,627.44	2,621,851.00	525,627.52	5,987,538.60	838,018.72	321,651.68	7,147,209.00	

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit a finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agency is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies' capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).