

GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: Full-sized Project
TYPE OF TRUST FUND:GEF Trust Fund

For more information about GEF, visit TheGEF.org

PART I: PROJECT INFORMATION

Project Title: Catalysing implementation of a Strategic Action Programme for the sustainable management of shared living				
resources in the Humboldt curre	nt system.			
Country(ies):	Chile and Peru	GEF Project ID: ¹	9592	
GEF Agency(ies):	UNDP (select) (select)	GEF Agency Project ID:	5697	
Other Executing Partner(s):	IFOP, IMARPE, SUBPESCA,	Submission Date:	20 April 2018	
	PRODUCE, MMA, MINAM,	Resubmission Date:	25 May 2018	
	SERNAPESCA, SERNANP			
GEF Focal Area (s):	International Waters	Project Duration (Months)	60	
Integrated Approach Pilot	IAP-Cities IAP-Commodities IAP-Food Security Corporate Program: SGP			
Name of Parent Program	[if applicable]	Agency Fee (\$)	760,000	

A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²

Focal Area			(in \$)	
Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Project	Co-
Objectives/110grams		Tuna	Financing	financing
IW-3 Program 6	Outcome 6.1: Coasts in globally most significant areas	GEFTF	6,414,104	46,182,610
	protected from further loss and			
	degradation of coastal habitats while protecting and			
	enhancing livelihoods			
IW-3 Program 7	Outcome 7.1: Introduction of sustainable fishing practices	GEFTF	1,585,896	45,456,417
	into xx % of globally over-exploited			
	fisheries			
	Total project costs		8,000,000	91,639,027

B. PROJECT DESCRIPTION SUMMARY

Project Objective: To facilitate ecosystem-based fisheries management (EBFM) and ecosystem restoration in the Humboldt current system for the sustainable and resilient delivery of goods and services from shared living marine resources, in accordance with the Strategic Action Programme (SAP) endorsed by Chile and Peru.

					(in	1 \$)
Project Components/ Programs	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	GEF Project Financing	Confirmed Co- financing
1. Recovery and	TA	1. The prioritized	1.1 Agreed protocols in	GEFTF	1,522,404	45,456,418
maintenance at		fishery resources have	operation for			
optimal population		improved the existing	simultaneous, sequential			
biomass levels of the		management scenarios	or joint assessments of			
majority of fisheries		to contribute to their	the shared stock and the			
resources while		recovery and there are	anchoveta fisheries			
maintaining ecosystem		systems to ensure the	(Southern Peru -			
health and productivity		maintenance at	Northern Chile).			
under climate change		optimum population	1.2 Document about the			
scenarios.		levels while sustaining	status of the anchoveta			

¹ Project ID number remains the same as the assigned PIF number.

² When completing Table A, refer to the excerpts on <u>GEF 6 Results Frameworks for GETF, LDCF and SCCF</u> and <u>CBIT programming directions</u>.

³ Financing type can be either investment or technical assistance.

					(ir	1 \$)
Project Components/ Programs	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	GEF Project Financing	Confirmed Co- financing
		a healthy and productive ecosystem considering climate change and El Niño Southern Oscillation scenarios.	and its fishery, and future projections, in the context of environmental variability (Southern Peru - Northern Chile). 1.3 Document with a comparative analysis of regulations and management strategies for the anchoveta, and recommendations for coordinated actions, including illegal, unreported and unregulated fishing (IUU), discards, by-catch, capture controls, closed seasons and fishing quotas. 1.4 Programme for the biological study of the Jibia in Chile, in areas beyond the fishery, with emphasis on growth and renewal rates, to complement those studies carried out in the follow-up project. 1.5 Management and monitoring system of benthic resources harvested in Marcona and Atico. 1.6 Beached seaweed harvesting strategy for the Marcona district, and management plan for beached seaweed for the San Fernando National Reserve			
2. Improve the environmental quality of the marine and coastal ecosystems via integrated management considering the various sources of pollutants.	TA	2. Improved coastal and marine environmental quality through the application of integrated ecosystem management.	2.1 Integrated and coordinated monitoring programme of environmental quality in the Bahía de Paracas. 2.2 Plan to improve environmental quality targets for the Bahía de Iquique. 2.3 Public investment project for wastewater treatment and landfill in the Paracas district.	GEFTF	1,149,577	6,186,388

					(ir	1 \$)
Project Components/ Programs	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	GEF Project Financing	Confirmed Co- financing
			2.4 Coastal and marine spatial planning in the Bahía de Iquique to improve environmental quality. 2.5 Integrated coastal and marine zone management of the Pisco province (Paracas and Independencia bays).			
3. Restore and maintain the habitat and biodiversity of marine and coastal systems at sustainable levels.	TA	3. There are systems to contribute to maintain and, if necessary, to recover habitat and biodiversity in the Humboldt current system.	3.1 Regional regulations for the management of productive activities in coastal and marine areas in the sector between the Reserva Nacional San Fernando and San Juan de Marcona (including Punta San Juan de Marcona and the Demonstration Pilot program) (Peru). 3.2 Marine protected area in Chispana (Chile) 3.3 Management plan for the AMCP-MU " Punta Morro - desembocadura rio Copiapó - Isla Grande de Atacama". 3.4 Technical cooperation network in marine areas of significant importance for the conservation of the Humboldt current.	GEFTF	606,280	4,655,851
4. Diversify and add value by creating productive opportunities inside and outside the fisheries sector with people socially organized and integrated	TA	4. Fishing activities are diversified, and new production opportunities are created for fishers, organized in integrated organizations of civil society, inside and outside the fishing sector.	4.1 Fishery products with increased added value that can be commercialized (using the prioritized resources) in a context of responsible fisheries in which traceability is demonstrated. 4.2 Programme for the diversification of production opportunities (with emphasis on tourism and gastronomy). 4.3 Programme for the	GEFTF	2,521,410	13,756,362

					(ir	n \$)
Project Components/ Programs	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	GEF Project Financing	Confirmed Co- financing
			diversification of production opportunities (with emphasis on culture and/or restocking of benthic species and macroalgae) (Chile)			
5. Contribute to the population's food security and food safety	TA	5. The general public benefits from increased food security and food safety, thanks to improved management of ecosystems and fisheries, and betterquality controls of the catch.	5.1 Technical proposal to promote the consumption of products made with hydrobiological resources (e.g., concentrates, hydrolysates) among vulnerable sectors of the population in Peru. 5.2 Training programme in food safety and quality of marine products for direct human consumption in the domestic market of each country (includes: improved production chain of marine based products for direct human consumption) (Chile and Peru) 5.3 Communication programme for consumers on food safety, food security and responsible consumption of products from the prioritized resources (anchoveta, jibia, chanque/loco, ostión and macroalgae). 5.4 Traceability system for direct human consumption products.	GEFTF	859,904	13,756,362
6. Share and disseminate experiences and learnings	TA	6. Lessons and good practices have been shared with key stakeholders in each country, between countries and globally.	6.1. Digital platform to aid in communication among key stakeholders and for disseminating lessons and good practices. 6.2. Documented and disseminated lessons and good practices. Participation in IW:LEARN activities	GEFTF	959,473	7,827,646

					(in	1 \$)
Project Components/	Financing	Project Outcomes	Project Outputs	Trust	GEF	Confirmed
Programs	Type ³	Project Outcomes	Project Outputs	Fund	Project	Co-
					Financing	financing
			equivalent to at least 1%			
			of GEF project budget.			
			6.3 Gender perspective			
			included in the project's			
			management and			
			actions.			
Subtotal					7,619,048	91,639,027
Project Management Cost (PMC) ⁴ GEFTF 380,952						
	Total project costs 8,000,000 91,639,027					91,639,027

C. CONFIRMED SOURCES OF **CO-FINANCING** FOR THE PROJECT BY NAME AND BY TYPE

Please include evidence for <u>co-financing</u> for the project with this form.

Sources of Co- financing	Name of Co-financier	Type of Cofinancing	Amount (\$)
Recipient Government	SUBPESCA	In-kind	12,000,000
Recipient Government	MMA	In-kind	1,900,000
Recipient Government	IFOP	In-kind	12,527,000
Recipient Government	PRODUCE	In-kind	3,747,096
Recipient Government	MINAM	In-kind	92,819
Recipient Government	SERNANP	In-kind	600,000
Recipient Government	IMARPE	In-kind	28,315,275
Recipient Government	FONDEPES	In-kind	2,141,774
Beneficiaries	COPMAR	In-kind	600,000
Recipient Government	A COMER PESCADO	In-kind	935,938
Private Sector	SNP	In-kind	25,740,000
Private Sector	CIAM	In-kind	2,273,125
Other	NOAA	In-kind	160,000
GEF Agency	UNDP Chile	In-kind	356,000
GEF Agency	UNDP Perú	In-kind	250,000
Total Co-financing			91,639,027

D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS

			(in \$)				
GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	GEF Project Financing	Agency Fee a) (b) ²	Total (c)=a+b
UNDP	GEF TF	Chile and Peru	International Waters	(select as applicable)	8,000,000	760,000	8,760,000
Total Grant Resources			8,000,000	760,000	8,760,000		

a) Refer to the Fee Policy for GEF Partner Agencies

⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁵

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	89,602 hectares ⁶
Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	hectares
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	Number of freshwater basins
investments contributing to sustainable use and maintenance of ecosystem services	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	1.2% Percent of fisheries, by volume ⁷
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both direct and indirect)	metric tons
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	metric tons
concern	Reduction of 1000 tons of Mercury	metric tons
	Phase-out of 303.44 tons of ODP (HCFC)	ODP tons
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	Number of Countries:
policy, planning financial and legal frameworks	Functional environmental information systems are established to support decision-making in at least 10 countries	Number of Countries:

F. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? No

(If non-grant instruments are used, provide an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/CBIT Trust Fund) in Annex D.

PART II: PROJECT JUSTIFICATION

Update the applicable indicators provided at PIF stage. Progress in programming against these targets for the projects per the Corporate Results Framework in the GEF-6 Programming Directions, will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

⁶ MPAs (new and improved management) 15,463 ha. Integrated management in three bays 74,139 ha (Paracas, Bahía Independencia and Iquique).

 $^{^{7}}$ 1.2% (by volume) (shared peruvian anchovy stock as percentage of world total capture of marine fishes in 2015). Shared stock landings in 2015 = 765,700 t. Total world living marine resources capture in 2015 = 81,164,685 t.

^{0.9%} (by volume) (shared peruvian anchovy stock as percentage of world total capture in marine fishing areas in 2015). Shared stock landings in 2015 = 765,700 t. Total world capture of marine fish in 2015 = 65,933,898 t.

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF⁸

A.1. *Project Description*. Elaborate on: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area⁹ strategies, with a brief description of expected outcomes and components of the project, 4) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and co-financing; 5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

Changes in alignment with respect to the original PIF

- 1. There are no changes in the justification, aim, and the spirit of the project proposal presented in the PIF. However, during project preparation some of the means of intervention were revised. All adjustments remain in full accord with the priorities and commitments made under the ministerially adopted bi-national Strategic Action Programme
- 2. A participatory process was at the backbone of project preparation, this allowed to identify a range of views, perspectives and recommendations from project partners and key stakeholders. The process is explained in section "stakeholder engagement plan" of the PRODOC.
- 3. The main adjustments made are:
- 1. Target species were decided. Four groups were chosen to be the focus of project interventions:
- The shared anchoveta stock (i.e., southern Peru northern Chile).
- The jumbo flying squid (local common names jibia or pota).
- Coastal benthic resources, mainly chanque or loco (*Concholepas concholepas*) and sea urchins
- Macroalgae for the derivatives industry (mainly *Macrocystis integrifolia*, *Lessonia trabeculata* and *Lessonia nigrescens*) and for direct human consumption (e.g., *Durvillaea antarctica*).

In the case of anchoveta, jumbo squid, and macroalgae the aim is to improve ecosystem-based fisheries management and to incentive direct human consumption for nutritional and food security purposes.

- 2. Intervention sites were decided. The project will focus in the following areas:
- The bays of Iquique in Chile and Paracas in Peru, for interventions on integrated management of coastal-marine areas and environmental quality.
- The localities of Coquimbo, Puerto Aldea, Torres del Inca, and the stretch between Chañaral and Caldera in Chile, and the localities of San Juan de Marcona¹⁰ and Atico in Peru for productive diversification interventions.
- The protected areas of (i) Punta Morro desembocadura rio Copiapó Isla Grande de Atacama and (ii) Chipana (to be created) in Chile, and (i) Reserva Nacional San Fernando (RNSF), (ii) Punta San Juan and (iii) Punta Atico in Peru for biodiversity conservation and management of productive activities within protected areas.
- 3. <u>The number of outcomes and outputs was revised</u>. The PIF proposed five outcomes and 22 outputs, while the PRODOC includes six outcomes and 25 outputs.

Major changes were:

• For the PRODOC outputs of outcomes 1 to 5 were fine-tuned to be more precise. Some elements were mainstreamed into the proposed actions (e.g., fisheries surveillance and control, ecosystem-based fisheries management).

- In outcome 3, an output was included to develop a regional technical cooperation network in marine areas of significant importance for the conservation of the Humboldt current.
- A new output (i.e., output 6) was created to have a discrete project element which accommodates the knowledge management and communications.
- 4. The following table list the outcomes and outputs as indicated in the PIF and PRODOC:

Outcomes	PIF outputs	PRODOC outputs
1. The prioritized	1.1. Carry out an in-depth analysis of the state of	1.1 Agreed protocols in operation for
fishery resources	fish stocks of prioritized commercial fisheries.	simultaneous, sequential or joint assessments of

⁸ For questions A.1 – A.7 in Part II, if there are no changes since PIF, no need to respond, please enter "NA" after the respective question.

⁹ For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which <u>Aichi Target(s)</u> the project will directly contribute to achieving.

¹⁰ In San Juan de Marcona a "demonstration pilot programme" (called PPD Marcona) for sustainable use of coastal resources (e.g., macroalgae, octopus, sea urchins) is under implementation since 2005. This is a 2000 ha intertidal stretch that extends south of the Punta San Juan protected area.

Outcomes	PIF outputs	PRODOC outputs
have improved the existing management scenarios to contribute to their recovery and there are systems to ensure the maintenance at optimum population levels while sustaining a healthy and productive ecosystem considering climate change and El Niño Southern Oscillation scenarios.	1.2 Analysis of the impact of natural and anthropogenically-driven variation in the HCS ecosystem on principal fish stocks. 1.3 Characterization of the ecosystem's components in which fish resources and fisheries are included. 1.4 New and/or revised fisheries regulations which incorporate EBFM principles adopted for prioritized HCS fisheries. 1.5 Fisheries Monitoring Control and Surveillance (MCS) systems are improved including application of effective deterrence mechanisms (sanctions, etc.). 1.6 The EBFM approach is in place and its use at all levels is fully understood in terms of improved ecosystem goods and service delivery under a range of climate change scenarios. Emphasis will be given to the coordination of joint anchovy stock management among other key transzonal fisheries.	the shared stock and the anchoveta fisheries (Southern Peru - Northern Chile). 1.2 Document about the status of the anchoveta and its fishery, and future projections, in the context of environmental variability (Southern Peru - Northern Chile). 1.3 Document with a comparative analysis of regulations and management strategies for the anchoveta, and recommendations for coordinated actions, including illegal, unreported and unregulated fishing (IUU), discards, by-catch, capture controls, closed seasons and fishing quotas. 1.4 Programme for the biological study of the Jibia in Chile, in areas beyond the fishery, with emphasis on growth and renewal rates, to complement those studies carried out in the follow-up project. 1.5 Management and monitoring system of benthic resources harvested in Marcona and Atico. 1.6 Beached seaweed harvesting strategy for the Marcona district, and management plan for beached seaweed for the San Fernando National Reserve
2. Improved coastal and marine environmental quality through the application of integrated ecosystem management 11.	2.1 Establish a programme of coastal marine monitoring, to consider the main sources of contaminants into the HCLME 2.2 Develop National Action Plans to ensure that environmental quality aspects are maintained. 2.3 Waste treatment systems in the coastal zone have been improved (wastewater and non-point-source land based pollution financed by GEF funds; solid waste treatment financed by government funds). 2.4 Environmental inspection agencies at the local and central levels are strengthened to allow improved environmental quality objectives. 2.5. Coastal and Marine Spatial Planning (CMSP) is implemented in both countries as a management tool in selected areas, in order to improve the integrated management of space.	2.1 Integrated and coordinated monitoring programme of environmental quality in the Bahía de Paracas. 2.2 Plan to improve environmental quality targets for the Bahía de Iquique. 2.3 Public investment project for wastewater treatment and landfill in the Paracas district. 2.4 Coastal and marine spatial planning in the Bahía de Iquique to improve environmental quality. 2.5 Integrated coastal and marine zone management of the Pisco province (Paracas and Independencia bays).
3. There are systems to contribute to maintain and, if necessary, to recover biodiversity in the Humboldt current system.	3.1 The knowledge of habitats and biodiversity in selected areas has been increased and an integrated biodiversity monitoring and evaluation system has been designed and implemented. 3.2 The capacity to manage coastal and marine habitats within Multiple Use Marine Protected Areas as part of Coastal Marine Spatial Planning initiatives and the associated biodiversity at sustainable levels has been strengthened. 3.3 Strengthened and new management measures for the conservation of habitats and biodiversity in marine and coastal ecosystems are in place and operating.	3.1 Regional regulations for the management of productive activities in coastal and marine areas in the sector between the Reserva Nacional San Fernando and San Juan de Marcona (including Punta San Juan de Marcona and the Demonstration Pilot program) (Peru). 3.2 Marine protected area in Chispana (Chile) 3.3 Management plan for the AMCP-MU " Punta Morro - desembocadura rio Copiapó - Isla Grande de Atacama". 3.4 Technical cooperation network in marine areas of significant importance for the conservation of the Humboldt current.

 $^{^{\}rm 11}$ The ecosystem approach in coastal and marine areas consider the associated watersheds.

Outcomes	PIF outputs	PRODOC outputs
4. Fishing activities are diversified, and new production opportunities are created for fishers, organized in integrated organizations of civil society, inside and outside the fishing sector. 5. The general public	 4.1 Fisheries products with increased value addition are developed and marketed. 4.2 Commercialization channels of fisheries products improved. 4.3 Working capital mechanisms established and in operation. 4.4 Fisherfolk provided with diversified or alternative livelihood opportunities 5.1 The processing capacity throughout the 	4.1 Fishery products with increased added value that can be commercialized (using the prioritized resources) in a context of responsible fisheries in which traceability is demonstrated. 4.2 Programme for the diversification of production opportunities (with emphasis on tourism and gastronomy). 4.3 Programme for the diversification of production opportunities (with emphasis on culture and/or restocking of benthic species and macroalgae) (Chile) 5.1 Technical proposal to promote the
benefits from increased food security and food safety, thanks to improved management of ecosystems and fisheries, and betterquality controls of the catch.	production chain for marine produce destined for Direct Human Consumption is improved. 5.2 The quality of fisheries products for local consumption is improved by a series of post-harvest safeguards. 5.3 The availability and supply of quality fisheries and mariculture products to the populations of both countries is enhanced. 5.4 Public and industry awareness of food safety and food security aspects relating to marine products has been improved.	consumption of products made with hydrobiological resources (e.g., concentrates, hydrolysates) among vulnerable sectors of the population in Peru. 5.2 Training programme in food safety and quality of marine products for direct human consumption in the domestic market of each country (includes: improved production chain of marine based products for direct human consumption) (Chile and Peru) 5.3 Communication programme for consumers on food safety, food security and responsible consumption of products from the prioritized resources (anchoveta, jibia, chanque/loco, ostión and macroalgae). 5.4 Traceability system for direct human consumption products.
6. Lessons and good practices have been shared with key stakeholders in each country, between countries and globally [New]	Not included in PIF	 6.1. Digital platform to aid in communication among key stakeholders and for disseminating lessons and good practices. 6.2. Documented and disseminated lessons and good practices. Participation in IW:LEARN activities. 6.3 Gender perspective included in the project's management and actions.

4. <u>Project budget distribution was revised</u>. The PIF budget proposal gave the largest emphasis to outcome 1 (management of fishery resources). However, during project preparation, the project partners decided to give more emphasis to production diversification (outcome 4). This will allow to develop catalytic practical experience and learning on working with seafood value chains and sustainable livelihoods. This type of intervention aims to (i) potentiate domestic direct human consumption of key Humboldt resources -- like anchoveta, jibia/pota and macroalgae - to improve nutrition and food security, (ii) develop seafood value chains that are inclusive, sustainable and responsible, and (iii) open opportunities for alternative or supplemental income to fishers, their families and their communities.

It was also necessary to accommodate the project budget to include the new outcome 6 and therefore make obvious the investment in knowledge management and communications.

The changes in budget emphasis between the PIF and the PRODOC are summarised in the following table.

		Outcomes						
		1	2	3	4	5	6	Total
PRODOC	USD	1,522,404	1,149,577	606,280	2,521,410	859,904	959,473	7,619,048
PRODUC	%	20.0	15.1	8.0	33.1	11.3	12.6	

PIF	USD %	1,859,002 24.4	1,591,000 20.9	1,510,005 19.8	1,290,020 16.9	1,369,021 18.0	Not included	7,619,048
	Difference USD	-336,598	-441,423	-903,725	1,231,390	-509,117	959,473	

The global environmental problem

- The Humboldt Current large marine ecosystem (HCLME) has a "high" level of risk of deterioration, according to the overall risk index of large marine ecosystems (LME overall risk¹²) (IOC-UNESCO & UNEP, 2016). HCLME ranks 24 among the 64 large marine ecosystems of the world (1 highest level of risk, 64 the lowest level of risk). In the case of the HCLME, the level of risk in the components that make up the index is: (1) fishing = low, (2) pollution and economic health = medium, (3) socio-economics = medium and (4) index gap of human development = high (IOC-UNESCO & UNEP, 2016). Therefore, the highest risk component is the gap in human development.
- 6. Deterioration of the HCLME can have severe global impacts, considering that this is one of the main upwelling systems of the world which supports:
- 7. (a) Important fisheries like anchoveta and jumbo flying squid, which are, respectively, the largest monospecific fishery ¹³ and the largest squid fishery of the world ¹⁴; and
- 8. (b) Biodiversity of high conservation value. A total of 10,201 species have been recorded in this large marine ecosystem (Miloslavich et al., 2011). Several species are of high conservation value, such as (i) the five species of marine turtles, (ii) the pingüino de Humboldt ¹⁵ (*Spheniscus humboldti*), (iii) the potoyunco peruano ¹⁶ (*Pelecanoides garnotii*), (iv) the lobo fino ¹⁷ (*Arctocephalus australis*), (v) the nutria or chungungo ¹⁸ (*Lontra felina*), (vi) the Galapagos albatross ¹⁹ (*Phoebastria irrorata*) which only nests in the Española island of Galapagos and feeds in coasts of Peru, and (vii) the ballena jorobada ²⁰ (*Megaptera novaeangliae*) that migrates along the South American coast to breed in the warm waters between Costa Rica and Ecuador. There are also valuable coastal habitats like macroalgae meadows with serve as refugia and support areas for a range of invertebrates and fish. Macroalgae in the HCLME have a high level of endemism, about 22.7% of benthic algae recorded in the Chilean mainland are endemic.
- 9. The transboundary ecosystem diagnostic analysis (TDA) -- prepared with support of GEF project 3749 -- identified two priority problems of transzonal nature and one common problem (GdCh et al., 2015). The transzonal problems are: (i) non-optimal exploitation of fishery resources (PT1), and (ii) anthropogenic alteration of the marine habitat (PT2). The common problem corresponds to high incidental fishing ²¹ or accompanying fauna and discards (PC).
- 10. The TDA identified the impacts and root causes of each problem, these are summarised in tables 3 to 6 of the PRODOC.
- 11. In addition to the three problems mentioned above, there are key factors that exacerbate the situation, mainly:
- 12. [1] The growing global demand for seafood, from wild capture or aquaculture. In turn, this demand is caused by (i) the growth of the world population, (ii) the greater awareness of the population on the nutritional value and health benefits derived of the consumption of seafood (e.g, fish oil), and (ii) the increase in purchasing power in several countries of high seafood consumption. An additional element is that Chile and Peru have adopted

 $^{^{12}}$ Risk is broadly defined as the likelihood of adverse consequences for humans and the environment in relation to the changing states of transboundary waters. The scale of the indicator ranges from 0 = no risk to 1 = maximum risk.

The risk categories are based on cluster analysis or hierarchical grouping of 11 indicators, which were identified as the most influential on the analysed modules (i.e. productivity, resources and fisheries, pollution, ecosystem health, and governance to): (1) pelagic fishing of low bycatch, (2) proportion of collapsed and overexploited stocks, (3) subsidies that increase the fishing capacity as a fraction of the value of fishing, (4) proportion of the catch that comes from arts that impact the seabed, (5) demersal non-destructive fishing of low bycatch, (6) coastal eutrophication potential index, (7) density of plastic waste, (8) percentage of change in the surface of protected marine and coastal areas, (9) maritime traffic pressure, (10) percentage of rural population within 100 km of the coast, and (11) nightlight development index.

¹³ FAO reported that in 2014 and 2015 respectively, the anchoveta catch corresponded to 3.9% and 5.3% of the world marine capture (FAO, 2017),

¹⁴ FAO (2017) reported a total capture of ca., 1.1 million tonnes in 2014.

¹⁵ Classified as vulnerable in the UICN red list

¹⁶ Classified as endangered species in the UICN red list

¹⁷ Classified as vulnerable in the UICN red list

¹⁸ Classified as endangered species in the UICN red list

¹⁹ Classified as critically endangered in the UICN red list.

²⁰ Classified as least concern in the UICN red list

²¹ In Chile and Perú, the meaning of incidental fishing, accompanying fauna and discard is different

- national policies to increase the per capita consumption of seafood, to improve the health conditions of the population and/or combat malnutrition. The increased demand causes an increment in the prices²², which in turn promotes greater pressure on the fishery resources, which are mostly fully exploited (e.g., anchoveta, macroalgae) and induces illegal fishing.
- 13. [2] The intensification of the use of the coastal zone and the continental shelf, due to urban expansion and the development of productive activities such as aquaculture, tourism, hydrocarbon exploitation, and port operations. On the other hand, the competition for the use of the coastal-marine areas causes (i) conflicts between key stakeholders and (ii) pressure on natural spaces and native biodiversity.
- 14. [3] Climate change and variability: climate variability is intrinsic to the functioning of the HCLME, which recurrently experiences the changes related to the cold and warm phases of ENSO and the decadal oscillation of the Pacific. In addition, this has great impacts on biodiversity (e.g., changes in subtidal communities of macroalgae, migration and mortality of guano birds and the Humboldt penguin, which is endemic to Chile and Peru) and in human activities (e.g., floods and droughts). It is foreseen that climate change will increase both frequency and intensity of ENSO (Cai et al., 2014; Cai et al., 2015), which in turn will affect the distribution patterns of fishery resources. It has been identified that climate change could reduce the abundance of anchoveta and cause a displacement of the population towards northern Peru (Brochier et al., 2013; BID & CEPAL, 2014).

The baseline scenario, root causes and barriers

- 15. Despite the significant national progress of Chile and Peru, the situation of the HCLME has a high risk of deterioration, mainly due to the impacts of alterations of the marine habitat caused by pollution from various sources, as well as the modification and loss of habitats and marine-coastal biodiversity. Both countries have identified that climate change could cause severe impacts on marine and coastal biodiversity, as well as on the distribution and abundance of fishery resources.
- 16. To confront the risks faced by the HCLME requires coordinated action by a range of stakeholders from both countries, from local local user groups that utilise coastal resources to ministerial offices that negotiate and implement harmonised policies and actions. The baseline scenario has the following elements:
 - (a) There is strategic action programme which was adopted by both countries in 2016 and which establish the priority actions to advance towards ecosystem-based management of the HCLME. However, the SAP has not yet been made operative.
 - (b) There is strong interest from different stakeholders to have stronger coordination and collaboration for the management of shared resources. For example, the fishing industry strives to have coordinated actions for the management of key resources like the jumbo flying squid and the shared anchoveta stock.
 - (c) Both countries have started to implement binational cabinets as a mechanism to operationalise integration and collaboration in key matters. The first binational cabinet was held in Lima in July 2017, and the next will be in Chile in 2018.
- 17. The main barriers to implement the SAP and to address the three key problems of the HCLME are:

Barrier 1: Limited experience in binational coordination for management with an ecosystem approach

18. Both countries have a long history of scientific collaboration on topics of fisheries and biodiversity. For example, since 1992, IFOP and IMARPE have a cooperation agreement for pelagic fisheries (anchoveta and sardina). In addition, Chile and Peru collaborate in various common forums such as the South Pacific Regional Management Organisation (SPRFMO), the Agreement on the Conservation of Albatrosses and Petrels (ACAP), the Inter-American Convention for the Protection and Conservation of Sea Turtles (CIT) and the Permanent Commission for the South Pacific (CPPS). However, it is recent the need for binational collaboration in order to manage fishery resources or shared biodiversity of common interest with an ecosystem approach (e.g., shared stock of anchoveta).

²² The FAO fish price index shows a marked increase since 2002 (Tveterås et al., 2012). By 2017, the index is almost double than that in 1990 (see http://www.fao.org/in-action/globefish/fishery-information/resource-detail/en/c/338601/).

19. An important advance is that both countries are implementing an operational mechanism for integration through binational cabinets and related action plans. As part of the last meeting, a collaboration agreement was signed for the conservation of the national systems of coastal marine protected areas²³.

Barrier 2: Insufficient intersectoral coordination for the management of coastal and marine areas

- 20. Despite the existing experience in the management of coastal zones and coastal and marine protected areas, there are still difficulties in coordinating actions and reaching agreements. This is more accentuated in areas such as bays, where it is common that tension and conflicts arise between key stakeholders with diverging perspectives (e.g. tourism versus hydrocarbon exploitation).
- 21. It is difficult to agree on a common vision of sustainable use of coastal areas. For example:
 - In Iquique (Tarapaca region, Chile) there are tensions among various key local stakeholders by the confluence of diverse activities in the bays and coastal border. For instance, socioenvironmental conflicts²⁴ have been generated due to impacts derived from the installation and operation of coal- thermoelectric power plants (INDH, 2016). The communities of artisanal fishermen interested in the conservation of the coastal environment have expressed their concern by the possible impacts on environmental quality and biodiversity derived from fuel transportation, gas emission and the discharge of cooling water into the sea. There is also concern about the impact of the discharge of wastewaters through submarine outfalls.
 - In Paracas bay (Peru) there are strong tensions among the activities that interact in the area, such as port operation, nature tourism and the scallop fattening. Also, there are serious pollution problems caused by vessel operations and untreated wastewater and garbage discharges from the population. These issues affect the Paracas area and endangers biodiversity of high conservation value such as the Peruvian potoyunco and the Humboldt penguin. Several entities monitor parameters of environmental quality and biodiversity of the bay, but it is still a challenge sharing information and performing integrated analyses that can sustain management action with an ecosystem approach.

Barrier 3: Domestic consumption of priority fishery products does not take off

- 22. For Chile and Peru, it is essential to increase the per capita consumption of fishery products. Three species have been prioritized for their nutritional value and availability: jibia/pota, anchoveta and macroalgae. These species are important in the HCLME, and their use to nourish the population would be a valuable contribution to sustain food security.
- 23. Jibia/pota is the second export item of Chilean (after salmon) and Peruvian (after anchoveta) fishery products. Both countries produce a variety of processed products (e.g., breaded) that are shipped to a range of countries such as Spain, China, South Korea and Mexico. However, domestic consumption is very low, despite the existing promotion campaigns, consumers are not incorporating jibia/pota in their consumption habits.
- 24. Something similar occurs with anchoveta and macroalgae:
 - In Peru, despite the availability of a number anchoveta products (e.g., canned, hamburgers) together with a strong consumer promotion campaign by the "A Comer Pescado" programme, the domestic demand does not increase.
 - Both countries have traditionally consumed algae, but this consumption is marginal. In Chile, a range of products have been developed such as marmalades, cochayuyo (*Durvillaea antarctica*) and luche (*Pyropia* sp.) burgers, and enriched flour and biscuits. However, these products have only settled in the gourmet market.
- 25. The available information indicates that there are multiple factors that constraint the mass consumption of these species. These are related to the supply, quality of raw materials, regulations about the resource and their products, and consumption habits (Villena, 2013; Freón et al., 2014; Ibañez & Ulloa, 2014).

Barrier 4: Little experience in comprehensive interventions for diversification of livelihoods of coastal communities

26. Productive diversification of organized artisanal fishermen is part of the objectives of the SAP. In Chile and Peru, the fishery authorities have several support mechanisms to assist fishermen (e.g., competitive funds, training, credit) that are complemented with initiatives from other entities that support productive

²³ Inter-institutional agreement between the Ministry of the Environment of the Republic of Chile and the Ministry of the Environment of Peru for the development of actions of governance, management and conservation of the national systems of coastal marine protected areas. This was signed on 7 July 2017.

²⁴ The map of socioenvironmental conflicts is available at the following link: http://mapaconflictos.indh.cl/

entrepreneurship. For example, the Fund for the Promotion of Artisanal Fisheries (FFPA) and the resources from the Production Development Corporation (CORFO) of Chile, or the credits from the National Fund for Fisheries Development (FONDEPES) and the competitions of the Peruvian National Program for Innovation of Competitiveness and Productivity (Innóvate Perú).

- 27. However, the interventions of the fishery authorities mainly have a sectoral approach and do not incorporate the wider perspective of sustainable human development (UNDP, 1990; UNDP, 2011). Comprehensive development interventions require accompaniment and support for the development of community capitals²⁵. This includes, for example, the strengthening of organizations, collaborative networks and community identity (social capital), capacity building (human capital), and financing of productive initiatives (financial capital).
- 28. There are interesting experiences, whose exchange can contribute to develop more comprehensive interventions, For example:
 - In Chile, SERNAPESCA has a gender unity that prepares analyses and frequently generates a report on the activities of women and men in the fishing and aquaculture sector. In addition, SERNAPESCA monitors, among its institutional management indicators, the compliance with the government gender agenda.
 - In Peru, FONDEPES applies a gender approach in its credit and training actions. Part of its strategy is to recognize that women and families are key players for the development of the productive fishing activities and related businesses.
- 29. Some constraints of the current way of operation that should be mentioned are:
 - a. Fishermen have difficulties preparing proposals and completing the procedures to apply to competitive funds
 - b. The role of women and other family members in the development of productive enterprises is not given sufficient relevance.
 - c. Support to beneficiary groups is punctual (short-term), without considering that associative or family entrepreneurships require maturing time, during which, having accompaniment is a critical success factor.

Barrier 5: There are no consolidated mechanisms to ensure food safety and responsible consumption of fishery products sold in the domestic market

- 30. In both countries there are strong controls to ensure both food safety and traceability of fishery products for export. However, at domestic level the requirements and controls are laxer, and the competences are divided among several entities (e.g., municipal control in markets) that do not always adequately coordinate their actions. This facilitates the commercialization of products without adequate sanitary management, and cases of fish laundering and seafood fraud.
- 31. An additional factor is that the national markets do not demand traceability of fishery products and certifications that ensure sustainability and responsible fishing.

Barrier 6: The operating mechanisms of the SAP have not been enabled

32. The strategic action programme was signed in 2016, after which the key actors of both countries focused their efforts in finalizing the Humboldt project (GEF ID 3749) and in preparing the current project. The details have not yet been prepared to make operational the mechanisms for SAP implementation. For example, the internal rules of the binational Steering Committee have not been approved nor have annual operational plans been prepared.

Alternative scenario and project strategy

- 33. This project is aimed at catalysing the implementation of the SAP, which is the guiding tool to address the three key problems of the Humboldt current large marine ecosystem.
- 34. The strategy of the project to initiate the implementation of the SAP and to address the barriers that limit the solution of the global problems prioritized by the countries include the following elements:
 - a. To implement interventions that contribute to advance each of the SAP objectives, which cover a range of issues such as (i) to strengthen the management of fishery resources, (ii) to improve the environmental quality of the marine and coastal ecosystem, (iii) to improve conservation and management of biodiversity, (iv) to diversify the productive activities of fishers, and (v) to improve both food safety and food security.

²⁵ In reference to the five capitals of the sustainable livelihoods approach (Chambers & Conway, 1991).

- b. To implement practical experiences in prioritized fishery resources and specific sites to generate learnings that can be subsequently enhanced. A central element of the project will be to facilitate collaborative work among key public and private stakeholders of both countries. Four fishery resources were selected by the project partners to focus the project interventions: (i) anchoveta, (ii) jibia/pota, (iii) coastal benthic resources, and (iv) macroalgae. In addition, the following intervention sites were selected:
 - i. The bays of Iquique in Chile and Paracas in Peru, for interventions on integrated management of coastal-marine areas and environmental quality.
 - ii. The localities of Coquimbo, Puerto Aldea, Torres del Inca, and the stretch between Chañaral and Caldera in Chile, and the localities of San Juan de Marcona and Atico in Peru for productive diversification interventions.
 - iii. The protected areas of Punta Morro desembocadura rio Copiapó Isla Grande de Atacama and Chipana (to be created) in Chile, and Reserva Nacional San Fernando, Punta San Juan and Punta Atico in Peru for biodiversity conservation and management of productive activities within protected areas.
- c. To apply in practice the sustainable human development approach to facilitate opportunities for people, taking into account the interconnections between human systems and the natural systems of the planet.
- d. To apply a highly participatory and inclusive approach that promotes collaboration and multi-level dialogue among the public and private stakeholders of the project.
- e. To apply a gender approach and to implement practical measures to promote both participation and empowerment of women.
- f. To support mechanisms that make more efficient the communication and collaborative work among the project partners, including the use of modern online collaboration technologies.
- g. To systematically document, exchange and disseminate both experiences and lessons within each country and at international level.
- h. To encourage the development of operational mechanisms for the implementation of the SAP.

Project objectives and outcomes

- 35. The project objective is to facilitate ecosystem-based fisheries management (EBFM) and ecosystem restoration in the Humboldt current system for the sustainable and resilient delivery of goods and services from shared living marine resources, in accordance with the Strategic Action Programme (SAP) endorsed by Chile and Peru.
- 36. The project is organized into six components and a similar number of outcomes. The first five outcomes are directly related to the five objectives of the SAP. The sixth outcome is focused on knowledge management and project learning. In total, 25 outputs will be generated (see Table 8 of the PRODOC).
- 37. Outcome 1. The prioritized fishery resources have improved the existing management scenarios to contribute to their recovery and there are systems to ensure the maintenance at optimum population levels while sustaining a healthy and productive ecosystem considering climate change and El Niño Southern Oscillation scenarios.
- 38. To achieve this outcome, specific actions will be implemented in four fishery resources: (i) shared southern Peru northern Chile anchoveta stock, (ii) jibia/pota, (iii) coastal benthic resources (chanque/loco²⁶, erizo), and (iv) macroalgae. The main focus of this outcome is to contribute to a better management of fishery resources of the HCLME that are of interest for both countries.
- 39. The project will support collaborative work to develop, agree and implement protocols for the joint assessment of the **shared stock of anchoveta** (southern Peru northern Chile) (output 1.1). This will be a major effort to be implemented through binational public private workgroups. It is foreseen to have five workgroups: (i) direct stock assessment, (ii) fisheries oceanography, (iii) fisheries biology-reproduction-growth, (iv) bio-socioeconomy, and (v) indirect stock assessment. These groups will be coordinated and guided by a scientific technical coordination subcommittee²⁷, formed by technical level executives from IFOP and MARPE and with the participation of the private sector and academic entities. The development of agreed protocols will require intense in-person work and virtual collaboration during the first two years of the project. It is expected that the protocols are formally agreed by the end of year 2 or before the midterm review.

²⁶ Concholepas concholepas, called loco in Chile and chanque in Peru.

²⁷ This subcommittee Will be part of the Technical Committee of the project.

- 40. The protocols will be implemented through coordinated cruises for direct assessment and oceanography. These cruises will include industry vessels. Also, standardized methods will be agreed for joint assessment of the shared anchovy stock status through modelling (indirect methods). GEF resources will support, until year three, the development of the protocols and the preparation and implementation of the cruises and joint assessments through modelling. In the last two years of the project, these actions will be partially financed with national resources. It is expected that during the project there is at least one coordinated cruise per year, as well as four joint assessments.
- 41. The bio-socio-economy workgroup will advance in the construction of a bioeconomic model of the shared anchoveta fishery. During the second year of the project it is expected to advance in the conceptual model and to apply and have the standardized information required by the model. By the fourth year of the project it is expected to have the bioeconomic models that explain the economic-fishing dynamics of the shared anchoveta fishery.
- 42. Complementarily, the fisheries oceanography workgroup will focus on biophysical modelling of the sector in which the fishery develops. It is expected that a conceptual model and the standardized data required for the model will be available by mid-project, and to have, by the end of the project, bio-physical models that explain the environmental and biological dynamics of the anchoveta in at least two biological milestones: recruitment and spawning. GEF resources will support the development of biophysical models through training of personnel from the fisheries research institutes of each country, by gathering specialists and by facilitating exchange with international experts, these actions will be partially funded with national funds from the third year onwards.
- 43. Finally, the scientific-technical coordination subcommittee will lead two outputs: (i) a joint analysis of the status of the anchoveta fishery (output 1.2), and (ii) and a comparative analysis of regulations and management strategies (output 1.3). The joint analysis will include (i) a retrospective analysis about the environmental variation and the anthropogenic action on the pelagic ecosystem, and (ii) design and application of predictive ecosystem and bioeconomic models. The analysis of regulations and management strategies will be completed during the second year of the project. Both outputs will serve to provide recommendations to strengthen the coordinated management of the shared stock to fishery authorities and the industry. The project includes activities to facilitate dialogue among the fishery and environmental authorities to advance the coordinated management of shared resources.
- 44. For **jibia/pota**, the project will support the expansion of IFOP's research programme to gather information from the areas where the artisanal fleet does not operate and to investigate migration patterns. At the moment, Chilean fisheries for flying squid²⁸ operate in very coastal areas. There is very limited information about the capture of the Chinese overseas fleet that fish offshore in the southeastern Pacific ocean.
- 45. The project will support monitoring with onboard observers and annual squid-tagging campaigns. The fisheries-biology information will be used to strengthen the studies on growth, renewal rate and migration patterns. After year three, IFOP will maintain the expanded monitoring programme.
- 46. For **coastal benthic resources**, the project will support interventions in San Juan de Marcona and Atico districts in Peru to build on the existing advances and to generate lessons and learnings that can be used in the country and the region. The aim of the intervention will be to develop monitoring and management systems of coastal benthic resources in both localities through a collaborative effort of local fishers, regional governments (who have management competences on artisanal fisheries) and the national fisheries authority (PRODUCE).
- 47. First, participatory surveillance systems will be designed and implemented, building on the experience of Artisanal Fishing Surveillance Regional Committees (COREVIPA). The project will support updating the existing regulation to strengthen community-based monitoring and surveillance. It is expected that PRODUCE will process and issue the new regulation for the COREVIPAs.
- 48. Second, fisheries management regulations (abbreviated ROP in Peru) or benthic resource management plans for the two districts and the three related protected areas will be prepared in a participatory manner:
 - ROP or benthic resources management plan for the San Juan de Marcona district.
 - ROP or benthic resources management plan for the Atico district
 - ROP or benthic resources management plan for San Fernando National Reserve

²⁸ There is a 200,000 t/year quota. Of this, 80% is assigned to artisanal fishers and 20% to industrial vessels. The artisanal fishers capture the squids using manual jigging. Industrial vessels capture the squids with midwater trawl.

- Benthic resources management plan for Punta San Juan of the National Reserve System of Islands, Islets and Guaneras Points (RNSIIPG).
- Benthic resources management plan for Punta Atico of the RNSIIPG
- 49. For **macroalgae**, the project will contribute to advance the sound use of stranded algae building on the experience of the Artisanal Fisheries Community of Marcona (COPMAR) in the San Juan de Marcona district (Peru). The project will support participatory processes to:
 - Improve the monitoring and control systems of the harvesting of stranded algae;
 - Update and strengthen COPMAR's stranded seaweed management plan; and
 - Prepare the stranded seaweed management plan for the San Fernando National Reserve
- 50. In all cases, the project will facilitate communication, in-person and virtual meetings and exchange visits among relevant groups from both countries.

Outcome 2. Improved coastal and marine environmental quality through the application of integrated ecosystem management.

- 51. To achieve this outcome, experience and learning will be generated from interventions in Iquique bay (Chile) and Paracas bay (Peru). In both cases, the aim will be to improve environmental quality and collaborative management of the bay. The groups working on each bay will exchange experience, learnings and good practice to facilitate cross-fertilization.
- 52. In **Iquique bay**, a baseline diagnosis of the status of the environmental quality and biodiversity of the bay will be prepared. Based on the results, indicators will be established to monitor the environmental quality of the bay, pollutants and bioindicators, and a participatory process will be implemented to prepare an action plan to improve the environmental quality of the bay. It is foreseen that the plan will be formally adopted by the corresponding authorities who will assume its implementation. At the end of the fourth year, the project will sponsor a second diagnosis of the condition of the bay that will be used to assess progress and to foster reflection and analysis by key stakeholders. This experience will serve to elaborate a proposal of secondary environmental quality standard to be considered by the corresponding instances of the Ministry of the Environment.
- 53. In parallel to the preparation of the action plan, an exercise to explore marine spatial planning tools and methods will be implemented. This exercise will be supported by NOAA -- which will train the personnel and will provide mentoring during the entire process and guided by the Regional Commission for the Use of the Coastal Border of the Tarapaca Region. The plan is expected to be ready during the fourth year and will be presented to the formal entities that manage the uses of the coast and the adjacent sea for analysis and reflection. It is expected that this exercise will contribute to the development of regulations and institutions for the management of marine areas
- 54. In **Paracas bay**, the project will contribute to:
 - Establish an inter-institutional collaborative monitoring programme that harmonize protocols and facilitate joint analysis of the information and its public dissemination. It is expected that the protocol for the coordinated monitoring program of Paracas bay will be signed by the stakeholders during the second year of the project.
 - Prepare the feasibility studies and the design of wastewater treatment and final solid waste disposal systems for the city of Paracas. At the moment, the sewage system is collapsed, and garbage is disposed in an open dump, therefore polluting the coastal zone and the bay. The project will finance the preparation of a public investment project to obtain fiscal funds for the implementation of the sanitary works.
 - Implement an approximation exercise to calculate the ocean health index (OHI) in the Paracas National Reserve and its buffer zone. The OHI was adopted by the Multisectoral Commission of Environmental management of the Coastal Marine Environment (COMUMA) in 2015. Therefore, this experience will facilitate gaining experience for future use of the OHI.
 - Prepare the integrated marine-coastal zone management plan of the Pisco province (including Paracas and Independencia bays). This participatory process will include an exploration of marine spatial planning tools and methods, that will also be supported by NOAA.

Outcome 3. There are systems to contribute to maintain and, if necessary, to recover biodiversity in the Humboldt current system.

- 55. To achieve this outcome, experience and lessons will be generated on key elements that are currently challenging. The project will focus on
 - Developing regional regulations to manage productive activities in the stretch between RNSF and Punta San Juan, including PPD Marcona (Peru);
 - Creating a new marine protected area in Chipana (Chile);
 - Preparing a management plan for the Coastal Marine Protected Area of Multiple Uses (AMCP-MU) Punta Morro - desembocadura rio Copiapó - Isla Grande de Atacama (Chile); and
 - Developing a technical cooperation network in protected areas of the Humboldt current.
- In San Fernando National Reserve and Punta San Juan de Marcona (Peru), the project will support the development and implementation of regulations for sport fishing and coastal tourism. Both activities currently constitute key drivers of habitat alteration in coastal areas. Interventions will be implemented by close collaboration of Ica's Regional Government (GORE Ica), SERNANP, Vice Ministry of Fisheries and Aquaculture, General Directorate of Captaincies and Coastguards of Peru (DICAPI), MINAM, and local stakeholders.
- 57. At the moment, sport fishing is not regulated. Therefore, a situation analysis of sport fishing in the area will be prepared, followed by a proposal for regional regulations to be analysed and processed by GORE Ica (based on the PRODUCE's sectoral regulations). Once the regulation has been issued, the project will provide an extension officer to support the interested local fishers, so they can be trained and formalized in compliance with the regional regulation. This person will work in coordination with GORE Ica.
- 58. In addition, a proposal for a regional coastal tourism regulation will be prepared for analysis and processing by GORE Ica²⁹. Complementarily, the following elements will be prepared:
 - A diagnosis of potential visiting sites that could complement the already consolidated sites;
 - Technical criteria and environmental standards for tourism activities in marine and coastal protected areas (RNSF and Punta San Juan de Marcona of the RNSIIPG) and marine-coastal areas; and
 - Economic valuation of natural resources for artisanal fishing and coastal tourism (stretch between RNSF and PPD Marcona).
- 59. Chile has a large extent of marine protected areas, but coastal and marine protected areas are in general very small and face strong pressure from various sources. Therefore, the project will assist participatory multi-level processes to create a new protected area in Chipana and to consolidate the administration of the AMCP-MU Punta Morro desembocadura rio Copiapó Isla Grande de Atacama. It is foreseen that the lessons learned will contribute to (i) strengthen the management of existing coastal marine protected areas along the Chilean coast, and (ii) eventually to an increase in conservation sites.
- 60. In **Chipana**, the Ministry of Environment will lead a participatory process with local stakeholders (e.g. artisanal and industrial fishermen, tour operators, residents) to agree a protection scheme for the site. With GEF resources, a case file will be prepared to sustain the creation of the new protected area and its corresponding management plan. It is expected that Chipana's protected area will be created between the second and third year of the project. Afterwards, the protection of the area and the implementation of the management plan will be covered with co-financing resources.
- 61. The AMCP-MU Punta Morro desembocadura rio Copiapó Isla Grande de Atacama was created in 2005³⁰, but its management proved difficult to consolidate. It has taken a long and sustained effort to reach sufficient intersectoral and stakeholders support to establish a proper management scheme. The project will support (i) the analysis of the previous experience to identify key lessons and barriers to be considered in future situations, and (ii) a public private participatory process to prepare and agree on the management plan for the area. The plan will focus on (i) biodiversity monitoring, (ii) control and surveillance, and (iii) administrative and financial arrangements. It is foreseen that the management plan will be ready and approved during the second year of the project. Immediately, the project will provide a consultant to supply technical assistance and support to those responsible for the area to initiate implementation of the management plan. After this initial support, the management of the area should be sustained with national financial resources.

²⁹ i.e., Ica's Regional Directorate of Foreign Trade, Tourism and Handicrafts (DIRECTUR Ica).

³⁰ This protected area was created with the support of the project "conserving globally significant biodiversity along the Chilean coast" (GEF ID 1236).

- 62. During the first Chile Peru presidential meeting and binational cabinet held in Lima in July 2017, a collaboration agreement for the management of marine coastal protected areas³¹ was signed. The project will contribute to operationalize this agreement through the creation of a **technical cooperation network in marine areas of significant importance for the conservation of the Humboldt current**. It is foreseen that this network will expedite collaborative work on matters of common interest like conservation of guano birds, migratory seabirds, and coastal marine mammals, and the impact of climate variability and climate change on protected areas and key biodiversity areas.
- 63. The project will support the development of this network. GEF resources will be invested to organize binational meetings focused on:
 - exchange of experiences,
 - agree on criteria to prioritise sites 32 and conservation targets,
 - agree on a strategy for the development of the network, and finally,
 - formally establish the technical cooperation network.
- 64. In addition, the following aspects will be financed:
 - Complementary studies in each country to support prioritization of sites and the preparation of national strategies to implement the binational agreements.
 - Development and maintenance of a web portal of the binational network. Initially, this portal will be operated by the project team, but will be accessible through the MMA and SERNAP portals. At the end of the third year, the web portal will be transferred to the corresponding entities to be administered by them.

Outcome 4. Fishing activities are diversified, and new production opportunities are created for fishers, organized in integrated organizations of civil society, inside and outside the fishing sector.

- 65. To achieve this outcome the project work will focus on developing pilot experiences in:
 - development of non-traditional products for direct human consumption in the national markets (output 4.1), and
 - production diversification in the areas of tourism and gastronomy (output 4.2.) and cultivation/repopulation of coastal benthic resources and macroalgae (output 4.3).
- 66. It is expected that the long-term impact of the learnings from this outcome will be: (i) increased domestic consumption of sustainable nutritious products (e.g., anchoveta, algae, and jibia), and (ii) the development of sustainable value chains in domestic markets.
- 67. There will be three types of project interventions:
 - Experiences with non-traditional fishery products and sustainable value chains
 - Experiences in productive diversification based on gastronomy and tourism
 - Experiences in production diversification based on cultivation / repopulation of benthic resources and macroalgae
- 68. In support of these efforts, the project will facilitate (i) the systematic documentation of experience and lessons, (ii) the exchange of ideas and views among the range of stakeholders of both countries, and (iii) the analysis of experiences so as to stimulate cross-fertilization and foster networking and partnerships.
- 69. The **experiences with non-traditional fishery products and sustainable value chains** will focus on developing production experiences based on associative businesses of artisanal fishers or their families. Actions will be developed in six topics:
 - i.Exchange of experiences and incorporation of women in productive processes. At project start, public and private experiences on production of seafood products for direct human consumption (focus on anchoveta, jibia/pota, and macroalgae) will be documented and analysed in a series of meetings to have a common base that serves as a platform for the other interventions in outcomes 4 and 5. Complementarily, GEF resources will be invested to prepare a detailed cadastre of social and productive organizations in each project intervention site. The study will include (i) identification of barriers and opportunities for the incorporation of women in activities of value addition and productive diversification, (ii) training and technical assistance

³¹ This is an inter-institutional agreement between the Ministry of the Environment of the Republic of Chile and the Ministry of the Environment of the Republic of Peru for the development of actions of governance, management and conservation of the national systems of marine coastal protected areas. This agreement provides diverse forms of collaboration (e.g. exchange of information and experiences, implementation of joint activities) and establishes that a binational technical workgroup on marine coastal protected areas will be formed to develop annual work plans.

³² The criteria established in the IUCN global standard for the identification of key biodiversity areas will be used (UICN, 2016). These areas are sites that are significant for the global persistence of biodiversity in terrestrial, freshwater and marine ecosystems.

needs required by women, and (iii) a proposal of actions to support the integration of women. Based on the results, three sets of actions will be implemented to contribute to women participation and empowerment in production initiatives:

- Sensitization meetings with local actors (men and women) during the second and third year of the project.
- Training in organizational strengthening and leadership in support to organizations of women who
 participate in the interventions of the present outcome.
- Small donations to support the activities of value addition or productive diversification carried out by groups of women (formal or de facto).
- Exchange of experiences events in years 3 and 4. In each event, about 10 women will visit the other country to know the progress of the initiatives of value addition and production diversification and to exchange ideas in this regard.
- Anchoveta fishery products for direct human consumption. At the beginning of the project, a detailed analysis of the critical factors and barriers that limit both production and consumption of anchoveta products will be prepared in each country. These studies will include the situation analysis of sites that have been selected to undertake the production pilots. The project will support the development of two production pilot projects of production and commercialization of anchoveta products for direct human consumption. The pilot projects will be implemented by organizations of artisanal fishermen, associative companies or family groups. It is expected that these pilot projects will generate learnings about how to encourage this type of initiatives at a national level. In Chile, the pilot will be developed in the Tarapaca region and the products will be provided to the institutional markets (gendarmerie, armed forces and police). In Peru, the project will be implemented in Ica and the products will be oriented to the consumption of the Andes commonwealth³³. The project will support the groups that develop the production ventures with preparation of business plans, training and technical assistance, tutoring for the preparation of project proposals to secure funds from existing competitive sources, and minor in-kind donations. The existing promotion programmes (e.g., A Comer Pescado, Del Mar a mi Mesa) will implement campaigns to motivate consumption of anchoveta products. Based on the experience and learnings, training courses for production and commercialization of anchoveta products will be developed and programs to promote family or associative businesses will be designed. The project will accompany the start-up of these processes to be then maintained and expanded by local entities.
- iii. Jibia/pota fishery products for direct human consumption. A pilot to produce and commercialise jibia products for the domestic market will be implemented in Coquimbo, using results of ongoing FIPA projects³⁴. At project start a baseline analysis will be prepared to identify critical factors and barriers, market conditions and consumer preferences. Then a strategy will be designed and implemented to promote jibia value chains in the Coquimbo Region. Its implementation will be a joint effort of SUBPESCA and the Coquimbo Regional Government. The project will:
 - Provide technical assistance for two years (e.g., preparation of business plans, technical training), as well as accompaniment to family and associative businesses interested in forming value chains.
 - Support entrepreneurs in the preparation of proposals to various sources (e.g. CORFO, FFPA) to finance investments for the development of businesses.
 - Promote consumption of jibia products. For this, public private promotion campaigns and the corresponding promotion materials will be designed. Implementation of the campaigns will be done by the existing promotion programmes. In addition, the project will design and implement the initial promotion phase of jibia products through neighbourhood stores of Coquimbo in collaboration with the programme "Almacenes de Chile / Chile stores" ³⁵.

³³ This commonwealth integrates the regional governments of Apurímac, Ayacucho, Huancavelica, Ica and Junín. Within his commonwealth there are severe malnutrition problems and therefore, the supply of accessible food products of high nutritional quality is required.

³⁴ SUBPESCA has commissioned through FIPA projects the identification of products that might be appealing to Chilean consumers. The domestic consumption of jibia in Chile is marginal, the public is not familiar with this product and have certain resistance to characteristics like odour and texture.

³⁵ This government programme is aimed to enhance competitiveness and profitability of neighbourhood stores. The programme includes online training and a competitive fund with regional calls to finance business initiatives. Information about the program is available at www.almacenesdechile.cl. At the beginning of the project, collaboration mechanisms with this government program of the Ministry of Economy, Promotion and Tourism will be established.

- Document experiences and lessons and prepare and disseminate a manual on processing jibia for direct human consumption.
- iv. Sustainable value chains of coastal benthic products. The project will support the development of pilot projects for both promotion and development of sustainable supply chains and responsible consumption of benthic resources from Puerto Aldea and Torres del Inca in Chile, and from San Juan de Marcona and Atico in Peru. At project start the status of the existing value chains will be analysed. Based on the results, the project will prepare (i) public private campaigns to encourage responsible consumption of benthic resources and (ii) strategies to promote responsible value chains for each of the four selected localities. The project will support the initial implementation of the campaigns and strategies. Local groups will be supported with (i) training, (ii) preparation of business plans, (iii) feasibility studies and design of value aggregation units, and (iv) tutoring and advice to submit projects to competitive funds. The project will also support Puerto Aldea and Torres del Inca to install small-scale processing units and to legalise their land tenure³⁶.
- v. Macroalgae products for direct human consumption and supply to the derivatives industry. The project will support two types of interventions: (i) the implementation of pilot project to add value to the stranded algae which is sold for industrial purposes, and (ii) the development of products for direct human consumption. The areas of work will be the sector between Chañaral and Caldera (Atacama Region) and Puerto Aldea (Coquimbo Region) in Chile, and San Juan de Marcona and Atico in Peru. Project actions will construct upon the experience of selected groups³⁷ and the progress made in both countries by various organizations of the civil society³⁸, academy and public sector.

In Peru, the project will support local organizations of Marcona and Atico to prepare feasibility studies and business plans for basic macroalgae processing plants. There are simple facilities with basic infrastructure for loading, chopping, sorting, bagging and weighing macroalgae to be sold to the derivatives industry. Depending on the results of the feasibility studies, the project will assist the preparation of project proposals to secure funding from competitive funds and technical assistance during installation and initiation of operations.

In Chile, the project will contribute to:

- Explore the possibility of installing a plant to extract alginate from seaweed. At project start, an analysis will be prepared to assess (i) the situation of the alginate market, and (ii) the barriers and opportunities for the installation of an alginate plant in Chañaral based on associative administration of artisanal fishers' organizations. Depending on the results of the analysis, support will be provided to local fishers' organizations for the preparation of (i) feasibility studies, (ii) business plan, (iii) processing plant designs and layouts, and (iv) project proposals to secure funds from various competitive sources.
- Develop value chains for macroalgae products for direct human consumption. At project start, Chilean experiences will be documented and systematised. Best products will be selected and a strategy to promote value chains of the prioritized products will be prepared for Puerto Aldea and the entire Atacama region. The strategy is expected to be implemented with the support of GORE Atacama and the University of Atacama, which has experience in the development of seaweed products.}
 The project will support local groups that develop production initiatives with (i) technical assistance, training and accompaniment to the development of family or associative businesses, and (ii) preparation of project proposals to secure funding from available sources. In addition, an extension officer will provide direct support to ongoing initiatives for one year. The project will also support the design and initial implementation of a public private campaign to promote consumption of macroalgae products. It is foreseen that the campaign will be sustained and expanded by the existing promotion programmes.
- vi. Use of fish processing waste as fertilizer. A pilot will be implemented in Pisco (Peru), whose learnings will be shared by both countries. At project start, a feasibility analysis will be prepared and, based on the results,

³⁶ Puerto Aldea and Torres del Inca are settled on fiscal lands in which the land tenure has not been regularized. This limits the fact that these fishing communities can access competitive funds and public investment. In the first year, the project will support the preparation of a case file and actions to regularize the land tenure and infrastructure based on the 2017 Fishing Coves Law. The recognition as artisanal fishing coves will enable them to develop multiple activities such as processing of fish products, small-scale aquaculture, shops of fishery products and handicrafts, and tourism

³⁷ For example, a summary of the situation in San Juan de Marcona can be seen in: https://pnudperu.exposure.co/la-revolucion-de-las-algas

³⁸ For example, algae collectors of Navidad (Libertador General Bernardo O'Higgins Region) who commercialise cochayuyo and luche products. More information in: alguerosdenavidad.cl.

a technological package will be designed to produce ictiocompost by small local producers. The project will assist with the design of a training programme, the training of trainers from national entities (e.g., FONDEPES, DIREPRO Ica), and the initiation of the programme. In parallel, the project will support:

- The design and initial implementation of a campaign to promote production of ictiocompost, and
- Initial assistance to entrepreneurs to prepare business plans and initiate production.

DIREPRO Ica will sustain and expand the various elements of this initiative.

In year 4, Chilean fishermen will visit the experience in Pisco. Learnings will be documented and disseminated to serve other sites.

- 70. The **experiences in productive diversification based on gastronomy and tourism** will be implemented in San Juan de Marcona and Atico in Peru, and Torres del Inca and Puerto Aldea in Chile. The project will contribute to the development of production diversification exercises, building upon existing experience and motivations and using a sustainable livelihoods approach.
- 71. At project start, an analysis of options and feasibility of productive diversification will be prepared in the four localities. The analysis will be based on the sustainable livelihoods framework, and it will emphasize in the role of women in production and income generation. The results of the analyses will be examined with the local stakeholders of each population, local governments (municipalities and regional governments) and fishing authorities.
- 72. From the results of the analyses, a strategy for production diversification will be prepared through a participatory process. The strategy will incorporate a gender approach and will promote women's participation and strengthening of social capital. The project will support the initial implementation of these strategies and it is expected that the same communities and the local governments are responsible for medium and long-term implementation.
- 73. In Puerto Aldea and Torres del Inca, the project will support the implementation of the production diversification strategy by:
 - Preparing a tourism development programme for each locality and support small practical exercises like the implementation of a tourist route in Torres del Inca.
 - Providing technical assistance and practical training to entrepreneurs. Two extension officers (one on each locality) will work with local entrepreneurs for a year. Support will be supplemented with competitions that provide small in-kind prizes.
- 74. In Marcona and Atico the project will support the implementation of the production diversification strategy by:
 - Facilitating participatory processes to prepare management plans for coastal tourism and technical assistance for their implementation.
 - Designing and developing tourist products related to the macroalgae meadows and the use of stranded seaweed.
 Two extension officers will provide practical on-site support.
- 75. The experiences in production diversification based on cultivation / repopulation of benthic resources and macroalgae will be developed in Chile and the learnings will be disseminated in both countries. There will be interventions to promote cultivation of macroalgae in the sector between Chañaral and Caldera, and repopulation of sea urchins in Torres del Inca.
- 76. At project start, two analyses will be prepared:
 - A feasibility analysis of productive diversification in these localities. The analysis will be based on the sustainable livelihoods approach and will pay attention to the role of women in production activities.
 - A study about the aptitude of sites for macroalgae production in the sector between Chañaral and Caldera. This study will identify the algae that are produced and that could be produced for various uses (e.g., direct human consumption, derivatives), as well as the production potential.
- 77. Based on the results of these studies, the project will support:
 - A feasibility study for the installation of a hatchery for production of macroalgae seedlings in the area. Depending on feasibility, the project will sponsor the design of the hatchery, its management model and the business plan. Hatchery installation and operation will be covered with national funds.
 - The design and initial implementation of an artisanal fishing extension programme focused on promoting macroalgae production in the sector between Chañaral and Caldera. The project will support the extension programme by providing two experienced extension officers for one year, who will train local staff and assist in

- the development of extension materials and logistics. These people will work jointly with SUBPESCA personnel, who will be responsible of implementing the extension programme.
- The design and initial implementation of a training course on sea urchin culture. GEF resources will be invested to prepare materials and to facilitate theoretical and practical training to fishers' families in Torres del Incha. This will be complemented with technical assistance and tutoring by providing an extension officer for one year.
- 78. In all cases, the interventions will seek to enhance the participation of local women in production activities, and it is foreseen that SUBPESCA will provide mid-term support to the producers and will promote the learnings in other sectors.

Outcome 5. The general public benefits from increased food security and food safety, thanks to improved management of ecosystems and fisheries, and better-quality controls of the catch.

- 79. The long-term impact is expected to be that the fishery products sold in the domestic market are safe and that consumers demand safe products from responsible catch and supply.
- 80. To achieve this outcome, the project will assist: (i) the preparation of an action plan to promote the seafood consumption in vulnerable sectors of Peru, (ii) the design of a training programme on food safety, food security and safe management of fishery products for the actors of the supply chains, (iii) the design of an information programme to consumers on food safety, food security and responsible consumption of seafood, and (iv) the development of a traceability pilot of products for human consumption in each country.
- 81. To **promote seafood consumption in vulnerable sectors of Peru**, current experience and situation about the use of fishery products (mainly anchoveta and jibia/pota) for food security of the vulnerable population of Peru will be systematized. This information will be analysed in a public private event, and the results of the analysis will be used to prepare an action plan to promote the consumption of fishery resources in vulnerable sectors of the country. The process will be headed by the Vice ministry of Fishery and Aquaculture, in collaboration with the corresponding sectoral authorities. It is expected that this action plan will be formally approved at the end of the first year of the project and will serve as input for the productive diversification and value-added interventions (outcome 4).
- 82. Both countries have regulations and institutions to control food safety, which are very strict in the case of the fishery products for export. However, problems persist in the manipulation of products that are sold in the domestic market. To address this issue a **training programme for producers** will be designed and implemented. The project will support:
 - An analysis of food safety deficiencies along the supply chains of anchoveta, jibia/pota, benthic resources and macroalgae products for the domestic market. The analysis will identify knowledge gaps and training needs.
 - The design and initial implementation of a training programme on food safety of fishery products for the domestic market. GEF resources will finance the design of the training programme and its corresponding materials, the training of trainers and the implementation of a training pilot for one year. An extension officer in each country will provide follow-up, accompaniment and tutoring to the local groups that are trained.
- 83. Learnings will be used to:
 - Update the training program so it can be applied in other localities; and
 - Prepare a manual of good practices for handling of fishery products for the domestic market. The manual will be disseminated trough official entities and associates interested in the subject (e.g. fishing organizations, ONG).
- 84. A **communication programme for consumers** will be implemented to complement the ongoing efforts of the promotion programmes ("A Comer Pescado", "Del Mar a mi Mesa" and "Come pescado y súmate al kilo de salud por año"). The project will support:
 - An analysis to identify the concerns and information needs of the consumers of the value change of the prioritized resources (e.g. anchoveta, jibia/pota, coastal benthic resources and macroalgae).
 - The design of communication programme focused on (i) food safety, (ii) food security, and (iii) responsible consumption, as well as its corresponding communication materials. The programme will be prepared together with the existing promotion programmes on each country. The project will support the execution of the first campaign, afterwards the communication programme will be sustained and expanded by the promotion programmes and other partners that have interest in this subject.

- That fishing authorities of each country organise events to promote dialogue, coordination and networking among the public entities with competencies in application of sanitary regulations and quality control in the retail of fishery products (e.g., municipal control of seafood sale in markets).
- 85. There is limited **traceability of fishery products for the domestic market**. The project will sponsor a comparative analysis of experiences and institutional framework for traceability of seafood products for the domestic market. The results will be analysed with public and private stakeholders and will serve to design a prototype a traceability system for each country.
- 86. GEF funds will be invested to support a pilot implementation in each country. The results of the pilot experience will be analysed in formal national and binational meetings to identify common learnings and good practice. It is foreseen that this experience will contribute to strengthen the traceability systems of both countries.

Outcome 6. Lessons and good practices have been shared with key stakeholders in each country, between countries and globally.

- 87. To achieve this outcome, three lines of work will be developed:
 - Facilitate communications among key actors of the project and the dissemination of learnings.
 - Document and disseminate the project lessons.
 - Incorporate the gender perspective in the project management and actions.
- 88. To **facilitate communication**, at project start a detailed project communication strategy will be prepared. This strategy will be implemented through (i) annual joint workplans with project partners, (ii) agreed protocols and procedures for collaboration and joint actions, and (iii) the application of guidelines to mainstream a gender perspective and inclusive behaviour and language.
- 89. A workgroup will be formed with delegates of the communication teams of the project partners. This group will (i) channel news and communication materials to be disseminated through the channels and social networks of the project partners, and (ii) evaluate every year the achievements and performance of the project's communication strategy and it will make relevant adjustments.
- 90. There will be a project website -- linked to the portals of the project partners, UNDP and IW: LEARN and a quarterly digital bulletin with news and information. However, the priority will be that information flows through the partner channels and networks.
- 91. During year one, a communication gap and need analysis will be prepared. This will allow to identify the breach between the needs for communication and collaborative work among project partners and the means and communication technologies that are being used. The study will propose improvements in equipment and software, as well as modern collaboration tools for distributed teams (e.g., Trello, Podio, Slack, Docusign, Dochub) to cover the identified gaps. Based on the results of the study, GEF resources will be invested to provide equipment and software that facilitate both communication and virtual collaboration in partner and project offices.
- 92. To **document project lessons**, a member of the project team will establish the methods and procedures for the systematic documentation of project experience, good practice and learning.
- 93. Yearly meetings will be organised with key stakeholders and beneficiaries of each project output to reflect on and self-assess progress and lessons. A key element of these sessions will be to examine women's contributions and perspectives.
- 94. To support dissemination of advances and lessons, GEF resources will be invested to support participation in (i) meetings and international events related to the subject of the project, (ii) the annual large marine ecosystems meeting organised by IOC-UNESCO, and (iii) the international waters conferences of 2018, 2020 and 2022.
- 95. In year 4, seven documents (Experience Notes) will be prepared to summarise the project experience:
 - a. Coordinated management of the anchoveta stock:
 - b. Integrated management of Iquique and Paracas bays;
 - c. In situ conservation of marine and coastal biodiversity;
 - d. Promotion of direct human consumption of anchoveta, jibia and macroalgae;
 - e. Promotion of responsible value chains of benthic invertebrates:
 - f. Promotion of food safety and food security and:
 - g. Visibility and strengthening of the role of women in fisheries and complementary activities, including value aggregation and productive diversification.

- 96. These documents will have dissemination format to be accessible to a broad audience. Each document will have an executive summary in Spanish and English, and will be in high-quality PDF format to be downloaded from the Web.
- 97. For project closure, a memoir will be prepared in a simple and very graphic format. This document will be presented in a formal public event on each country, with broad participation of beneficiaries, key stakeholders and project partners. Key experiences and scientific advances will be presented in this event.

Contribution to GEF objectives, Aichi targets and Sustainable Development Goals

- 98. The project is in line with Sustainable Development Goal 14, and will directly contribute to targets 14.1, 14.4, 14.5 and 14b. It will contribute to objective 3 of the International Waters portfolio of GEF-6 (in particular outcomes 6.1 and 7.1) by fostering multi-state cooperation to advance towards ecosystem-based management of the Humboldt current large marine ecosystem.
- 99. The project will focus on mobilising multi-level action, dialogue and networking to initiate the implementation of the strategic action programme agreed by Chile and Peru in 2016. The core of the project is to support multi-stakeholder implementation of actions of every component of the SAP through an action learning approach.
- 100. With respect to outcome 6.1, the project will contribute to improve conservation of coastal zones. It will facilitate the development and adoption of (i) Pisco province ICZM plan in Peru (ca., 94 km of coastline), (ii) integrated management plans for three important bays in Paracas (57,500 ha) and Bahía Independencia (15,645 ha) in Peru and Iquique (994 ha) in Chile, and (iii) the establishment of a new coastal marine protected area in Chipana (ca., 11,469 ha) and the preparation and adoption of the management plan for the Punta Morro desembocadura rio Copiapó Isla Grande de Atacama MPU-MPA (3,994 ha)(both in Chile).
- 101. A main action to highlight is the establishment of a technical cooperation network in prioritized marine areas for the conservation of the Humboldt current. This binational network will motivate coordinated action on agreed conservation targets.
- 102. With respect to outcome 7.1, the project will support collaborative work to strengthen fisheries administration and the sound use of fishery resources. It is important to highlight:
 - The major effort that will be required to develop, agree and implement common protocols for the joint assessment of the shared stock of anchoveta (southern Peru northern Chile). The stock is not in good condition and there is an urgent need for coordinated management measures. The project will contribute to improve management of about 0.7×10^6 t/year of anchoveta landings.
 - ii. The project will implement pilots to develop value chains of anchoveta, jibia/pota and macroalgae products for domestic direct human consumption. This will contribute to (a) a better use of the existing catch, (b) make accessible to the population affordable and nutritious seafood products, and (c) diversify production alternatives for fishers and coastal families and communities.

Incremental/ additional cost reasoning and global environmental benefits

- 103. The baseline situation is that the Humboldt current large marine ecosystem has a high level of risk of deterioration. There has been important progress to identify common problems and to plan coordinated actions between Chile and Peru. However, the agreed Strategic Action Programme has not yet been operative. Current national efforts have proven to be insufficient to address common issues like the management of the anchoveta shared stock, the conservation of key biodiversity like the Humboldt penguin or the seaweed meadows, or the pollution of bays.
- 104. In addition, the implementation of the SAP face important barriers. One of them is the need to mobilise comprehensive interventions with multiple and diverse stakeholders. This is a major challenge that requires multi-level and cross-sectoral dialogue and action.
- 105. GEF resources will be crucial to support a major endeavour to put in practice collaborative work among a range of stakeholders of both countries that is aimed at implementing the SAP. The project is centred on an action learning approach to motivate self-reflection, cross-fertilization and networking. The GEF investment will facilitate the initial implementation of the SAP as the common framework to address key matters of common interest among diverse groups of both countries. In the end, the overall global benefit will be to foster ecosystem-based management in the 261.9 million hectares of this large marine ecosystem.
- 106. The project will build upon a range of existing experience and ongoing initiatives from various private and public sources. For example, the seafood consumption programmes (e.g., A Comer Pescado), various

competitive funds (e.g., FFPA, FAP, FONDEPES, PNIPA) and research programmes (e.g., IMARPE, IFOP, CIAM). The project will establish synergies with a number of initiatives like GEF projects 4505, 6955, and 9060, and projects from other sources like the Adaptation Fund's project "adaptation to the impacts of climate change on Peru's coastal marine ecosystem and fisheries", KfW's PAN III project, GIZ's EbAMar project, and the Walton Family Foundation seafood markets strategy in Chile and Peru. The project will contribute to value an integrated comprehensive perspective that link a large marine ecosystem with daily livelihoods, and motivate investments into monitoring, study and management.

- 107. The GEF investment will generate lessons that will be useful for both countries and for other regions of the world. In terms of fishery resources, it is expected to directly improve the management and sustainable use of anchoveta, jibia/pota, coastal benthic resources and macroalgae. In volume, the work with the shared anchoveta stock will contribute to improve sustainability of about 0.9% of the total world marine capture (1.2% of the total world marine fishes capture). The other resources are not large in volume, but have great social value. Also the project will contribute to motivate responsible domestic direct human consumption of these species and therefore will add to food security.
- 108. In addition, the project will contribute to improve conservation of about 89,602 ha of valuable coastal areas. Including points and islands that sustain colonies of guano birds and associated biodiversity like the Humboldt penguin (*Spheniscus humboldti*) and the potoyunco peruano (*Pelecanoides garnotii*), both endemic to the area.
- 109. Finally, an important contribution of the project is the direct inclusion of gender sensitive actions in all interventions. The project is based on a participatory and inclusive approach and will generate important lessons that will be useful worldwide.

Innovativeness, sustainability and potential for scaling up.

- 110. The main innovations from the present project are:
 - Comprehensive interventions that link high level actions with daily chores. This is a major task, because visions and perspectives tend to be sectoral and focused in a few elements of the scenario. For example, for local fishers and coastal communities, their pressing needs, and interests (e.g., income generation) have no apparent link with the conservation of vast ocean areas. Therefore, the project will use diverse participatory tools to bridge the gap between local action and global conservation efforts. It is envisioned that inclusive dialogue, networking, and a learning approach will facilitate the comprehension of the linkages between the multiple levels of natural and human systems.
 - Identify barriers for production and domestic consumption of anchoveta, jibia/pota and macroalgae products. The domestic use of these nutritious and affordable species has not taken off in Chile and Peru, despite important private and public efforts. During project preparation it became obvious that there are multiple factors that constraint the development of value chains and the mass consumption of these species. The project will support in-depth analyses and pilots to produce and commercialise products for direct human consumption. The lessons from these experiences will provide new insights about developing products for food security.
 - Use of fish processing waste for fertiliser. The project will explore composting fish waste and caulerpa macroalgae (an invasive species) as a low-investment activity to produce fertiliser suitable for organic agriculture. This activity could (i) provide alternative or supplementary income to fisher families or coastal communities, (ii) contribute to reduce pollution from organic waste, and (iii) generate a nutrient-rich fertiliser for organic agriculture production.
 - Macroalgae culture by small producers. Chile established in 2016 an incentive to promote macroalgae repopulation and cultivation. This new approach is expected to drive production by local fishers and coastal communities. The project will support this process in a pilot site (between Chañaral and Caldera) promoting a sustainable livelihoods approach and the involvement of women in production activities. In addition, the project will contribute to set-up a fisheries extension programme, which will be a completely new endeavour for the Chilean fisheries authority.
- 111. The key elements of project sustainability are:
 - Environmental sustainability. The project aims to advance ecosystem-based management in the Humboldt current large marine ecosystem by integrating multiple stakeholders into collaborative action within the scope of the SAP. Also, the role of climate variability and climate change will be considered in all interventions. All

- actions will be in line with the various pertinent national policies, strategies and plans (e.g., biodiversity, adaptation to climate change).
- Social sustainability. The project includes a participatory and inclusive approach and emphasises the involvement of key stakeholders in hands-on practical action learning. This will facilitate multi-level networking, dialogue, collaboration and, therefore, the construction of social capital. A key element will be that stakeholders collaborate to address common problems and develop relationships based on trust. In addition, the project will promote pairing local entrepreneurs with entities that can give them support, making then more likely to succeed.
- Institutional sustainability. The project is founded in the SAP, which is the binational instrument that outlines the common objectives for the management of the HCLME. In addition, the countries are developing binational ministerial cabinets in which action plans are established on issues of common interest. This is a valuable mechanism that provides political and institutional basis for joint management. During the implementation of the present initiative, project partners will be encouraged to include the management of the HCLME within the agenda of the presidential meetings and the corresponding binational action plans. 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.
- <u>Financial sustainability</u>. GEF resources will be used to fund strategic actions that will be later sustained with national funds. The post-project sustainability of actions is ensured by integration into the institutional budgets of several stakeholders such as fishing and environmental authorities, research institutes, local governments and civil society organisations.
- 112. There is high probability of replicating and scaling-up the lessons and best practice from the project. GEF resources have been strategically assigned to activities with high potential to catalyse lessons. For this purpose, both experience and lessons will be systematically documented and disseminated through (i) the project website, (ii) the portals and channels of the project partners, and (iii) the IW: LEARN platform.
- 113. Some of the elements with high replication potential are:
 - a. The experience of agreeing protocols for the coordinated assessment of the anchoveta shared stock. This very relevant to the international agenda, and it is very likely that will be useful to other countries of the world that deal with reduction fisheries.
 - b. Positive and negative lessons in the development of value chains of products for direct human consumption of anchoveta, pota/jibia, and macroalgae for the domestic market. These lessons will be useful at the national level in both countries and can help other countries. There is a large worldwide interest in the use for direct human consumption of non-traditional species (e.g., pota/jibia, macroalgae) as well as species from reduction fisheries (Kılınc et al., 2013; Lange et al., 2015; Cashion et al., 2017).
 - c. Lessons in the use of a comprehensive approach for the promotion of production diversification in coastal communities.
 - d. Experience in integrated management of bays and the use of integrated coastal management tools and marine and coastal spatial planning

A.2. Child Project?	If this is a child project	under a program,	describe how the	components	contribute to th	e overall
program impact.						

This is not a child project.

114. A participatory process was used for project preparation. An initial mapping of key stakeholders was prepared and used to organise national start-up workshops on each country. In these workshops the project concept was presented, and the ideas and proposals of public and private actors were known. In these meetings it was also requested to analyse the initial ideas about fisheries and focus sites for the project. Later, the selected

³⁹ As per the GEF-6 Corporate Results Framework in the GEF Programming Directions and GEF-6 Gender Core Indicators in the Gender Equality Action Plan, provide information on these specific indicators on stakeholders (including civil society organization and indigenous peoples) and gender.

intervention sites were visited to contact local actors and to analyse the viability of the proposed interventions. Additionally, key stakeholders (e.g., sectoral authorities, private companies, NGOs, international cooperation) were interviewed to evaluate their interest in being involved in the project and to collect proposals and recommendations. The draft results framework and workplan were analysed with key stakeholders in validations workshops. In these meetings the interest of participation of the different groups and their roles and responsibilities were confirmed.

- 115. The project incorporates a participatory and inclusive approach. A person of the project team (i.e., participation, communication and gender specialist) will be responsible for guiding stakeholder engagement, multi-level dialogue, and action learning processes. At project start, this person will prepare a detailed communication strategy that will be operationalised through annual work plans. This person will also organise annual meetings for reflection and self-assessment with key stakeholders and beneficiaries of each project output.
- 116. The project key stakeholders and beneficiaries are listed in Annex 11 of the PRODOC. Stakeholders include fishers, coastal communities and users of coastal resources, members of seafood value chains, civil society organizations, sectoral authorities, and local governments (e.g., municipalities, provincial governments, regional governments). There are no indigenous groups related to the intervention actions and focus sites.
- 117. A gender analysis was prepared, including an analysis of the conditions at each intervention site. Three key barriers to women's participation and engagement were identified:
 - Barrier 1: There is little information on women participation in (i) activities related and complementary to those of extraction of fishery resources, and (ii) other production activities in coastal communities, as well as their training and advising needs. This barrier is common to all intervention sites.
 - Barrier 2: The role of women in the fishery sector is not fully recognized and accepted, both by a gender perspective (focused on the role of men) and a vision of the role itself (focused on extraction), though there is an increasing recognition of their role. This barrier is common in all sites, but more accentuated in Atico.
 - Barrier 3: Domestic responsibilities and care for others are an important part of women's workload and it can limit their participation in several activities (e.g., meetings, production) if the initiatives to be implemented do not consider this factor or are not suited to it. This barrier is common to all intervention sites.
- 118. A gender action plan was prepared (Annex 13 of the PRODOC) and gender actions were mainstreamed into the project results framework, multiyear work plan and budget. The project incorporates general and specific actions to address the three barriers previously mentioned. The monitoring plan (Annex 2 of the PRODOC) requires, when applicable, sex-disaggregated information and includes three gender-specific indicators:
 - Indicator 16. Number of production diversification initiatives, led by women
 - Indicator 17. Number of production diversification initiatives where women are involved (either leading or not).
 - Indicator 18. Women's perception about their participation in accessing resources and decision-making in production diversification initiatives.
- 119. A person of the project team (i.e., participation, communication and gender specialist) will guide and coordinate the implementation of the gender action plan.
- 120. Annex 11 presents sex-disaggregated information about the beneficiaries of each project output. In general, the project will benefit about 290,004 persons (49.3% women and 50.7% men). The number of beneficiaries per country is:
 - Chile, 200,983 beneficiaries, 98,520 women and 102,463 men.
 - Peru, 89,021 beneficiaries, 44,579 women and 44,442 men.

_

⁴⁰ Same as footnote 8 above.

A.5 Risk. 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):

Des	cription	Type ⁴¹	Impact and probability ⁴²	Mitigation measures	Responsible	Status ⁴³
1.	Change of central government in Chile in 2018 (before the beginning of the project) and 2022 (before the closure of the project)	Political	P = 5 I = 3	Presentation of the project to the new authorities in SUBPESCA, SERNAPESCA, MMA, MINREL and IFOP	UNDP Chile	Without change
2.	Change of central government in Peru in 2021 (before the closure of the project)	Political	P = 5 I = 3	Presentation of the project to the new authorities in the Vice Ministry of Fisheries and Aquaculture, MINAM and MRE	UNDP Peru	Without change
3.	Changes of municipal and regional governments in Peru in 2019 (at project start) and 2023 (before the closure of the project)	Political	P = 5 I = 3	To present of the project to the new regional and municipal authorities	UNDP Peru	Without change
4.	Direct election of regional governors in Chile ⁴⁴	Political	P = 5 I = 5	Analysis of the possible impacts in the implementation of the project. To present the project to the new authorities when appropriate	UNDP Chile	Without change
5.	Difficulty in agreeing methodologies and protocols for the assessment of the shared anchoveta 45.	Operational	P = 5 I = 5	To prepare and implement a facilitation process to enable agreements between the corresponding staff of IFOP and IMARPE. To ensure the political direction of SUBPESCA and the Vice Ministry of Fisheries and Aquaculture to motivate the achievement of agreements.	CBP UNDP Chile UNDP Peru	Without change
6.	Resistance to coordinate methods and actions, and to share data among the	Operational	P = 3 I = 3	To prepare and implement a facilitation process to ensure agreements and interinstitutional collaboration. To motivate the political	Biodiversity specialist	Without change

⁴¹ Environmental, Financial, Operational, Organizational, Political, Regulatory, Strategic, Others

 $^{^{42}}$ 1 = low, 5 = high.

⁴³ Finished, reducing, increasing, without change.

⁴⁴ In December 2016 the Law 20,990 was issued, which allows the direct election of the regional governor, who will replace the present figure of the regional mayor who is appointed by the president of the Republic. This is a major change in the governance mechanism of the regions. It is very likely that the first election of regional governors will occur right before or during the implementation of the project. Since 2014, the regional counsellors are elected by direct vote, for a four-years period. In November 2017, new elections were held, the counsellors will take office in March 2019 and they will be in functions until March 2022.

⁴⁵ During the PPG it was observed that methods and perspectives are very different in both countries. It is very probable that the process of agreeing protocols and methods will be very complex. It will be important to count on a strong political support of the fisheries authorities and a strong facilitation of the participatory process to reach agreements.

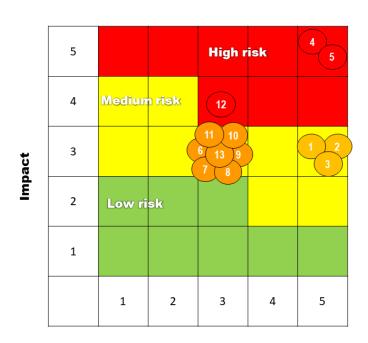
Description	Type ⁴¹	Impact and probability ⁴²	Mitigation measures	Responsible	Status ⁴³
entities that monitor environmental parameters in the bays of Iquique and Paracas			direction of the corresponding authorities		
7. Resistance of key stakeholders to ordering the use of resources and areas in Iquique and Paracas bays	Social	P = 3 I = 3	To design and implement a communication strategy that sensitizes the actors and motivates multi-level dialogue. To have clear messages To provide information and facts To prepare and implement a participatory planning process and multi-level dialogue To establish a mechanism for conflict resolution	Biodiversity specialist	Without change
8. Resistance of key stakeholders to the creation of new protected areas or in situ conservation areas for biodiversity	Social	P = 3 I = 3	To ensure the political support of key entities To design and implement a communication strategy that sensitizes the actors and motivates multi-level dialogue To have clear messages. To provide information and facts.	Biodiversity specialist	Without change
9. Difficulties and discouragement of the groups that develop the initiatives of production diversification ⁴⁶ .	Social	P = 3 I = 3	To select rigorously the groups with which the entrepreneurships will be developed and ensuring they have the appropriate conditions. To link each group with a local entity that provides medium or long-term accompaniment	Specialist in production diversification	Without change
10. Limitations to women participation and involvement ⁴⁷	Cultural	P = 3 I = 3	To implement proactive measures to motivate the involvement of women (gender action plan)	Specialist in participation, communication and gender	Without change
11. Discouragement of women who develop initiatives to add value and productive diversification due to incompatibility with domestic tasks and family care.	Social	P = 3 I = 3	To ensure conditions that allow women to complement their domestic tasks and family care with activities of value aggregation and productive diversification	Specialist in participation, communication and gender	Without change
12. Effect of ENSO and the interdecadal	Environmental	P = 3 I = 4	To monitor information and alerts from meteorological entities, NOAA and World	СВР	Without change

⁴⁶ The associative productive entrepreneurships normally face diverse challenges that motivate discouragements and even abandonment of the entrepreneurship (e.g. problems of internal organization, technical assistance or marketing). These entrepreneurships require medium or long-term accompaniment (no replacement of the social subject or noternalism) to mature

social subject or paternalism) to mature.

47 During PPG, two key issues were identified: (i) the role of women in seafood value chains is not apparent, and (ii) their limited participation in the OSCs of the fishing sector. Traditionally, the fishing sector is a male space, where the advances in the recognition of women and their involvement in organizations and decision-making processes have been slow. Added to this is that women have domestic responsibilities and care for other members of the family and that men restrict the participation of women of their family to these spaces.

Description	Type ⁴¹	Impact and probability ⁴²	Mitigation measures	Responsible	Status ⁴³
Pacific oscillation on fishery resources and HCLME ⁴⁸			Meteorological Organization		
13. Climate change	Environmental	P = 3 I = 3	To monitor information and to incorporate adaptation to climate change into project activities	СВР	Without change



Probability

Magnitude of the identified risks

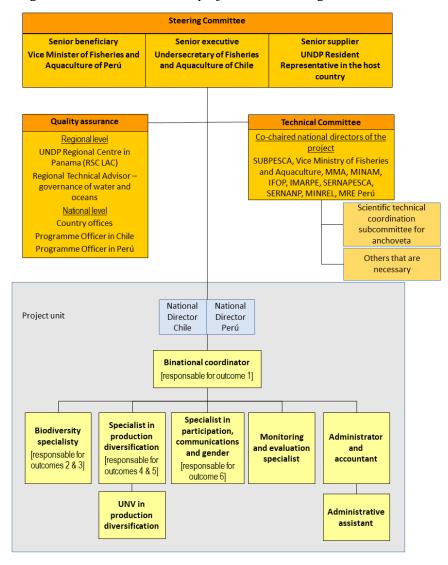
A.6. Institutional Arrangement and Coordination. Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

121. The project will be implemented under UNDP's National Implementation Modality (NIM), according to the standard basic assistance agreement between UNDP and the governments of Chile and Peru and the country programme action plan⁴⁹ (CPAP). The GEF implementing agency will be UNDP and the lead office will be UNDP Chile. The lead office will supervise the entire project and will directly administer the binational and Chilean financial resources. The UNDP office in Peru will collaborate in the implementation of the project by administrating the Peruvian financial resources of the project.

⁴⁸ By November 9, 2017 there were conditions for a weak La Niña, with a forecast that continues until the southern summer. It is probable that during the implementation of the project another ENSO event will occur. It is also probable that the interdecadal Pacific oscillation (IPO) changes to a warm phase in the coming years. Again, this will have a direct impact on the availability of fishery resources.

⁴⁹ Chile's CPAP is being updated. The document of the country program 2015-2018 is available at the following link: http://www.latinamerica.undp.org/content/dam/rblac/docs/Country%20Programme%20Documents/CHL_CPD%202015%202018_ENG.pdf
The country program 2017-2021 of Peru is available at the following link: http://www.pe.undp.org/content/peru/es/home/library/democratic_governance/documento-programa-pais-2017-20210.html

- 122. The executing agencies of this project are the Undersecretariat of Fishery and Aquaculture in Chile (SUBPESCA) and the Vice Ministry of Fisheries and Aquaculture in Peru. The executing agency will be responsible and accountable for the implementation of the project, including monitoring and evaluation of the project interventions, achieving project outcomes and for the effective use of the GEF resources. The executing agency in Chile, in coordination with the implementing agency will be in charge of organizing and coordinating the activities of project initiation (inception workshop) and closure (administrative closure and final report). In addition, it will coordinate the midterm review and the terminal evaluation of the project.
- 123. The project partners in Chile are SUBPESCA, the Ministry of the Environment (MMA), the National Service of Fisheries and Aquaculture (SERNAPESCA), and the Fisheries Development Institute (IFOP). The project partners in Peru are the Vice Ministry of Fisheries and Aquaculture, the Ministry of Environment (MINAM), the National Services of Natural Areas Protected by the State (SERNANP), and the Institute of the Sea of Peru (IMARPE).
- 124. The organizational structure of the project has a Steering Committee, a Technical Committee and a project unit.



Note

- Binational coordinator, monitoring and evaluation specialist, specialist in production diversification, and administrator
 and accountant in the main office in the host country.
- Biodiversity specialist, UNV in production diversification, specialist in participation, communications and gender, and administrative assistant in the satellite office in the other country.

- 125. The **Steering Committee** (also called **Project Board**) is responsible for making by consensus, management decisions when guidance is required by the project manager (here called binational 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. In case a consensus cannot be reached within the Board, final decision shall rest with the UNDP Programme Manager.
- 126. The Steering Committee is formed by the following people: Undersecretary of Fisheries and Aquaculture of Chile, Vice Minister of Fisheries and Aquaculture of Peru and the UNDP Resident Representative in Chile or their officially nominated alternate representatives. In addition, the national directors of the project and the GEF focal points of each country will participate as observers. The UNDP Regional Technical Advisor in governance of waters and oceans will participate in the meetings as part of its quality assurance role to provide advice and guidance. The binational coordinator of the project will act as secretary of the committee, but without vote. In its first meeting, the Steering Committee will agree its operating procedures.
- 127. The **Technical Committee** is an inter-institutional binational coordination space. Its main role is to provide technical guidance to the binational coordinator and the project unit in support to the achievement of the project outcomes. In addition, this entity reviews and pre-approves the work plans and annual budgets before they are submitted for consideration of the Steering Committee.
- 128. The technical committee will be formed by formally designed delegates from SUBPESCA, the Vice Ministry of Fisheries and Aquaculture of Peru, MMA, MINAM, SERNAPESCA, SERNANP, IFOP, IMARPE, the Ministry of Foreign Affairs of Chile, the Ministry of Foreign Affairs of Peru and the GEF operational focal points in each country. Where appropriate, the programme officers or other UNDP specialists will participate. The members will decide on inviting other entities that consider relevant. The committee will be co-chaired by the national directors of the project in Chile and Peru. In its first meeting, the Technical Committee will agree its operating procedures.
- 129. The **National Directors** of the project will be government officials formally designed by SUBPESCA in Chile and the Vice Ministry of Fisheries and Aquaculture in Peru. These people will be responsible for the execution of the project according to what is established in the PRODOC and the approved work plans. The national directors will supervise the implementation of the national actions of the project and establish guiding and coordination actions with the binational coordinator, facilitate coordination and cooperation with the various relevant national entities, participate (when necessary) in the processes of recruitment / acquisition of staff, goods and services for the project, and is the person who authorizes the expenditure to be executed.
- 130. The **project unit** is headed by the binational coordinator (also called project manager) and includes eight people⁵⁰. The national directors are considered members of the project unit.
- 131. The **Binational Coordinator** of the project (also called Project Manager) has the authority to run the project on a day-to-day basis on behalf of the Steering Committee within the constraints laid down by the board. The Binational Coordinator is responsible for day-to-day management and decision-making for the project. This person's prime 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 Implementing Partner appoints the Binational Coordinator, who should be different from the Implementing Partner's representative in the project board.
- 132. The function of the Binational Coordinator will finalize when the terminal evaluation report and other documentation required by GEF and UNDP have been completed and submitted to UNDP (including the operational closure of the project). The Binational Coordinator will ensure fluid communication and coordination with the national directors, UNDP and the project partners, as well as other entities that contribute to project execution (e.g., local governments, OSC, international cooperation, NOAA).
- 133. UNDP provides a three tier supervision, oversight and quality assurance role funded by the GEF agency fee involving UNDP staff in country offices and at regional and headquarters levels. Project Assurance must be totally independent of the project management function. The quality assurance role supports the Steering Committee and project unit by carrying out objective and independent project oversight and monitoring

⁵⁰ All members of the project unit will be contracted with GEF funds. Annex 5 of the PRODOC contains the terms of reference for each post.

functions. This role ensures that appropriate project management milestones are managed and completed. The Steering Committee cannot delegate any of its quality assurance responsibilities to the project manager.

Additional Information not well elaborated at PIF Stage:

A.7 *Benefits*. Describe the socioeconomic benefits to be delivered by the project at the national and local levels. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

- 134. The project will benefit a wide range of groups at local and national levels. The list of beneficiaries is presented in Annex 11 of the PRODOC. In general terms, the project will directly benefit about 200,983 persons in Chile and 89,021 persons in Peru.
- 135. A summary of direct project beneficiaries includes:
 - Scientific personnel from IFOP and IMARPE who will improve their capacities through the process to develop, agree and implement common protocols to assess the shared stock of anchoveta. Indirectly, scientists and technical personnel from the private sector, universities and NGOs will also benefit from their participation in this very intense public-private process.
 - Artisanal fishers and local people from the localities where the project will intervene. In Peru, Marcona (ca., 600 persons) and Atico (ca., 1,500 persons). In Chile, Torres del Inca (ca., 27 persons), Puerto Aldea (ca., 59 persons), Chañaral (ca., 280 persons), and Coquimbo (ca., 100 persons). Fishers will benefit in various forms, like (i) direct participation and multi-level and intersectoral dialogue to improve fisheries management, (ii) trials for production diversification (e.g., tourism, macroalgae processing and culture, jibia products for direct human consumption, ictiocompost), and (iii) improved inclusive value chains. The range of trials with production diversification (outcome 4) will include members of fisher families (e.g., spouses, senior persons) and other members of coastal communities.
 - Local population and resource users of the bays and protected areas where the project will intervene. In Peru, the Paracas district (ca., 7,321 persons), the Marcona district (ca., 12,393), and the Pisco province (ca., 75,128 persons). In Chile, the Iquique commune (ca., 200,897 persons) and the Chipana area (ca., 179 persons). These people will benefit from hands-on experience in addressing marine and coastal management, including pollution monitoring, integrated coastal zone management, and coastal and marine spatial planning. It is expected that multi-level dialogue and networking will improve inter-sectoral collaboration, negotiation and conflict solving.
- 136. The project will indirectly benefit many people that cannot be quantified at the moment. For example, the development of products for direct human consumption will facilitate access to nutritious and affordable food. Also, the actions of outcome 5 will facilitate access to safe seafood.
- 137. It is foreseen that the project strategy focused on multi-level dialogue, networking and learning approach will catalyse multiple present and future actions to conserve coastal and marine biodiversity and the sound management of the Humboldt current large marine ecosystem.

A.8 Knowledge Management. Elaborate on the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives (e.g. participate in trainings, conferences, stakeholder exchanges, virtual networks, project twinning) and plans for the project to assess and document in a user-friendly form (e.g. lessons learned briefs, engaging websites, guidebooks based on experience) and share these experiences and expertise (e.g. participate in community of practices, organize seminars, trainings and conferences) with relevant stakeholders.

- 138. Knowledge management is a key element of the project strategy. During project preparation a specific outcome was introduced to assemble all actions to be implemented to foster learning and the dissemination of lessons and good practice. This outcome was previously explained (see paragraph 87).
- 139. The project will build upon the experience and lessons from former projects (e.g., GEF project 4505, colloquially called GEF Guaneras) and ongoing initiatives (e.g., A Comer Pescado). Relevant projects were mapped during project preparation.

- 140. A series of coordination mechanisms will be established with the existing initiatives and projects (Annex 12 of the PRODOC) and those that will develop later. These include:
 - Annual coordination meetings with relevant GEF projects and initiatives from other donors.
 - Participation in International Water Conferences (IWC) and the IOC-UNESCO annual large marine ecosystems meeting.
 - Letters of understanding with projects and relevant initiatives of other donors.

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 Consistency with National Priorities. Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.:

- 141. In Chile, the project is in line and will contribute to the implementation of the following instruments:
 - [1] National Biodiversity Strategy 2017 2030, recently approved by the Council of Ministers for sustainability.
 - [2] Climate Change National Action Plan 2017 2022⁵¹ and Climate Change Adaptation National Plan⁵². In particular the following elements:
 - <u>Climate Change Adaptation Plan in Biodiversity</u>⁵³. Specific objective 4. Strategic line 1. Design, strengthen and implement a national system of protected areas, public and private, terrestrial, marine and inland waters.
 - Climate Change Adaptation Plan for Fisheries and Aquaculture⁵⁴:
 - Objective 1. Specific action 1. Contribute to the implementation of management plans in local, national and regional fisheries.
 - Specific action 4. Promote the development of marine spatial planning as a tool to manage uses of marine resources and ecosystems.
 - Objective 2. Specific action 7. Forecast models of Chilean pelagic fisheries considering different climate change scenarios.
 - Objective 4. Specific action 22. Include aquatic areas into the national system of protected areas.
 - Objective 5. Specific action 28. Promotion of direct human consumption of anchovies and sardines. Specific action 29. Promote consumption and added value in the resources of artisanal fisheries
 - [3] <u>National Policy for the use of the coastal border</u>⁵⁵ which is implemented by a National Commission which delineate policies and approve zoning plans, and Regional Commissions that discuss and analyse requests for use and proposal to change local zoning plans.
 - [4] <u>Gender Agenda</u> which is implemented by the Ministry of Women and Gender Equity and the National Service for Women and Gender Equity (SERNAMEG)
 - [5] National Food and Nutrition Policy⁵⁶, in particular:
 - Component 2. Strengthen food and nutritional security: availability, access, use of foods and stability. Strategic line ii. Improve the access of the population to the foods promoted in the Dietary Guidelines for the Chilean Population. Implementing mechanisms and structural measures that favour low costs for the final consumer and improving availability throughout the national territory.
 - Component 3. Improve the configuration of environments and food systems. Strategic line iv.b. Develop structural strategies to increase the consumption of fish, shellfish and other seafood. Specifically, allowing access to the population to the products that are extracted in the national territory at low cost, considering the modernization of the current supply formats and the incorporation of new ones.
- 142. In Peru, the project is in line and will contribute to the implementation of the following instruments:

⁵¹ MMA. 2017. Plan de Acción Nacional de Cambio Climático 2017 -2022. Ministerio del Medio Ambiente (MMA). Santiago, Chile: 251 pp.

MMA. 2014. Plan Nacional de adaptación al cambio climático. Ministerio del Medio Ambiente (MMA). Santiago, Chile: 80 pp.
 MMA. 2014. Plan de adaptación al cambio climático en biodiversidad. Ministerio del Medio Ambiente (MMA). Santiago, Chile: 95 pp.

⁵⁴ MEFT & MMA. 2015. Plan de Adaptación al Cambio Climático para Pesca y Acuicultura. Subsecretaria de Pesca y Acuicultura del Ministerio de Economía,

Fomento y Turismo (MEFT) y el Departamento de Cambio Climático del Ministerio del Medio Ambiente (MMA). Santiago, Chile: 77 pp. ⁵⁵ Supreme Decree 475 of 1994

⁵⁶ MINSAL. 2017. Política Nacional de Alimentación y Nutrición. Ministerio de Salud (MINSAL). Primera edición, noviembre 2017. Santiago, Chile: 80 pp.

- [1] <u>National Biodiversity Strategy 2021</u> 57. The project is in line with strategic objective 1 "to improve biodiversity condition and maintain the integrity of ecosystem services", and strategic objective 3 "to reduce direct and indirect pressures on biological diversity and its ecosystem processes". The project contributes to:
- Target 1. "to 2021 sustainable and effective biodiversity management is consolidated in at least 17% of land area and 10% of marine area under several conservation modalities of conservation and in-situ management"; and
- Target 6. "to 2021, it has increased in 20% the level of awareness and appreciation about the contribution of biodiversity to national development and wellbeing".
- [2] <u>National Strategy on Climate Change</u>⁵⁸. In particular with strategic objective 1: the population, economic agents and the State increase awareness and adaptive capacity for action in the face of the adverse effects and opportunities of the climate change. The project is also in line with the proposed actions of the Climate Change Adaptation Strategy for the fisheries and aquaculture sector⁵⁹ that is being prepared by PRODUCE. In particular the following adaptation measures:
- Develop and implement marine spatial planning, ecological-economic zoning and coastal and marine management.
- Promote the diversification of the anchoveta fish meal and oil industry towards higher value-added products and direct human consumption with emphasis on food security.
- Promote production diversification of fishers and coastal population.
- Strengthen the adaptive capacity of artisanal fishers' communities through management plans.
- [3] <u>Guidelines for integrated management of coastal and marine areas</u> ⁶⁰. In particular the following priority actions:
- Strategic guideline 1. Priority action b. To promote the formulation and articulation of integrated coastal and marine areas management plans and programmes with other instrument of territorial management
- Strategic guideline 2. Priority action a. to establish and strengthen mechanisms for coordination, agreement, dialogue and integration of the different actors and levels of government that intervene in the marine coastal zones.
- Strategic guideline 3. Priority action d. To promote the orderly occupation of coastal marine areas to promote and diversify productive activities with an adequate management of natural resources and support the local communities of marine coastal zones.
- [4] National plan for gender equality 2012 -2017⁶¹. In particular the following strategic objectives:
- 2. Strengthen a culture of respect and appreciation of gender differences.
- 5. Guarantee the economic rights of women in conditions of equity and equality of opportunities with men.
- 7. Increase the engagement of women and men in decision making and political and citizen participation.
- 8. Value the contribution of women in the sustainable management of natural resources.
- [5] Food and nutrition security. In particular, the <u>National Strategy for Food Security and Nutrition 2013 2021</u>⁶² and the <u>National Plan for Food Security and Nutrition 2015-2021</u>⁶³. In particular following strategies and actions:
- E.1.1. Promote and generate economies of scale in food production an emphasis on family farming and artisanal fisheries. Action line 1.1.4. Strengthen and promote association of small farmers and artisanal fishers.
- E.1.4. Increase and diversify the supply of food from agriculture and fisheries. Action line 1.4.1. Promote mechanisms to reduce post-harvest losses and losses along the value chains of agriculture and hydrobiological products. Action line 1.4.2. Improve regulations of fish production for direct human consumption and monitor its compliance.

⁵⁷ MINAM. 2014. Estrategia nacional de diversidad biológica al 2021 y su plan de acción 2014-2018. Ministerio del Ambiente (MINAM). Lima, Perú: 112 pp.

⁵⁸ MINAM. 2015. Estrategia Nacional ante el Cambio Climático. Ministerio del Ambiente (MINAM). Lima, Perú: 88 pp. Adopted by Supreme Decree 011-2015-MINAM of September, 2015.

⁵⁹ PRODUCE. 2016. Diagnóstico de vulnerabilidad actual del sector pesquero y acuícola frente al cambio climático. Tomo 5. Documento síntesis del diagnóstico de vulnerabilidad actual y líneas de acción preliminar a la estrategia de adaptación. Ministerio de la Producción del Perú (PRODUCE). Lima, Perú: 79 pp. ⁶⁰ Resolución Ministerial 189-2015-MINAM of 4 August 2015.

⁶¹ MIMP. 2012. Plan Nacional de Igualdad de Género 2012 – 2017. Ministero de la Mujer y Poblaciones Vulnerables (MIMP). Lima, Perú: 76 pp.

⁶² CMSAN. 2013. Estrategia Nacional de Seguridad Alimetnaria y Nutricional 2013-2021. Comisión Multisectorial de Seguridad Alimentaria y Nutricional (CMSAN). Julio, 2013. Lima, Perú: 73 pp.

⁶³ MINAGRI. Plan Nacional de Seguridad Alimentaria y Nutricional 2015-2021. Ministerio de Agricultura y Riego (MINAGRI). Lima, Peru: 65 pp.

- E.2.2. Promote the commercialization and consumption of local and regional foods. Action line 2.2.1. Implement a programme to develop local markets. Action line 2.2.2. Develop campaigns to promote consumption of local and regional safe and nutritious foods.
- E.3.4. Ensure food quality and safety. Action line 3.4.2. Engage value chain stakeholders in food safety processes.

C. DESCRIBE THE BUDGETED M&E PLAN:

- 143. The project results, as outlined in the project results framework, will be monitored annually and evaluated periodically during project implementation to ensure that the project effectively achieve the expected outcomes. Based on the activities of outcome 6, the project monitoring and evaluation plans (Annexes 2 and 3 of the PRODOC) will facilitate learning and will ensure that knowledge is widely shared and disseminated to ensure that the outcomes of the project are magnified and replicated.
- Monitoring and evaluation will be based on UNDP monitoring⁶⁴ and evaluation⁶⁵ policies. In addition, specific GEF monitoring and evaluation requirements (mentioned below) will be applied, according with the GEF⁶⁶ monitoring and evaluation policy.
- 145. In addition to the mandatory requirements of monitoring and evaluation of UNDP and GEF, other monitoring and evaluation activities considered necessary to support project-level adaptive management will be agreed during the inception workshop and they will be detailed in the inception report. This will include the exact role of project target groups and stakeholders in the monitoring and evaluation activities of the project, including the GEF operational focal point in each country and other national / regional entities to which monitoring actions of the project were assigned. The GEF operational focal points in Chile and Peru will strive to ensure consistency in the expected approach with respect to GEF specific monitoring and evaluation requirements (especially the relevant monitoring tools) in all projects financed by GEF in the country.
- 146. The binational coordinator of the project will be responsible for day-to-day project management and regular monitoring of project outcomes and risks, including social and environmental risks. In addition, the project unit includes a monitoring and evaluation specialist, who will guide and coordinate the execution of the monitoring and evaluation plans and any other requirements.
- 147. The binational coordinator will ensure that the project maintains a high level of transparency, responsibility and accountability in monitoring, evaluation and reporting project results. The binational coordinator will:
- 148. Inform the Steering Committee both progress and outcomes of monitoring and evaluation at least once a year.
- 149. Inform the Steering Committee, UNDP country office in Chile (lead country office) and the UNDP-GEF Regional Technical Advisor of any delays or difficulties as they arise during implementation, so that appropriate support and recommendations can be adopted.
- 150. Maintain close coordination with the National Directors of the project to meet the approved annual work plan and budget.
- 151. The following table summarise the mandatory GEF monitoring and evaluation requirements and the corresponding monitoring and evaluation budget:

GEF monitoring and evaluation requirement	Primary responsibility	Indicative costs to be charged to the project budget ⁶⁷ (USD)		Time frame
		GEF	In kind co- financing	
Inception workshop	UNDP country office in Chile	USD 11,560	USD 10,000	Within two months after the signing of the project document

⁶⁴ https://popp.undp.org/SitePages/POPPSubject.aspx?SBJID=137

⁶⁵ http://web.undp.org/evaluation/policy.shtml

⁶⁶ https://www.thegef.org/documents/policies

⁶⁷ Excluding project team time and UNDP personnel time and travel expenses

GEF monitoring and evaluation requirement	Primary responsibility	Indicative costs to be charged to the project budget ⁶⁷ (USD)		Time frame
		GEF	In kind co- financing	
Inception report	Binational coordinator of the project	None	None	Within two weeks after the inception workshop
Standard UNDP monitoring and reporting requirements as stipulated in the POPP	UNDP country office in Chile	None	None	Quarterly, annual
Monitoring of indicators of the project results framework	СВР	USD 16,000	USD 16,000	Annual
GEF Project Implementation Report (PIR)	CBP, UNDP country office in Chile, UNDP-GEF team	None	None	Annual
NIM audit according to UNDP audit policies	UNDP country office in Chile	USD 25,000	USD 25,000	Annual or other frequency, as stipulated in the UNDP Audit policies
Lessons learned and knowledge generation	СВР	None	None	Annual
Monitoring of social and environmental risks and the corresponding action plans	CBP y UNDP country office in Chile	None	None	Continuous
Addressing environmental and social complains	CBP and UNDP country office in Chile Bureau of policy and program support (BPPS), if required	None	None	Continuous
Steering Committee meetings	Steering Committee, UNDP country office in Chile and CBP	USD 11,280	USD 10,000	At least annually
Supervision missions	UNDP country office	None ⁶⁸	USD 10,000	Annual
Oversight missions	UNDP-GEF team	None ⁶⁹	USD 10,000	Troubleshooting as necessary
Knowledge management as indicated outcome 6	СВР	USD 151,998 (1.9% of GEF grant)	None	Continuous
GEF Secretariat learning missions/site visits	UNDP country office in Chile, CBP, team UNDP-GEF	None	USD 10,000	To be defined
Midterm update of the GEF tracking tool, to be completed by a consultant	СВР	USD 10,000	None	Before the midterm review mission
Mid-term review (MTR)	UNDP country office in Chile, project team, UNDP-GEF team	USD 30,000	USD 10,000	Between second and third PIR
Final update of the GEF tracking tool, to be completed by a consultant	СВР	USD 10,000	None	Before the terminal evaluation mission
Independent terminal evaluation (TE) included in the UNDP evaluation plan	UNDP country office in Chile, project team, UNDP-GEF	USD 40,000	USD 20,000	At least three months before the operational closure

 $^{^{68}}$ Participation costs and UNDP country office time will be charged to the GEF agency fee. 69 Participation costs and UNDP-GEF team time will be charged to the GEF agency fee.

GEF monitoring and evaluation requirement	Primary responsibility	Indicative costs to be charged to the project budget ⁶⁷ (USD)		Time frame
		GEF	In kind co-	
			financing	
	team			of the project (third quarter of year five).
Translation to English of MTR and TE reports	UNDP country office	USD 5,000	None	The GEF only accepts reports in English
Indicative total cost Excluding time of the project teal travel expenses	m, UNDP staff and	USD 310,838	USD 111,000	

152. The main monitoring and evaluation reports to be generated are:

- [1] <u>Inception report</u>. There will be an inception workshop after (i) the project document has been signed by the corresponding parties of each country, and (ii) the binational project coordinator has been hired. The inception workshop will serve to:
- Orient the project stakeholders in the project strategy and discuss changes in the general context that may influence project implementation.
- Discuss the roles and responsibilities of the project team, including reporting and communication lines, and mechanisms for conflict resolution.
- Review the results framework and, if pertinent, adjust the indicators, means of verification and monitoring plans.
- Discuss reporting, monitoring and evaluation roles and responsibilities, and if pertinent, adjust the monitoring and evaluation budget, identify national / regional entities that could be involved in the monitoring and evaluation actions of the project, discuss the role of the GEF operational focal points in project monitoring and evaluation.
- Update and review responsibilities for monitoring project plans and strategies, including the risk log, safeguards requirements, gender plan and communication strategy.
- Review financial reporting procedures and mandatory requirements and agree on the arrangements for the annual audit.
- Plan and schedule the meetings of the Steering Committee and finalize the annual work plan for the first year.

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

- [2] GEF project implementation report (PIR). The binational coordinator of the project, the UNDP country office of Chile, and the UNDP-GEF Regional Technical Advisor will provide objective inputs to the annual GEF PIR covering the reporting period July (of the previous tear) to June (of the current year). The binational project coordinator will ensure that the indicators included in the project results framework are monitored annually well in advance of the PIR submission deadline, and they are adequately reported in the GEF project implementation report. The PIR that is submitted to the GEF every year must be in English and it will be presented to the project Steering Committee. The UNDP country office in Chile will coordinate as necessary, the inputs for the PIR of the GEF operational focal point and other key stakeholders. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR. The final PIR of the project, together with the report of the terminal evaluation and the corresponding management response will be the final package of the project report. The final report project package will be analysed with the Steering Committee of the project during the final review meeting to identify lessons learned and opportunities to expand the outcomes.
- [3] GEF focal area tracking tools. In line with its objective and the corresponding focal areas / GEF programmes, the present project will apply the GEF-6 international waters monitoring tool. The tracking tool

presented in Annex 4 of the PRODOC corresponds to the baseline situation of the project. The tracking tool will be updated by the binational project coordinator and handed to the consultants responsible of the midterm review and the terminal evaluation, before the beginning of the respective review / evaluation missions take place. The updated tracking tool will be presented to the GEF together with the Midterm Review and Terminal Evaluation reports.

[4] Midterm review (MTR). The independent midterm review process will begin after the second PIR has been submitted to the GEF. The final MTR report will be submitted to the GEF in the same year as the third PIR. The MTR findings and the management response will be incorporated as recommendations to improve the implementation during the last half of the project's duration. The terms of reference, the review process and the final report of the MTR will follow the standard formats and guidelines of the UNDP Independent Evaluation Office 70 (UNDP, 2014). As stipulated in the guide for the MTR, the review will be "independent, impartial and rigorous". The consultants hired for this task will be independent from the entities that participated in the design, implementation or advising of the project. The GEF operational focal points of Chile and Peru will be consulted during the review process. The final MTR report will be available in English and Spanish and will be cleared by the UNDP country office of Chile and by the PNUD-GEF Regional Technical Advisor and approved by the Steering Committee.

[5] Terminal evaluation (TE). An independent terminal evaluation will be carried out once most of the outputs and activities have been completed. The terminal evaluation process will begin three months before the operational closure of the project, facilitating that the evaluation mission acts while the project team is still operating, but making sure that the project is close enough to its conclusion, so that the evaluation team reach conclusions on key aspects such as the sustainability of the outcomes achieved. It is expected that the terminal evaluation is performed in the third quarter of the fifth year of the project, and that the operational closure is carried out during the last quarter of the fifth year (Annex 1 of the PRODOC). The binational project coordinator will remain on contract until the TE report and the management responses have been finalized. The terms of reference terms, the evaluation process and the final TE report will follow the standard formats and guidelines of the UNDP Independent Evaluation Office (UNDP, 2012). As stipulated in the guide for the MTR, the review will be "independent, impartial and rigorous". The consultants hired for this task will be independent from the entities that participated in the design, implementation or advising of the project. The GEF operational focal points of Chile and Peru will be consulted during the terminal evaluation process. Additional quality assurance support will be available from the UNDP-GEF directorate. The terminal evaluation report will be cleared by the UNDP country office of Chile and the UNDP-GEF Regional Technical Advisor and approved by the Steering Committee. The TE report will be available to the public in English on the UNDP Evaluation Resource Centre (ERC). The UNDP country office in Chile will include the project terminal evaluation within the country office evaluation plan and will upload the final report of the terminal evaluation in English to the UNDP Evaluation Resource Centre, as well as the corresponding management response. Once the documents have been uploaded to the ERC, the UNDP Independent Evaluation Office will perform a quality evaluation and will validate findings and grades that are in the TE and will rate the quality of the TE report. The UNDP independent evaluation office assessment report will be sent to the GEF independent evaluation office together with the terminal evaluation report. The UNDP country office in Chile will retain all monitoring and evaluation records of the present project for up to seven years after its financial closure to support ex-post evaluations that can be carried out by the UNDP independent evaluation office and/or the GEF independent evaluation office.

[6] <u>Final report</u>. The last PIR of the project together with the terminal evaluation report and the corresponding management response will serve as the final project report package. The final project report package will be analysed with the Steering Committee during an end-of-project review meeting to examine lessons learned and opportunities to enhance the outcomes.

⁷⁰ <u>http://web.undp.org/evaluation/guidance.shtml#gef</u>

PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)

A. GEF Agency(ies) certification

This request has been prepared in accordance with GEF policies⁷¹ and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Adriana Dinu UNDP-GEF Executive Coordinator	<u> </u>	20 April 2018	José Vicente Troya, Regional Technical Adviser	+507-302- 4616	Jose.troya@undp.org

 71 GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT GEF6 CEO Endorsement /Approval Template-August2016

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).

This project will contribute to the following Sustainable Development Goals: Objective 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development. Particularly the following goals:

- 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.
- 14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics
- 14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information
- 14.b Provide access for small-scale artisanal fishers to marine resources and markets.

This project will contribute to the following country outcomes included in the UNDAF / Document Country Program

Document Country Program Peru 2017 – 2021. Outcome 1. Growth and development are inclusive and sustainable, and they incorporate productive activities that create employment and livelihood for the poor and the excluded.

Document Country Program Chile 2015 – 2018. Outcome 1. Growth and development are inclusive and sustainable, and they incorporate productive activities that create employment and livelihood for the poor and the excluded.

This project is linked to the following product of the UNDP Strategic Plan

Product 1.3. Solutions developed at national and subnational levels for the sustainable management of natural resources, ecosystem services, chemicals and waste.

Objective / Outcome	Objective and outcome indicators	Baseline	Mid-term target	End of project target	Assumptions
Objective To facilitate ecosystem-based	Indicator 1. Number of new partnership mechanisms with funding for sustainable	3 ⁷²	7	9 ⁷³	Political support from national (e.g. fisheries, environment) and local

⁷² (1) Strategic action programme (SAP), (2) collaboration agreement between IMARPE and IFOP for fisheries research, and (3) collaboration agreement between MINAM and MMA for the development of actions of governance, management and conservation of national systems of marine and coastal protected areas.

⁷³ The agreements to be reached by mid-term are:

- 1. Protocol for joint assessment of anchoveta (output 1.1).
- 2. Protocol for coordinated monitoring in Paracas bay (output 2.1).
- 3. Inter-institutional Memorandum of Understanding for the technical cooperation network in marine areas of significant importance for the conservation of the Humboldt current (output 3.4)
- 4. Agreement for collaboration and exchange of experiences for the promotion of diversification of products for direct human consumption and seafood responsible consumption. (outputs 4 and 5).

The agreements to be reached until the end of the project are:

- 5. Agreement for the implementation of the plan to improve environmental quality objectives in Iquique bay (output 2.2).
- 6. Integrated marine-coastal zone management plan for the Pisco province (output 2.5).

Objective / Outcome	Objective and outcome indicators	Baseline	Mid-term target	End of project target	Assumptions
fisheries management (EBFM) and ecosystem restoration in the Humboldt current system for the sustainable and resilient delivery of goods and services from	management solutions of natural resources, ecosystem services, chemicals and waste at national and/or sub-national level, disaggregated by partnership type				(e.g. municipalities, regional governments) authorities. Interest and collaboration of fishermen and user groups of coastal resources.
shared living marine resources, in accordance with the Strategic Action Programme endorsed by Chile and Peru.	Indicator 2. Number of women and men as direct beneficiaries of project activities.	0	200,897 Chile ⁷⁴ . 98,488 women and 102,409 men 75,128 Peru ⁷⁵ . 39,126 women and 36,002 men	200,983 Chile. 98,520 women and 102,463 men 89,021 Peru. 44,579 women and 44,442 men	Women are interested in participating in the activities of the project.
	Indicator 3: Number of national plans for SAP implementation, with secured finance contributions.	0	1	2 ⁷⁶	Political support from relevant national authorities (e.g. ministries of foreign affairs and economy, fisheries and environment authorities). Private and local stakeholders are willing to participate and contribute to prepare and implement the national plans.
Outcome 1: The prioritized fishery resources have improved the existing management scenarios to contribute to their recovery and there are systems to ensure the maintenance at optimum population levels while sustaining a healthy and productive ecosystem	Indicator 4: Number of coordinated or joint cruises for population assessment of the shared stock of anchoveta	0	1	3	The scientific staff of IFOP and IMARPE agree on methods and procedures for the coordinated assessment of the anchoveta shared stock. SUBPESCA and PRODUCE provide political support Interest and support of the industry to assess the population of the anchoveta shared stock.
considering climate change and El Niño Southern Oscillation scenarios.	Indicator 5: Number of ecosystem-based fisheries management plans for benthic resources	0	≥2	7 ⁷⁷	Support of the relevant national authorities (PRODUCE, MINAM, SERNANP) and local governments.

_

⁷⁴ It corresponds to output 2.2, which has greater number of beneficiaries

⁷⁵ It corresponds to output 2.1 which has greater number of beneficiaries

⁷⁶ A national plan for SAP implementation in each country.

⁷⁷ Management plans to be generated are:

^{1.} Management plan of benthic resources for the San Juan de Marcona district.

^{2.} Management plan of benthic resources for Atico district.

^{3.} Management plan of benthic resources for San Fernando National Reserve.

^{4.} Management plan of benthic resources for Punta San Juan of the RNSIIPG.

^{5.} Management plan of benthic resources for Punta Atico of the RNSIIPG.

^{6.} Management plan of benthic resources for San Fernando National Reserve.

^{7.} Improve and update the Management plan of stranded algae of COPMAR.

Objective / Outcome	Objective and outcome indicators	Baseline	Mid-term target	End of project target	Assumptions
					Interest and involvement of fishers and other key actors in the value chains of benthic resources and algae.
Outcome 2: Improved coastal and marine environmental quality through the application of integrated ecosystem	Indicator 6: Number of inter-agency long-term environmental quality monitoring programmes for prioritized bays	0	1 (Paracas)	2 (Paracas and Iquique)	The relevant agencies are willing to coordinate actions, share information and maintain long-term monitoring programmes.
management	Indicator 7: Number of participatory integrated management plans for prioritized bays including ecosystem approach, sustainable use of biodiversity, and funding	0	1	2 (Paracas and Iquique)	Local stakeholders are willing to engage in participatory management of coastal and marine areas.
	Indicator 8: Percentage of coastline under integrated coastal management.	89 km, 2.88% Perú (Sechura province ⁷⁸)	183 km, 5.94% Peru (Sechura and Pisco provinces ⁷⁹)	183 km Peru	Local stakeholders are willing to engage in participatory management of coastal and marine spaces.
Outcome 3: There are systems to contribute to maintain and, if necessary, to recover biodiversity in the Humboldt current system.	Indicator 9: Coastal and marine surface (ha) under conservation	46,323,077 ha Chile ⁸⁰	≥ 46,334,546 ha Chile (Chipana ca., 11.469 ⁸¹ ha.	≥ 46,334,546 ha Chile	Key actors are interested and support the conservation of marine and coastal areas.
Outcome 4: Fishing activities are diversified, and new production opportunities are created for fishers organized in integrated organizations of civil society, inside and outside the fishing sector.	Indicator 10: Number of women and men of small-scale or artisanal fishers' families engaged in diversified productive activities. Indicator 11: Number of plans for diversified sustainable economic activities	0	20 Chile. 10 women and 10 men 100 Peru. 20 women and 80 men	298 Chile ⁸² . 62 women and 236 men 640 Peru ⁸³ . 20 women and 620 men 13 ⁸⁴	The corresponding authorities provide long-term support to the groups interested in diversifying their production activities. Families of artisanal or small-scale fishers are willing to explore alternative production activities.
Outcome 5: The general public benefits from increased food	Indicator 12: Number of women and men of artisanal or small-scale fishers' families	0	Chile. ≥100 people (≥30% women)	Chile. ≥300 people (≥30% women)	Families of artisanal or small-scale fishermen are interested in

- 1. Value-added anchoveta products (Chile and Peru).
- Value-added jibia products (Chile). 2.
- Value-added products of benthic resources (Torres del Inca, Puerto Aldea, Marcona, Atico) (four plans).
- Value-added macroalgae products (Marcona, Atico, Chañaral, Caldera) (four plans).
- Production diversification of Torres Inca and Puerto Aldea fishing coves (two plans). 5.
- 6. Ictiocompost production (Peru).

⁷⁸ Peru has a coastline of 3,080 km (MRE, 2012). By 2017, only the province of Sechura had a coastal-marine zone management plan. The coastline of the province of Sechura is 89 km (IMARPE, 2007).

⁷⁹ The coastline of the Pisco province is 94 km (IMARPE, 2010).

80 Until June 2017. The protected surface corresponds to 13.6% of the exclusive economic zone of Chile. Source: MMA.

⁸¹ The final surface will be defined when the file for the creation of the protected area is prepared.

⁸² People from Puerto Aldea, Torres del Inca, and Iquique.

⁸³ People from Marcona and Atico.

⁸⁴ Business plans to be prepared during the project are:

Objective / Outcome	Objective and outcome indicators	Baseline	Mid-term target	End of project target	Assumptions
security and food safety, thanks to improved management of ecosystems and fisheries, and better-quality controls of the catch together with a better control on the quality of the	trained on safe seafood handling, processing and distribution .		Peru. ≥ 100 people (≥10% women)	Peru. ≥ 300 personas (≥10% women)	improving seafood safety. Women are interested and participate in the process. Artisanal or small-scale fishermen make possible and recognize the participation of women.
catch.	Indicator 13: Number of people sensitised about seafood safety and food security.	0	≥1,000 Chile (50% women) ≥1,000 Peru (50% women)	≥2,000 Chile (50% women) ≥3,000 Peru (50% women)	PRODUCE, SUBPESCA and SONAPESCA maintain the existing promotion programmes and incorporate the educational and communications materials prepared by the GEF project.
Outcome 6: Lessons and good practices have been shared with stakeholders in each country, between countries and globally.	Indicator 14: Number of people (men and women, by nationality) who have participated in events for dissemination of lessons and best practice (e.g., workshops, IWC)	0	≥1000 personas ≥ 30% women	≥3000 personas ≥50% women	Information is attractive, useful and accessible to key actors and groups of interest.
	Indicator 15: Number of visitors per month (annual average) recorded in the network of electronic platforms used to disseminate project learnings and best practice	Visits 0 Unique visits 0	Visits ≥2000 Unique visits >1600	Visits ≥4000 Unique visits ≥3200	Families of fishers and coastal communities have proper access to the Internet and social networks.

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).

STAP COMMENTS

STAP comment. The predecessor project was supported from the International Waters and Biodiversity focal areas of the GEF; however, the present proposal is solely targeted at IW funds and as a consequence appears not to fully reflect the foundational work leading to designation and management of pilot Marine Protected Areas associated with transboundary cooperation. STAP's earlier advice regarding integration of designation and management of MPAs and the ecosystem approach to fisheries management appears not to be reflected in the proposed actions agreed through the SAP, although the proponents engaged in dialogue with STAP over this issue. Accordingly, STAP recommends that the project brief includes a summary of the findings of the MPA assessments conducted and how the new project intends to take forward work on Marine Spatial Planning (Component 3.2). Currently the description of Multiple Use MPAs is vague and needs clarification. Additionally, these sub-sets of MPAs are not mentioned in the SAP matrix of actions, therefore it is unclear what indicators are proposed or indeed what links between MPAs and Marine Spatial Planning are envisaged, given that this process is also not specifically mentioned in the SAP matrix.

Response: MPAs and Marine Spatial Planning in the final SAP. The SAP was signed by Chile and Peru in 2016. It has five general objectives and very detailed targets and actions. The following table summarise the elements of the SAP:

Joint vision: A healthy, productive and resilient Humboldt current large marine ecosystem through ecosystem-based management that ensures conservation and sustainable use of its goods and services for the benefit of its people.

General objective 1: To recover and maintain optimal population levels of the main fishery resources, considering environmental variability and maintaining both health and productivity of the ecosystem.

General objective 2: To improve the environmental quality of the marine and coastal ecosystem through integrated management, considering the different sources of pollutants.

General objective 3: To recover and maintain the habitat and biodiversity of the marine and coastal ecosystems at a sustainable level.

General objective 4: To diversity and add value, creating productive opportunities inside and outsider the fishing sector, with socially organized and integrated people.

General objective 5: To contribute to the food security of the population.

Objective 2 focus on environmental quality and pollution abatement. It has five specific objectives, the last one is "to strengthen the integrated management of coastal and marine areas". This specific objective includes two actions: (i) to strengthen multisectoral commissions for integrated coastal and marine zone management, and (ii) to implement tools for marine spatial management on a specific site.

Objective 3 focus on biodiversity conservation, including MPAs. It has three specific objectives, the last one is "to strengthen/propose management measures for conservation of coastal and marine habitats and biodiversity". It has four actions, the third one is "to establish different conservation instruments (marine protected areas, biological corridors, adaptive areas, marine spatial planning, etc.)"

The present project proposal includes actions to advance on each of the SAP objectives to catalyse multi-level action. Therefore, it includes actions to facilitate practical learning and action regarding in situ conservation and coastal and marine territorial planning.

MPAs associated with transboundary cooperation. At the national level the surface of MPAs has increased. At the moment, in Chile and Peru MPAs cover 13.4% and 0.48% of the exclusive economic zone, respectively. Chile has established very large oceanic protected areas that are outside of the Humboldt current large marine ecosystem (HCLME). In both countries, MPAs within the HCLME are small and inshore. Multiple-use MPAs is an important paradigm for both countries, because strong opposition of local stakeholders to the creation of new protected areas that will limit resource access. Therefore, the present project will support local actions to strengthen MPA administration (e.g., sportfishing regulation, social base for MPA management) (outputs 3.1 and 3.2) and the creation of a new MPA in Chile (output 3.3). All this supported with processes to exchange experience and lessons between countries. In addition, the project will support the development of a technical cooperation network in marine areas of significant importance for the conservation of the Humboldt current (output 3.4). This network will operationalise a cooperation agreement recently signed by Chile and Peru, and will facilitate cooperation and collaboration. It is expected that both countries will agree on common criteria to identify priority conservation sites and conservation targets and a strategy for the network.

Marine Spatial Planning. To some extent, both countries have explored the methods and tools of marine spatial planning (MSP). However, this is a new approach and there is no legal and institutional basis to promote the preparation of zoning or management schemes for coastal or marine waters. Therefore, the project will support MSP exercises as part of integrated interventions to address the environmental quality of two bays: Iquique in Chile and Paracas in Peru. All this supported with processes to exchange experience and lessons between countries. A key ally will be NOAA, who will provide training and mentoring for the exercises.

During project preparation it was agreed with the project partners, that these will be practical learning exercises to facilitate that the range of public and private stakeholders explore the benefits and limitations of the tool. It is envisioned that the experience generated could eventually lead to change in the legal and institutional framework. MPAs are an integral part of the MSP process. In Paracas, the MSP exercise will include the Paracas National Reserve and elements of the National Reserve System of Islands, Islets and Guaneras Points. In Iquique bay there are no MPAs, however the MSP exercise will include the identification of areas with high value for conservation and biodiversity protection.

STAP comment. It is encouraging to note that the project will seek coordination with other GEF-funded regional initiatives, but STAP is concerned that no specific mention of collaboration with the FAO is foreseen, regarding strategic advice on regional issues or to follow up the earlier commitment to collaborate on data sharing.

Response: The FAO Regional Office for Latin America and the Caribbean was invited to participate in the project preparation process. Recommendations were received mostly to outcomes 4 and 5. There will be coordination and collaboration with two GEF projects:

- GEF Project ID 6955 "strengthening the adaptive capacity to climate change in the fisheries and aquaculture sector" in Chile; and
- GEF Project ID 9060 "coastal fisheries initiative programme", whose Latin American project (GEF ID 9124) will be implemented by UNDP in Ecuador and Peru initiating in 2018.

STAP comment. The issues of diversification need to be included within Marine Spatial Planning to evaluate both opportunities and potential deleterious impacts from diversification (e.g. from aquaculture pollution).

Response: The focus of outcome 4 is diversification of production activities for fishers, fisher families and coastal communities. The main focus is on activities to develop value chains for locally produced seafood products for direct human consumption in the domestic market (i.e., anchoveta, jibia/pota, macroalgae), which is a major priority for both countries. There are also actions to explore diversification in other activities like gastronomy, tourism and cultivation of macroalgae and sea urchins. The focus is on exploring options for sustainable livelihoods.

The MSP exercise in Paracas includes fattening of scallops (*Argopecten purpuratus*), a major activity in the area. This exercise will allow to explore the interactions with other activities (e.g., port operation, tourism).

COUNCIL COMMENTS

Germany's comment 1. The Introduction of Coastal and Marine Spatial Planning (CMSP) in Peru is also an integral part of the project design "Regional Coastal Fisheries Initiative-Latin America" (GEFID: 9124). Any description on how both projects aim to gain synergies and avoid double funding would be appreciated.

Response: The Coastal Fisheries Initiative project (CFI) will initiate implementation during early 2018 and includes marine spatial planning exercises in Sechura bay in Peru and the Gulf of Guayaquil in Ecuador. The present project will implement coastal and marine spatial planning exercises in Paracas bay in Peru and Iquique bay in Chile. NOAA will be a key ally that will provide training and mentoring to the process in both projects. During project preparation the following strategy was agreed:

- 1. Take advantage of the early start of the CFI project to:
 - a. Train key personnel that will be related to the implementation of the Paracas and Iquique exercises (e.g., MINAM, SERNANP, MMA, DIRECTEMAR); and
 - b. Document experience, lessons and best practice.
- 2. Use the experience in Sechura (the first exercise to be executed in CFI) to adjust the workplan for Iquique and Paracas. Bring stakeholders from Sechura to Iquique and Paracas to facilitate peer-to-peer experience exchange and networking.
- 3. There will annual coordination meeting with CFI and other relevant projects. If pertinent, an MOU will be signed with the CFI project.

Germany's comment 2. Germany recommends that the project documents stress that they are fully in line and actively assisting the implementation of the FAO Code of Conduct for Responsible Fisheries (CCRF) as well as the FAO-Voluntary Guidelines on Small Scale Fisheries (VGSSF).

Response: The PRODOC indicates this.

Germany's comment 3. Germany recommends that the project actively seeks for more synergies gained from aligning the activities with other international projects in the region, such as the KfW project "Protected Area Programme coastal and marine protected areas III (PAN III)" and the GIZ project "Sustainable Use and Protection of natural Resources in Peru (ProAmbiente - 2012.2216.5)".

Response: During project preparation possible synergies and complementarity was analysed with the PAN III and GIZ projects. There is clear complementarity with PAN III in the intervention sites of Paracas bay. With GIZ the main complementarity might be with project "ecosystem-based adaptation measures for integrated management of marine-coastal zones (EbAMar)". However, until December 2017, the intervention sites for EbAMar had not yet been decided. GIZ has been kept informed of the PRODOC development and it is expected that at project start there will be conversations to link, as much as possible, the two projects.

USA's comment 1. As the proposal is further developed, greater consideration should be given to how the project will be sustained once the GEF grant is finished. However, the level of diverse partnerships, the existing bilateral Environmental Cooperation Agreement that went into effect in 2014, and other national and regional elements of the project indicate relevant and appropriate mechanisms that could support post GEF-grant sustainability.

Response: Post-project sustainability was a key concern during the project preparation phase. GEF resources have been allocated to actions that catalyse engagement and contributions of the range of stakeholders. In most cases, local funds will complement project action. For example, in actions for production diversification, the project will provide technical assistance, mentoring and support to prepare proposals to access funding from the various funds already available. Another example is the promotion of new seafood products for domestic consumption. In this case, the project will

contribute in the design and initial implementation of the promotion campaigns. But, these will be sustained and expanded by the existing promotion programmes (e.g., A Comer Pescado in Peru).

USA's comment 2. Finally, to the extent that the project involves workers hired on short-term contracts, proper safeguards should be in place to ensure that this contracting scheme is not used to violate workers' freedom of association.

Response: The project will be implemented using UNDP programme and operations policies and procedures. These include human resources management policies and procedures that guarantee labour rights.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS 85

A. Provide detailed funding amount of the PPG activities financing status in the table below:

ed Amount	Amount Spent To	Amount	
	date	Amount Committed	
200,000	180,628.11	19,371.89	
	200,000		

_

⁸⁵ If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.
GEF6 CEO Endorsement /Approval Template-August2016