

## **Strengthening management and governance for the conservation and sustainable use of globally significant biodiversity in coastal marine ecosystems in Chile**

### **Part I: Project Information**

**GEF ID**

10075

**Project Type**

FSP

**Type of Trust Fund**

GET

**Project Title**

Strengthening management and governance for the conservation and sustainable use of globally significant biodiversity in coastal marine ecosystems in Chile

**Countries**

Chile

**Agency**

FAO

**Other Executing Partner(s):**

Ministry of Environment

**Executing Partner Type**  
Government

**GEF Focal Area**

Biodiversity

**Taxonomy**

Focal Areas, Fisheries, Certification - International Standards, Productive Seascapes, Community Based Natural Resource Mngt, Stakeholders, Civil Society, Non-Governmental Organization, Community Based Organization, Local Communities, Beneficiaries, Sex-disaggregated indicators, Adaptive management, Innovation, Biodiversity, Academia, Mainstreaming, Protected Areas and Landscapes, Coastal and Marine Protected Areas, Influencing models, Strengthen institutional capacity and decision-making, Trade Unions and Workers Unions, Private Sector, Individuals/Entrepreneurs, Gender Equality, Gender Mainstreaming, Capacity, Knowledge and Research, Capacity Development, Learning, Climate Change Adaptation 1, Climate Change Mitigation 0, Climate Finance (Rio Markers)

**Duration**

4

In Months

**Agency Fee(\$)**

332,782

**Submission Date**

10/19/2018

## A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-2_P7	GET	2,049,356	4,500,000
BD-1 _P1	GET	1,453,612	18,800,000
<b>Total Project Cost (\$)</b>		<b>3,502,968</b>	<b>23,300,000</b>

## B. Indicative Project description summary

### Project Objective

Develop and implement a governance system that integrates, coordinates and articulates public, private and civil society institutions for the conservation and sustainable use of coastal marine ecosystems.

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1. Governance system for the conservation and sustainable use of coastal marine ecosystems	Technical Assistance	1.1 Stakeholders apply new governance system that integrates, coordinates and articulates public, private and civil society institutions for the conservation and sustainable use of coastal marine ecosystems	1.1.1 Mechanisms established to support public sector decision making based on an ecosystem approach to fisheries (EAF).  1.1.2 Local communities (tour operators, citizens, local government officials, artisanal fishermen and women)	GET	1,007,991	5,595,238

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
		<p><b><u>Indicators:</u></b></p> <p><i>Area of coastal marine ecosystems with strengthened management and governance systems, with a target of 500,000 ha in the north of Chile and 1,200,000 ha in southern Chile (indirect coverage, upscaling from pilot areas)</i></p> <p><i>Number of norms for the conservation and sustainable use of coastal marine ecosystems that integrate biodiversity considerations, with a target of two</i></p> <p><i>No. people trained to identify, prioritize, implement, monitor and evaluate ecosystem based conservation strategies, with a target of 10</i></p>	<p>apply EAF principles in the development of community level management plans to conserve and sustainably use coastal marine ecosystems</p> <p>1.1.3 Capacity building programme for the conservation and sustainable use of coastal marine ecosystems implemented.</p> <p>1.2.1 MPA management implemented with regional and local agreements that promote the participation of local actors</p>			

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
		<p>1.2 Increase of Marine Protected Area (MPA) management effectiveness</p> <p><b><u>Indicator:</u></b></p> <p><i>Improvement in METT score at project closure over baseline value, with a target of 25% increase (to be validated during PPG)</i></p>				
2. Biodiversity conservation objectives and methods mainstreamed into Chile's municipal coastal planning and artisanal fishery policy and practice.	Investment	<p>2.1. Coastal marine ecosystem of Ecologically or Biologically Significant Areas (EBSA) managed under ecosystem approach to fisheries</p> <p><b><u>Indicators:</u></b></p> <p><i>Number of stakeholders applying more BD friendly technologies and sustainable practices such as tourism development, seaweed repopulation, new fishing technologies, or crab fattening (target to be defined)</i></p>	<p>2.1.1. Pilot coastal communities adopt BD friendly management practices and technologies to sustainably utilize marine resources and marine ecosystems.</p> <p>2.1.2 Local capacity development program established to support the implementation of community-level management plans (in 1.1.2)</p> <p>2.1.3. Municipal Environmental</p>	GET	1,958,535	15,466,667

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
		<p><i>Change in stakeholders communities income from applying sustainable technologies and practices (target to be defined)</i></p>	<p>Certification System (SiCAM, in Spanish) strengthened by incorporating a coastal marine component into its planning and appraisal processes, (to be tested with the communities and municipalities of the pilot areas).</p>			
		<p><i>Number of municipalities certified by the SiCAM, with a target of 2</i></p>	<p>2.1.4 Incentives developed to promote the participation of coastal communities in the management and governance of MPAs in order to reduce threats to the conservation of coastal marine ecosystems with biodiversity of global significance and implemented with communities of the pilot areas.</p>			
		<p><i>Number of incentives schemes to promote the participation of coastal communities in MPAs management and governance, with a target of 2</i></p>				

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
3. Monitoring and Evaluation (M & E)	Technical Assistance	3.1. The implementation of the project is supported by an M & E strategy based on measurable and verifiable outcomes and adaptive management principles.	<p>3.1.1. M &amp; E strategy developed with relevant stakeholders, clearly defining the expected outcomes, expected implementation timeframe, and confirmation through objectively verifiable indicators and means of verification.</p> <p>3.1.2. Mid Term Review and Final Evaluation carried out</p> <p>3.1.3. Best practices and lessons learned systematized and disseminated to a variety of audiences and stakeholders.</p>	GET	369,634	1,119,047
			<b>Sub Total (\$)</b>		<b>3,336,160</b>	<b>22,180,952</b>
		<b>Project Management Cost (PMC)</b>	<b>GET</b>		<b>166,808</b>	<b>1,119,048</b>
			<b>Total Project Cost (\$)</b>		<b>3,502,968</b>	<b>23,300,000</b>

For multi-trust fund projects, provide the total amount of PMC in Table B and indicate the list of PMC among the different trust funds here:

### C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Government	Ministry of Environment	In-kind	Recurrent expenditures	2,300,000
Government	Undersecretariat for Fisheries and Aquaculture	Grant	Recurrent expenditures	13,500,000
Government	National Fisheries and aquaculture service (Sernapesca)	In-kind	Recurrent expenditures	3,000,000
Government	Other Public services (GORE, Municipios)	In-kind	Recurrent expenditures	2,000,000
CSO	NGOs	In-kind	Recurrent expenditures	1,500,000
Others	Universities	In-kind	Recurrent expenditures	1,000,000
<b>Total Project Cost(\$)</b>				<b>23,300,000</b>

Describe how any "Investment Mobilized" was identified

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)
FAO	GET	Chile	Biodiversity		3,502,968	332,782
<b>Total Project Cost(\$)</b>					<b>3,502,968</b>	<b>332,782</b>

**E. Project Preparation Grant (PPG)**

PPG Amount (\$)  
150,000

PPG Agency Fee (\$)  
14,250

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)
FAO	GET	Chile	Biodiversity		150,000	14,250
<b>Total Project Costs(\$)</b>					<b>150,000</b>	<b>14,250</b>

# Core Indicators

## Indicator 2 Marine protected areas created or under improved management for conservation and sustainable use

### Indicator 2 Marine protected areas created or under improved management for conservation and sustainable use

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
30,335.00	0.00	0.00	0.00

### Indicator 2.1 Marine Protected Areas Newly created

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
Isla Chañaral de Acetuno	063	Habitat/Species Management Area	0.00			
Islas Choros Damas	064	Habitat/Species Management Area	0.00			
Pitipalena - Añihue	161	Protected area with sustainable use of natural resources	0.00			

### Indicator 2.2 Marine Protected Areas Under improved management effectiveness

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
30,335.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Isla Chañaral de Acetuno	063	Habitat/Species Management Area	2,695.00						
Islas Choros Damas	064	Habitat/Species Management Area	3,778.00						
Pitipalena - Añihue	161	Protected area with sustainable use of natural resources	23,862.00						

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

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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1,700,000.00			
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Indicator 5.1 Number of fisheries that meet national or international third party certification that incorporates biodiversity considerations 

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
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Type/name of the third-party certification

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

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)
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0	0	0	0
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LME at PIF	LME at CEO Endorsement	LME at MTR	LME at TE
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## Part II. Project Justification

### 1a. Project Description

- a. The global environmental and/or adaptation problems, root causes and barriers that need to be addressed;
- b. The baseline scenario or any associated baseline Programs;
- c. The proposed alternative scenario with a brief description of expected outcomes and components of the Program;
- d. Alignment with GEF Focal Area and/or Impact Program Strategies;
- e. Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and co-financing;
- f. Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and
- g. Innovation, sustainability and potential for scaling up.

#### **Global environmental significance of coastal and marine ecosystems in Chile**

1. The coastal and marine ecosystems in Chile are heavily influenced by the Humboldt Current System (HCS),<sup>[1]</sup> one of the most productive ecosystems on earth and a globally significant biodiversity area. The general oceanography of the HCS is characterized by a predominant northward flow of trickling waters of sub-Antarctic origin and by a strong upward flow of cold trickling waters of equatorial origin which is rich in nutrients. The upward current appears along the northern and central coast of Chile, and its appearance changes from a continuous flow (not seasonal) in the north of Chile up to a more seasonal pattern in the south-central of Chile.

2. The HCS is characterized by a globally significant biodiversity and is designated as a priority ecoregion for conservation and is included in the Global 200 list of the World Wide Fund (WWF). There is a rich diversity of seabirds that cover at least 14 breeding species, 9 of which are endemic. Marine mammals are observed mainly covering the continental shelf of the HCS and even when there are no endemic species, the total species richness reaches at least 22 species, mostly cetaceans. In general terms, the marine flora and fauna of Chile exhibits a high degree of geographic isolation, with only a few similarities (especially in endemic species) with nearby equatorial marine biotas (Galapagos, Ecuador and Juan Fernandez)

3. The high productivity of the marine and fishing ecosystems makes Chile one of the main fishing producing countries of the world, and fishing and aquaculture are among the most relevant economic and social productive activities at the national level. In 2016, the total fishing landing was 2.87 million tons and the aquaculture production 1.05 million tons, with 73% corresponding to

fisheries and 27% to aquaculture. The volume exported was 1.44 million tons. It is estimated that the direct and indirect labour force associated with fishing and aquaculture activities in Chile would exceed 200,000 people and in some coastal sectors is the only source of income.

4. A total of 141 marine species are included in the fisheries sector, of which 74 are fish, 23 crustaceans, 31 molluscs and 13 algae. However, only a few of them make up the bulk of the landing. Anchovy (*Engraulis ringens*), common sardine (*Strangomera bentincki*), horse mackerel (*Trachurus murphyi*), and mote sculpin (*Normanichthys crockery*) accounted for 83% of the fish landing in 2013. Similarly, the giant squid (*Dosidicus gigas*) and the Chilean kelp (*Lessonia beteroana*, *L. spiaca*) accounted for 85% and 65% of the mollusc and algae landing, respectively. Aquaculture is carried out with 20 species: seven fish, eight molluscs and five algae, where fish production represents a 74% of the total. The main cultivated species are the Atlantic salmon (*Salmo salar*), silver salmon (*Oncorhynchus kisutch*), rainbow trout (*Oncorhynchus mykiss*) and mussel (*Mytilus chilensis*).

5. After a historical growth with more than 8 million tons in 1994, fishery has experienced a downward trend over the last decade due to overfishing of several fishery resources. Aquaculture has grown considerably over the last decades in terms of volumes and profits, from 184,000 tons in 1994 to 1.2 million tons in 2014, although this represents a smaller volume compared to the previous year. However, the total volume of landings and harvests shows a marked downward trend. The average volume of 3.8 million tons a year between 2009-2014 is lower than the average of 4.7 million tons in the last decade, that have dropped to 3.05 millions tons for the 2015-2016 period, what reflects a deterioration in major fisheries and aquaculture. This results in negative socio-economic impact, namely, on fisher communities' income and food safety.

6. With an export-based economy, Chile is active in maritime traffic and navigation is an important activity in many areas. The port system of Chile is comprised of 56 ports: 10 State-owned for public use, 14 private-owned for public use and 32 private-owned for private use. Each port has an important role in the economic development of the regions where they are located, serving the need of international trade y maritime traffic of diverse cargo. The total maritime cargo transported in 2016 in Chile was 1.12 million tons deadweight (TDW) and the total number of Chilean flag cargo ships is 237. The average annual growth of the sector is around 8%.

7. Tourism is one of the fastest growing sectors of Chile. Up to July of 2018, 3.6 millions international visitors chose Chile as a touristic destination of which 78% declare that there were attracted by nature and many of them visited protected areas. In 2014, Chile developed a National Plan for Sustainable Tourism for the 2014-2018 period, that include an action plan for 20 protected areas to increase their touristic value and supply, coordinating with the Ministry of the Environment and other agencies for the implementation.

### *Threats to coastal marine ecosystems biodiversity*

8. Coastal marine ecosystems in Chile are severely degraded. Anthropogenic activities due to inadequate municipal-level coastal planning and inappropriate fishing, aquaculture, navigation and coastal development practices put pressure on these ecosystems and have led to degradation of habitats and their biodiversity in several areas of the country. The main pressure stems from fishing, though other activities such as port activities, urban coastal settlements, hydrocarbon exploitation and maritime traffic have negative impacts that relate mainly to marine pollution. The increase in harmful algae bloom in the southern regions is also significant, which, together with contributing to a reduction in fish and aquaculture production (mainly molluscs), causes the mortality of fish, birds, marine mammals, decreases biological diversity and alters the ecosystem food chains.

9. The current state of the main national fisheries shows a significant deterioration of fish stocks. [2] By 2017, the status of the 26 main fisheries in operation in Chile was as follows: 9 were classified as depleted or collapsed, 7 overexploited, and 8 fully exploited, plus one in undetermined condition and another underexploited.[3] Annex D presents a summary of the main types of fisheries found in the areas that will be the target of this project. The artisanal fishery sector puts significant pressure on benthic resources along the coastline as well as to pelagic and demersal resources; the latter in conjunction with the industrial sector.[4] Overexploitation of benthic resources by artisanal fisheries increased as the sector incorporated technologies such as hookah diving that intensified extraction activities in a short period of time. In this context, the government of Chile has been strengthening the governance and implementation of Benthic Resource Management and Exploitation Areas (AMERB, in Spanish). These areas provide exclusive access and are administered by artisanal fishermen and women, and to date have focused on reducing the fishing effort—i.e. limit the number boats and fishermen that have access to the fishery in order to reduce the catch.

10. Aquaculture in some areas poses a threat to marine ecosystems. In 2017, 20% of the Environmental Information (INFA, in Spanish) of the aquaculture farms reported anaerobic conditions, with evident impacts on benthic habitats[5]. Most of these are large non-native salmon farms. The use of antibiotics and antiparasitics largely exceeds the quantities applied in other leading salmon farming countries such as Norway. The impacts of salmon farms over marine mammals routes, escapes of non natives fishes to the wild, transfer of diseases and parasites, effects of chemicals and antibiotics into the wild have not been assessed.

11. The current deterioration of fisheries in Chile has negative socio-economic effects on coastal communities. The fisheries sector provided direct employment to 150,000 people in 2013, of which 47.3% were artisanal fisheries, 26.2% processing industry, 24.2% aquaculture and 2.2% for industrial capture fisheries. In some coastal areas this is the only income source. It estimated that female workers constitute 30% of the fisheries and aquaculture workforce. The decline in artisanal fisheries landings over recent years has led to lower income and has put pressure on the livelihoods of vulnerable communities. In relation to food security, the lower number of

landings of fresh species for direct human consumption have influenced the availability and price of everyday food for the Chilean population.

12. As discussed below, the government of Chile has developed an institutional and legal framework to address anthropogenic threats in a holistic manner. However, there are important gaps in this institutional and legal/policy planning framework. Consequently, the proposed project will focus on coastal communities and their activities, with emphasis on artisanal fisheries,<sup>[6]</sup> as they represent an important source of pressure to marine ecosystems and, at the same time, they are the most affected stakeholders by resource degradation caused by other sectors located in the coastal border. In addition, the project is focussing on one strategic area of land-use planning sector – municipal level coastal planning via micro-zoning (see paragraph 13 below)-- and the need to mainstream biodiversity conservation objectives and practices into these planning tools. Regional governments are trying to include an integrated vision of the territory and its ecosystem services within activities that support ordering and planning of the coastal border. The goal is to convert ecosystem and species conservation into concrete actions that all inhabitants of the territory can commit to.

### **Project sites**

13. Two intervention sites were selected based on the following criteria: (i) being located within Ecologically or Biologically Significant Marine Areas (EBSAs), including AMERB or Marine Protected Areas (MPA); (ii) that local or regional processes and/or exercises and/or territorial planning such as coastline macrozoning, regional land-use plan or territorial planning, among others, have been developed; and (iii) be located in municipalities involved in territorial planning processes and local organizations duly identified and committed. The selected sites are:

- Community of Chañaral, located within the Freirina Commune, in the Atacama Region, and Punta de Choros, in the Coquimbo Region. These communities are located within the coastal marine space from Isla de Chañaral Marine Reserve and Choros y Damas Reserve (all part of the Humboldt Penguin National Reserve) and nearby AMERB. In these communities, the coastal ecosystem of the Humboldt Current includes 8 islets. Almost 70% of the area of the archipelago is under official control (i.e. publicly owned). It includes coastal marine areas of high biodiversity and under conservation regimes: Choro and Damas Reserves, Humboldt Penguin National Reserve and Punta Choros Nature Sanctuary. The productivity is high thanks to the coastal upwelling phenomena that provides a favourable habitat for a wide range of marine species. These areas are home to 80% of the Humboldt Penguin population in their natural habitat (vulnerable category). The biological and landscape attributes of these islands have allowed the development of an important fishing, touristic, research and navigation activities associated with the uses of the coastal communities such as the extraction of benthic resources within the AMERB and a local tourist activity that has experienced steady growth over the years.

· Community of Puerto Cisnes, located within the Cisnes Commune in the Aysen Region. This community is located next to the coastal marine space that includes the Pitipalena-Añihue and the Añihue Private Reserve, as well as the neighboring AMERB. There are ecosystems of fjords and channels in this area, unique environments that exist in few places of the world. These ecosystems stand out because of the high biological productivity due to the contribution of sediments rich in nutrients coming from the rivers and the snowmelt from glaciers. The seascape's productivities allow a series of activities such as salmon farming, artisanal fisheries, research, tourism and others.

14. Annex D presents a summary of the main fisheries in these two regions.

### **Institutional and legal framework for BD conservation**

15. Marine biodiversity conservation in Chile is undergoing a process of transformation<sup>m</sup>. This transformation was led by the government and civil society and was supported by GEF-financed projects, namely projects No. 1236 (Chile MUMPA)[8] and 2772 (Chile SNAP)[9]. The Chile MUMPA project supported the development of the legislation that defines "Multiple-Use Marine Protected Areas" (MUMPA) and assigned their overall responsibility to the ministry of Environment. Project resources were used to formally create three MUMPAs, to develop initial management plans, and to pilot activities that could cover the long term financial needs. Their management was given to public-private partnerships that were supported by the corresponding Regional Governments and local not-for-profit entities. MUMPAs were positioned as a tool for local and regional development by making them visible and then empowering regional government and other parties involved. While the creation of these MUMPAs represented a significant advance within Chile's protected area system, there were some shortcomings related to stakeholder participation in the management process and the process to develop management plans that this project will address (see discussion on remaining barriers #2 and #3 below).

16. Project PIMS 2772 focused on the strengthening of protected areas in Chile, the development of learning tools to launch an integrated National Protected Area System and decision-making processes from a legal perspective, on financial sustainability, and capacity building. This includes the establishment of a PA Service responsible for the overall management of PA. With respect to Marine Protected Areas (MPA), PIMS 2772 supported the design and financing of the management plan for La Rinconada Marine Reserve (pilot activity). The proposed project will support the implementation of the governance model designed under PIMS 2772 by introducing ecosystem-based management principles to the communities and municipalities responsible for MPAs under the PROT and ZBC

17. Regarding addressing the threats to marine biodiversity caused by production sectors, the government of Chile has set up a legal and institutional framework to address them in a holistic manner, but some work remains to be done. In 1995 the government of Chile established its National Policy for Coastal Management (PNUBC) together with its National Commission (CNUBC). The objective of the CNUBC is to propose the zoning of the coastal area in order to regulate the impacts of the productive sectors.[10] The PNUBC creates the National and Regional Coastal Management Commissions (CNUBC and CRUBC, respectively) which are in charge of developing the macro- and micro-zoning starting from 80 meters above the highest point of the tide to the 12 nautical miles of territorial sea. To date, only two regions in Chile (those targeted by the project) have developed their macro-zoning. While these instruments are broad enough to address from a general perspective all sectors affecting marine biodiversity, the proposed project will focus on the fisheries sector, particularly on small scale (community-based) fisheries located in the area of influence of selected Marine Protected Areas. The development of preferred land uses (i.e. macro- and micro-zoning) follows a top-down participatory approach, where the government bodies identify the “preferred uses” based on established parameters, and then the private sector and other users are invited to discuss the proposal. Therefore, there is no strategic vision for biodiversity conservation within this planning process. The proposed project seeks to work with local communities to mainstream conservation into the planning process.

18. In addition, currently the main instruments for coastal land use coastal planning in Chile are the Regional Land Management Plan (PROT) and the Coastal Border Zoning (ZBC). Both of these instruments are required by law to be subjected to Strategic Environmental Assessment. Unfortunately, the PROT is an indicative plan, and is not normative in nature. On the other hand, there are normative plans (Community Development Plans, or PLADECO in Spanish), but these only cover land, therefore they are not apply to marine environments. Therefore there is a currently a protection vacuum for the marine space associated to MUMPA. The Ministry of Environment will be responsible for the overall management of these areas once the Law that creates the Biodiversity and Protected Areas Service developed under PIMS 2772 is approved by the National Congress. In this context, the project seeks to test management and governance systems that can be adopted by the BD and PA Service once it is operational.

19. While there are no indigenous communities with EMCPO requests in the pilot sites,[11] the project will be implemented in two Regions of Chile that are known to have indigenous populations. During the design phase of the project, the communities will be invited to get acquainted with and participate in the project. The process of consultation and joint work with the project, will be developed according to the protocol established by the National Corporation for Indigenous Development (CONADI, in Spanish). This consultation process will also consider the FAO guidelines for consultations with indigenous communities, consensus and prior agreements (<http://www.fao.org/3/a-i4413e.pdf>).

### **Remaining barriers to proper management and governance of coastal marine ecosystems**

20. The evaluation of the 2003 National Biodiversity Strategy (NBS) and its Action Plan 2003-2010 concluded that the marine environment hasn't received enough attention within the nation's efforts to manage biodiversity. Specifically, marine biodiversity has not been properly mainstreamed in public policy instruments and productive sectors (public and private) have little influence on the management of the resources. The new National Biodiversity Strategy of 2018[12] has the goal to fill a series of gaps related to the capacities and participation of local actors in the management of marine protected areas and their buffer zones, mainstreaming biodiversity and the lack of capacity and insufficient governance mechanisms both at national and municipal level to promote conservation and sustainable use of marine ecosystem biodiversity.

21. Chile has neither given official protection nor has an effective management of the biodiversity and marine ecosystems of its Ecologically or Biologically Significant Marine Areas (EBSAs). However, there are studies of the Ministry of the Environment identifying areas of high conservation value, many of which overlap with the EBSA areas. Traditionally, the management system of marine ecosystems in Chile has consisted of a fragmentation in the governance system, where the specific uses of ecosystem services are addressed by different institutions that issue their own regulations, without a comprehensive and coordinated view of the flow of information. Decisions are made at the central level, and local actors are not given the tools so the processes can be autonomous. As a result, there are neither institutional agreements nor local capacity to foster BD conservation, structure and functioning of the ecosystem, avoid irreversible impacts on fisheries ecosystem and reduce undesirable reversible impacts (e.g., bycatch and feeder fish).

22. The Chilean Fisheries legislation considers the ecosystem based approach as the basis for sustainable fisheries.. The purpose of the Ecosystem Approach to Fisheries is to plan, develop and manage fisheries, taking into account the multiple needs and desires of the society, without affecting the different options, so future generations may benefit from all goods and services from marine ecosystems.

*Barrier # 1: Weak institutional and regulatory framework and institutional capacities to mainstream biodiversity considerations in the management of coastal marine fisheries.*

23. Decision-making processes at the public level are characterized by excessive centralization and fragmentation, and low effective participation of local institutions (regional directions, municipalities, etc) in for coastal management and marine governance. Several national institutions are involved in coastal marine ecosystems and there is no coordination view between these public entities at the national regional and local level, nor coordination mechanisms between the central, regional and local levels, hence, the actions taken continue to be sectoral and based on the central level.

24. There are more than 100 coastal municipalities along the Chilean coastline, of which, a very low percentage have carried out participatory microzoning processes of the coastline and, therefore, of the definition of uses in a consensual manner. This means that private-public investments are not generally planned and with a view of the territory and its sustainability. The municipal teams are not prepared for global management and have no connection with public planning bodies regarding coastal marine biodiversity issues. There are no qualified professionals to deal with coastal marine and management issues, and in most cases, there is no environmental authority.

25. Chile has made progress in the creation of marine protected areas (MPAs), mainly on oceanic islands, but is still below 10% in many core regions, including EBSAs. Many MPAs have ongoing management plans, some more advanced than others, but none funded. Several institutions are involved in the management of MPAs, but there is great inertia of the public services to transfer responsibilities to the communities for the management of MPAs. MPAs are legally required to submit management plans for their natural populations, research plans, dissemination plans, but it is necessary to strengthen management and governance through local agreements in terms of who will be in charge of the administration. The experience is incipient and it is necessary to support, reinforce and crystallized local processes led by municipalities to strengthen marine coastal management and conserve biodiversity.

*Barrier # 2: Limited capacities of local organizations and communities to plan, develop and implement operational mechanisms for an adequate management coastal marine ecosystems based on a common view of the territory.*

26. Private and civil society organizations usually do not participate in coastal management issues, except for fisher organizations linked to benthic resources management and exploitation, and NGOs linked to the marine issue. If they exist, the management plans are usually for the BRMA, but these are related to the fisheries activity of the marine areas and not explicitly to conservation management, so there is no experience in the development and implementation of management and governance plans. There is no relationship between the existing plans and regional and local territorial planning developed under the coastal macro and microzoning processes.

27. As a result, good practices are insufficient and poorly linked to coastal marine ecosystems. There is limited information and knowledge at the community level to implement good practices and proper coastal marine ecosystems management. There is no adequate provision of community-level training, other than that developed by universities and NGOs. Although there is abundant environmental information, the community is lacking the capacities to use such information for managing and planning activities. In general, there are very few information products designed for these audiences. The transfer of information, knowledge and lessons learned regarding fishery resources management, biodiversity and coastal marine ecosystems, is still insufficient at the local community level, which makes it difficult to replicate successful experiences.

28. There is no sufficient incentive to promote the participation of local actors in the management of coastal marine ecosystems. Although productive incentives are being developed for the repopulation and cultivation of benthic species (especially algae) of economic significance, no proposals have been developed aimed at the conservation of ecosystems, species or genes. This approach from the resource and not from the communities who make a living from their resources, prevents from making headway in a local proposal of sustainable development where the community, together with the local government, defines priorities and ways to maintain well-being along with their local wisdom and traditions.

## 2) Baseline scenario and associated baseline projects

29. As mentioned in paragraph 12 above, the **Undersecretariat of Armed Forces** developed the National Policy on the Use of the Coastal Border (PNUBC[13]) and its national commission (CNUBC[14]). The role of the CNUBC is to propose the zoning of the spaces that make up the coastal border in order to regulate the potential impact of the productive sectors. The National and Regional Secretariats (SNOBC and SROBC, respectively) are responsible for the development of the macro- and micro-zoning of the Chilean coastal border. Only Aysen and Coquimbo Regions in Chile have developed their macro-zoning, and the proposed project will support the micro-zoning of the selected sites.

30. The bill for the creation of the new *Biodiversity and Protected Areas Service and the National System of Protected Areas* is currently being revised at the National Congress[15] and seeks to organize the existing institutions in the field of biodiversity, since there is a multiplicity of standards and actors involved in the current protection of biodiversity and management of protected areas, including MPA; generate diverse and practical funding mechanisms, both public and private; and have a regulatory framework on the activities to be developed by users of a given area and control mechanisms[16].

31. The need of integration of the marine environment to reduce impacts and achieve sustainability is incorporated into the *National Biodiversity Strategy (NBS)* (currently being updated by the **Ministry of the Environment - MMA**). In the context of the NBS, the MMA is prioritizing the dissemination of the links between marine biodiversity, ecosystem services and human well-being. The Biodiversity Action Plan 2030 (currently being finalized) includes a chapter on Marine Biodiversity Conservation that focuses on (i) promoting the sustainable use of biodiversity for human welfare, reducing the threats on ecosystems and species; (ii) raising awareness, participation, information and knowledge on biodiversity as the basis for community welfare; (iii) developing robust institutionality, good governance, and fair and equitable distribution of the benefits from biodiversity; (iv) mainstream biodiversity into public policies, plans and programs in order to protect and restore biodiversity and ecosystem services. The Project will support these targets, mainly iii and iv.

32. In order to contribute to targets i and ii, the MMA implements several initiatives focused on generating information on coastal marine ecosystems to justify the adoption of an ecosystem based approach in the fisheries sector. The *Marine Ecosystem Classification System* is a programme to produce an inventory of Chilean marine ecosystems and to identify the characteristics and conditions of each of them as the first step towards planning with an ecosystem approach. The *Biodiversity Monitoring Network* is another programme aimed at designing, implementing and consolidating a monitoring network of biodiversity and integrity of ecosystems in response to climate change. In 2016, the Ministry of the Environment made the first diagnosis of marine monitoring in the country and the design of the needs to have an effective monitoring system. In 2016, the MMA presented, for the first time, a detailed cadastre of the marine ecosystems present in the entire exclusive economic zone of Chile, with 14 marine ecoregions which are home to around 96 marine ecosystems, defined and distinguished according to depth, floor substrate, unique areas such as the upwelling areas, seamounts, among others.

33. At local level, the MMA has a voluntary programme of the *Municipal Environmental Certification System* (SiCAM, in Spanish), to support municipalities that wish to develop a local environmental management process. The programme is based on ISO 14.00150 and EMAS51 standard is an integral and holistic system that allows the municipality to place itself in the territory as an environmental management model. There are some initial activities in the municipalities pre-selected for the pilot sites (Huasco and Pto Cisnes).

34. Given the importance of fisheries and the coastal marine interface for the country's economy, and the current situation, the Chilean Government is taking important steps to advance the reduction of anthropogenic pressures to coastal marine ecosystems biodiversity. The Government through the **Undersecretariat for Fisheries and Aquaculture (SUBPESCA)** requested FAO a revision of the Fisheries and Aquaculture Law [17] vis a vis international tools and good practices for sustainability and fisheries' sector good governance. In this analysis, several recommendations were made to improve the application of the ecosystem approach and scientific committees were established for each fishery, which are responsible for defining the catch quota. At the same time, the fisheries management committees were created for the participatory elaboration of management plans. The principle of sustainability, the ecosystem approach and the precautionary principle in the Law, highlight the importance that the country grants to the maintenance of fishery resources and their future protection.

35. In order to face overexploitation based on the requirements of the law, SUBPESCA manages the *Programme of Support to the Functioning of Fisheries Management Committees*, which provides financial support to the operation of said committees that meet regularly to discuss and analyse the state of marine resources based on scientific information and make management decisions, accordingly. The scientific committee defines fisheries quota per year and management committees decides in a participatory manner how this quota is distributed among stakeholder related to the sector. At the same time, to avoid overexploitation at BRMAs, SUBPESCA manages the *Fisheries Monitoring Programme Under the Management Areas and Management Plans Regime*, which

finances studies to gather information on the BRMA's for the implementation, maintenance and annual follow-up of the same. SUBPESCA also manages the *Benthic Resources Monitoring Programme*, which aims to generate knowledge and scientific-technical information about the main national fisheries to determine the amount of resources available for fishing per year.

36. Given its normative and policy-defining role for fisheries and aquaculture, SUBPESCA works with private companies to improve trawling fisheries, for instance by increasing the mesh in the fishing nets. For instance, shrimp and prawns fisheries have certified voluntarily through the Marine Stewardship Council. In addition, the SUBPESCA and the Institute for the Development of Fisheries (IFOP in Spanish) have developed a policy of "On-board" observers to ensure boats are using the right tools for the type of fishery they are targeting. Regarding by-catch, SUBPESCA is implementing its "Action Plan to reduce Incidental Catch of Albatross in long-line fisheries". Regarding ecosystem restoration, SUBPESCA developed its "National Algae Policy[18]" and the "Law for the repopulation of Algae"[19] in order to address the high pressures that algae prairies suffer. The law will provide subsidies to recover/re-populate macroalgae forests and other species of algae. It is expected that this program will help restore marine habitats and contribute to the recovery of marine biodiversity. Finally, regarding harmful algal bloom in the southern part of the country (around Chiloe), the SUBPESCA created an Investigative Commission and strengthened its early-warning monitoring network.

37. The **National Fisheries and Aquaculture Service (SERNAPESCA)**, in Spanish) has the mandate to monitor compliance with fisheries and aquaculture regulations, providing services to facilitate its proper implementation and conduct effective health management in order to contribute to the sustainability of the sector and protection of living aquatic resources and their environment. To this end, it has established the following strategic objectives: i) supervise fishing and aquaculture activities ensuring compliance with legal and regulatory norms set for the sector; ii) ensure the health quality of exporting fishery and aquaculture products in order to comply with the health requirements of importing countries; iii) ensure the health and environmental status of aquaculture contributing to the competitiveness of the sector; and iv) provide sectorial, complete, timely and reliable information. SERNAPESCA has the responsibility to manage fisheries and aquaculture registries and produce official statistics of the country which constitutes an important input for understanding and monitoring the vulnerability of communities.

38. SERNAPESCA is also responsible for the management of MPA and the BRMAs. Chile has been a pioneer in the management of benthic fishery resources in arranging the exploitation of artisanal fisheries. The Biodiversity Fifth Report reports BRMAs have shown greater wealth or number of species than in adjacent open access areas. Chile has also made progress in the development of MPAs, mainly on oceanic islands, but is still under 10% in many ecoregions, including EBSA. SERNAPESCA implements the *Programme for the Implementation of Marine Reserves Management Plans*. Marine Parks and Reserves must have a General Management Plan, covering programmes developed in the area (management, research, outreach, monitoring and inspection). This Programme is currently operational for reserves in Chile. The General Management Plans of Isla Chañaral and Islas Choros y Damas

(located in the proposed project zone) have already been designed and approved by SERNAPESCA. This project will support the implementation of these plans.

39. The **Dirección del Territorio Marítimo y Marina Mercante (DIRECTEMAR)** implements the *Coastal Environment Observation Programme* (POAL, in Spanish) to monitor annual fluctuations in the concentration levels of the main components of home and industrial waste, petroleum hydrocarbons and POP in bays, lakes and rivers under its jurisdiction, including coastal waters and its impact. The POAL determines the level and concentration of the main contaminants both in freshwater sources and coastal waters. Special attention is paid to bodies of water more commonly used in Chile, paying attention to the effects of two key factors: discharges from land and the impact of main economic activities on the water bodies. The DIRECTEMAR also develops Environmental Sensitivity Maps. These are tools to support decision-making for the management of oil spills. The POAL still requires the incorporation of biodiversity variables to be monitored so that the monitoring approach is systemic, supports good coastal marine ecosystems practices and can then be the basis for better decisions made by local, regional and national actors.

40. Several regional and local initiatives linked to coastal marine ecosystems exist in the project intervention regions. The coastal communities of both regions have initiated coastal microzoning processes that are strategic planning exercises with the relevant actors and users of the coastline and its ecosystems. Likewise, there are specific fisheries management committees in both regions, along with open area management plans and BRMA's management plans. They potentially have coastline working groups in the communities, as well as interdisciplinary working groups for the Biodiversity Strategy and the Ministry of Public Works with the Port Authority (DOP, in Spanish) and the Environmental Assessment Service, for the implementation of the Strategic Environmental Assessment tool that each investment project must submit. In addition, the Environmental Protection Fund finances initiatives with special emphasis on recycling education in environmentally certified schools. Current coastal marine planning exercises have emphasized relevant uses of the coastline such as: ports; shipping industries, human settlements and artisanal fisher coves; areas of public use; industrial, economic and development activities, with no consideration to biodiversity conservation.

41. In addition, two projects are implemented in the Aysen Region: The Project '*Study of the Marine Biodiversity of the Marine Protected Areas of Multiple Use Pitipalena – Añihue*' -UACH-MMA, whose objective is to know the current ecosystem status and health of benthic communities in the MPAs-MU Pitipalena - Añihue; and the Innova-CORFO Project '*Design of strategies to improve the productive management of the sector Benthic Artisanal Fishery: Pilot application in Raul Marin Balmaceda*' - UACH - CORFO (2017-2018) that aims to design strategies to improve the productive management of the benthic artisanal fishery through the adoption of tools for the recovery of local benthic fisheries and providing value added to their products.

42. Without the support of the GEF, in the ‘without project’ scenario, baseline initiatives will not be sufficient to leverage changes towards integrated management and governance of coastal marine ecosystems that allow their conservation and sustainable and resilient use on a scale important enough to counteract anthropogenic pressures on the biodiversity of these ecosystems, due to the existing barriers to achieve effective management and sustainable governance of coastal marine ecosystems.

### **3) Proposed Alternative scenario, including description of expected results and project components**

43. The Government of Chile is requesting GEF support to move towards the conservation and sustainable and resilient use of coastal marine ecosystems to maintain its biological integrity, diversity and ecosystem services for present and future generations. The objective of the project proposed is to develop and implement a governance system that integrates, coordinates and articulates public, private and civil society institutions for the conservation and sustainable use of coastal marine ecosystems. In keeping with the same, the project will: (i) develop a participatory model of governance and management based on coordination, articulation of public, private and civil society actors in order to conserve and make sustainable use of coastal marine ecosystems; (ii) promote a common vision of the territory with its relevant actors and tools available under a spatial planning and adaptive management approach to improve the conservation and sustainable use of coastal marine ecosystems; and (iii) strengthen management programmes for marine protected areas in coastal marine ecosystems with biodiversity of global significance.

44. The project seeks to mainstream biodiversity protection in two ways: first it will support the introduction of the ecosystem approach to fisheries into Chile’s land use planning process, and second, it will support the improvement of production and capture practices currently used by artisanal fishermen and women. These are described below. Please see Annex E for a schematic view of the proposed project.

45. Under component 1, the project will support mainstreaming BD conservation into the current legal and institutional framework established under the National Policy for Coastal Management (PNUBC) which is implemented by its National and Regional Commissions (CNUBC). Currently, the development of preferred land uses (i.e. macro- and micro-zoning to regulate impacts from productive sectors) follows a top-down approach where the government bodies identify the “preferred uses” based on established parameters, and then the private sector and other users are invited to discuss the proposal. Therefore, there is no participatory, integrated strategic vision for biodiversity conservation within this planning process.

46. In addition, there is currently a gap within the coastal planning system for key marine biodiversity conservation areas because, on the one hand, existing planning instruments (Regional Land Management Plan—PROT—and the Coastal Border Zoning—ZBC) are indicative in nature and national funds cannot be assigned through them. On the other hand, normative instruments such as Communal Development Plans (PLADECO in Spanish) only cover land areas and not marine areas. Therefore, areas such as Multiple Use Marine Protected Areas (MUMPA) currently cannot be allocated government resources. Furthermore, while the Ministry of Environment will be responsible for the administration of the system of MUMPAs once the Law that creates the Biodiversity and Protected Areas Service developed under PIMS 2772 (see question 4 below) is approved by Congress, the management of each area will be the responsibility of the CNUBC. In this context, the project seeks to test management and governance systems that can be adopted by the CNUBC once the BD and PA Service becomes operational and responsibilities are formally assigned by law.

47. Besides working on spatial planning, the project aims to improve productive practices currently used by artisanal fisheries to ensure the ecological integrity of the productive seascape in which protected areas exist as well as protected areas themselves and their long term sustainability (Component 2). This could include activities such as replacing gillnets (redes de enmalle) by long-line fishing (espinel), increasing farming areas for mollusks and algae, or crab fattening in the pilot areas. These specific technical and practice related improvements will be defined fully during the PPG. The goal is to ensure that pressures on key biodiversity areas are reduced while artisanal fishers maintain or improve their livelihoods in the long run.

48. For instance, algae are currently being over-exploited because of its economic importance. The project will work with artisanal fishermen and women to recover algae forests by building on current baseline government incentives (National Policy for algae repopulation and farming) and to train them on good practices in order to reduce degradation (i.e. ensure algae are not collected from the root to allow for their regeneration). This will be done within the governance framework established under component 1 (see point (1) above).

49. The strategy of the project is to modify paradigms at the national and regional levels, through the implementation of coordinating bodies to manage coastal marine ecosystems and, at the local level, by developing and launching a model of coastal marine ecosystems management and governance and ad-hoc biodiversity, articulated by municipalities and integrating views and expectations of public and private services and organized coastal communities, users and managers of the coastline. The hypothesis of the project that underlies its theory of change is that to remove the barriers and reverse the current situation it is necessary that the local actors themselves, empowered and with a bottom up approach, develop management and governance models according to local reality, to subsequently reach the regional and national level.

50. The strategy is based on the active participation of key public, private and community actors to develop a suitable environment for the conservation and sustainable use of marine and coastal ecosystems, generating social, environmental and economic benefits for local and regional stakeholders, thus ensuring sustainability of results and replication of experiences and lessons learned, as well as national and global benefits, while conserving the biodiversity of coastal marine ecosystems in Chile. The coastal communities are in rural areas, many of them still vulnerable, so the project will contribute to poverty alleviation as well as food security, cultural identity and preservation of traditions and local wisdom of coastal communities and indigenous peoples, and to the valuation of the natural coastal marine heritage, which does not recognize geographical barriers.

**Component 1** Governance system for the conservation and sustainable use of coastal marine ecosystems, with its relevant outcomes: **Outcome 1.1:** *Stakeholders apply new governance system that integrates, coordinates and articulates public, private and civil society institutions for the conservation and sustainable use of coastal marine ecosystems*, and **Outcome 1.2:** *Increase of Marine Protected Area (MPA) management effectiveness*

51. The project will develop mechanisms for inter-institutional coordination and articulation and public services decisions at national, regional and local levels based on various approaches such as the ecosystem and/or polycentric approach, including adaptive management. To this end, Working Groups (WG) will be formed with the objective of coordinating and advising on coastal management and governance at national, regional and local levels (in the regions and communities where the project intervention areas are located). The WG will be connected between them, thus creating a network of public and private institutions to strengthen partnerships between national, regional and local public and private institutions for adequate coastal management and governance. These working groups will promote the coordination of public and private baseline programmes on coastal marine ecosystems and emblematic species, contributing to the redesign and strengthening of such programmes at national, regional and local levels, as well as the promotion of good management practices, improving coordinated inter-agency outreach on relevant marine ecosystems (including ecosystem services, species, and their vulnerability at the national, regional and local levels) and management tools. By proposing an intersectoral articulation, it will be possible to propose consensual actions that reduce the risk of impact on the territory, thus contributing to resolve the fragmentation in the decision-making and to reach a sectoral territorial development planning, reducing the constant threat to degradation of ecosystems due to the lack of coordinated actions.

52. Community participation mechanisms will be promoted for the conservation and sustainable use of coastal marine ecosystems, which will be composed of communities and local organizations and coordinated with regional public services. Regional Zoning Committees will be strengthened where all users of the coastal areas are represented. These mechanisms of participation will contribute to strengthen the coordinating role of the municipality. In this sense, the local pilot zones will be selected considering that the municipalities are interested and committed and, in some cases, have already advanced in the certification of their environmental management, as is the case of Huasco and Pto Cisnes. It is also important, but nonexclusive, that they have experience in participatory

coastal planning processes and then lead management and governance programmes. The mayor and his municipal council will be the relevant actors along with the user organizations, in incorporating these changes of approach for the conservation and management of the coastline and, with this, the change of paradigm of centralized and decontextualized decision making. Likewise, women's participation in decision-making will be increased by ensuring a minimum percentage of women's representation in local groups, so that their knowledge and views are incorporated into the conservation of biodiversity of global significance in coastal marine ecosystems. This direct work of the local work tables will allow the contingency plans to be improved and hence, prevent future impacts on the environment, in addition to elaborate participatory plans that allow the recovery of the coastal marine ecosystems health that shows significant degradation levels.

53. Regional and local public services and municipalities will receive specialized training and technical assistance to develop their capacities for the conservation and sustainable use of coastal marine ecosystems, coastal marine spatial planning, and the integration and complementation of other regional and local public and private programmes. Training programmes and materials for the management and governance of coastal marine ecosystems addressed to regional and local teams will be developed, to prepare empowered local leaders on management and coastal governance issues that can support project interventions at institutional level in the pilot sites during the project duration and after completion, ensuring sustainability as well as the replication of lessons learned in other coastal marine ecosystems.

54. The decreed MPAs will implement their management plans, reaching regional and local agreements that promote the incorporation of local actors (communities and municipalities), as well as the development of their capacities, to participate actively in the MPAs management and the conservation of its biodiversity of global significance. This will include the development of needs assessment and strategies for a better management and to train local actors in such a way as to empower them in their roles and leadership to support MPAs management improvement from the local level. The development of skills will help to promote active participation in the spaces for the conclusion of plans and programmes for sustainable development, considering that marine and coastal spaces are more complex for stakeholder interactions with this environment than with terrestrial areas. The development of these instruments will contribute to the effective inclusion of local actors, which is important for improving MPAs management and ensuring the ecosystem health. This is one of the most effective ways to achieve the conservation of biodiversity of global significance by reducing threats to the environment.

**Component 2** Biodiversity conservation objectives and methods mainstreamed into Chile's municipal coastal planning and artisanal fishery policy and practice, and its outcome: **Outcome 2.1:** *Coastal marine ecosystem of EBSAs managed under ecosystem approach to fisheries*

55. The advances and activities will include the development and implementation of management pilot plans at the intervention sites, for coastal marine ecosystems that integrate considerations of conservation and sustainable use of biodiversity. This will be done with the active participation of public, private institutional actors, civil society and local communities, mainstreaming gender and indigenous peoples issue as well. The incorporation of the opinion and approach of the users from the beginning will serve to ensure that, the decisions about the actions that will be taken in the future within the framework of these plans, are based on agreements validated and based on what exists today and clear goals and responsible persons. These plans will serve to generate experiences and lessons regarding coastal marine ecosystems management. Management will be focused on the community, as the territorial space unit and extended to the territorial sea. One of the most significant ways to reduce threats to marine and coastal ecosystems is to have management plans which must previously define the territory vocation in terms of the activities that make sustainable development possible and drastically reduce threats to the marine environment itself and that of terrestrial origin as well. This will be the new approach and challenge.

56. Local community capacities will be developed through training and technical assistance to strengthen both men and women in pilot sites for the construction, implementation and execution of pilot plans of coastal marine ecosystem management. The development of capacities will enable to empower community leaders in coastal marine management and governance issues to support local actions to be implemented in selected ecosystems and to provide continuity to said actions to ensure long term sustainability. As there are unique local factors among the pilot sites, the exchange of experiences and lessons will be promoted among pilot site communities through internships and field visits. The visits of communities from other coastal areas to pilot sites will also be promoted with a view to encouraging the replication of experiences and lessons learned. The development of capacities will mainstream the gender approach, as well as specificities of indigenous peoples, and the dissemination of experiences and local wisdom. Likewise, the GIS databases will be unified under a dynamic and adaptive look in the pilot areas, and local monitors will be trained to make use of IT tools and databases. Having instruments such as programmes, plans and projects is one of the best ways for municipalities to have budgetary allocation to counteract threats to coastal marine ecosystems and have technical teams trained to work with technical assistance from other organizations.

57. Key stakeholders will promote the identification and development of good environmental, economic and social practices for the management of coastal marine ecosystems and disseminate and transfer these practices to local communities and organizations to strengthen management and governance in the selected pilot areas. This will be done with the active participation of public, private, civil society and local community actors, and mainstreaming gender and indigenous peoples' approaches. Good practices will include the existing practices that will be improved and new practices to be introduced, agreed and validated with key actors, especially pilot communities. Prioritized practices will be incorporated and validated in Community Development Plans. The appropriation of these good practices and their implementation by all actors at the local, regional and national levels will allow the activities in marine and

coastal ecosystems to be developed in a sustainable way, thus reducing threats such as indiscriminate fishing, land-based pollution, tourism of special interests without adequate rules, among others.

58. The Municipal Environmental Certification System (SiCAM) will be strengthened through the elaboration of a protocol for coastal marine issues, in which municipalities will develop agreed and planned coastal marine management and governance processes. Steps and criteria for certification will be defined with the participation of key stakeholders. This new certification will be implemented or improved by the municipalities of the pilot areas, which will be supported in the new protocol to facilitate the certification process. The certification will serve as a recognition to the municipalities of their commitment to their process of leveraging local capacities and implementation of community processes of coastal marine ecosystems management and governance and the challenge to improve the ways of facing their own development. Also, to have environmental certification at the municipal level will be an important step towards reducing threats to coastal marine ecosystems. Sustainable municipalities means that the actions carried out in their territory have a component of respect for the environment that eventually becomes a useful tool for the conservation of ecosystems.

59. In order to promote the participation of coastal communities in the MPAs management within the agreements framework, a scheme of incentives for communities will be developed for the implementation of good practices to reduce threats to MPAs, which will be prioritized by the community. The incentive scheme will be developed with the active participation of key institutional and community stakeholders, may be monetary or non-monetary, and will include specific incentives for women to help them to increase their participation in MPAs management and actions for biodiversity conservation.

**Component 3:** Monitoring and Evaluation (M&E) based on the principles of adaptive management, and delivery of measurable and objectively verifiable results, and its outcome: **Outcome 3.1:** *The implementation of the project is supported by an M & E strategy based on measurable and verifiable outcomes and adaptive management principles*

60. The outcome associated to this component is designed to ensure that the implementation of the Project is supported by an M&E strategy based on measurable and verifiable results and principles of adaptive management. A M&E strategy will be developed with the relevant actors who will clearly define the expected results, the expected timeframes for their achievements and their confirmation through objective indicators and means of verification. Annual work plans and corresponding budgets based on expected results and their respective progress will also be developed, including systematic steps and milestones required for measurable achievements. To assist in this process, the annual work plans will be articulated with annual progress indicators in a participatory manner for each outcome. Mid-term and end-of-period evaluations will be carried out at strategic intervals and with the objective of informing and advising on the implementation of the project in a constructive manner, paying attention to sustainability considerations, articulating a coherent "exit strategy" and implementing adaptive measures as needed. During project implementation, lessons learned and best

practices related to the project will be systematized and disseminated to various audiences and stakeholders. A web site of the project (with relevant links to the MMA, among others) will also be developed and maintained to share experiences, disseminate information, policy development and integration, highlight results and progress, and facilitate duplication of processes for the duration of the project.

#### **4) Alignment with GEF focal area**

61. Component 1 “Governance system for the conservation and sustainable use of coastal marine ecosystems”, and its relevant outcomes: **Outcome 1.1:** *Stakeholders apply new governance system that integrates, coordinates and articulates public, private and civil society institutions for the conservation and sustainable use of coastal marine ecosystems*, and **Outcome 1.2:** *Increase of Marine Protected Area (MPA) management effectiveness*, are aligned with two entry points of the GEF-7:

BD-1-1: Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors.

BD-2-7: Assist direct drivers to protect areas and species and improve financial sustainability, effective management and ecosystem coverage of the global protected area estate.

62. Component 2 “Biodiversity conservation objectives and methods mainstreamed into Chile’s municipal coastal planning and artisanal fishery policy and practice”, and its relevant outcome: **Outcome 2.1:** *Coastal marine ecosystem of EBSAs managed under ecosystem approach to fisheries*, is aligned with the following entry point of GEF-7:

BD-1-1: Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors.

#### **5) Incremental cost reasoning and expected contributions from the baseline and the GEF**

61. The project is based on an operational baseline managed mainly by the MMA, SUBPESCA and SERNAPESCA, among other actors described in the baseline section. All these institutions invest in having and developing human skills and infrastructure required

for the effective sustainability of marine ecosystems. However, this investment in specific areas is neither coordinated nor integrated to achieve greater efficiency and impact on the sustainability of marine ecosystems. These programmes, and particularly in relation to the local development benefits they provide, will be significantly modified, adapted and revised by the proposed project to include the conservation and sustainable use of coastal marine ecosystems within their operations and corresponding budgets in the intervention sites.

62. The barriers identified will be approached together with GEF resources, as detailed below. Under **Component 1**, GEF resources (USD 1,007,991) will contribute to removing barrier #1 through the development and implementation of a management and governance model that integrates, coordinates and articulates public, private and civil society institutions for the conservation and sustainable use of coastal marine ecosystems. This will include technical assistance for the implementation of coordination and participation mechanisms including participatory processes at the national, regional and local levels, mapping key actors, defining objectives and goals, participant roles and responsibilities, drawing up work plans, assessment of the needs to develop key actors' skills, strategies and capacity building plans. Removal of barrier #1 requires also the improvement of MPAs management effectiveness, with technical assistance to develop strategies for mainstreaming local stakeholders in MPA management and governance processes, the assessment of the needs to develop capacities so that local actors can contribute to the MPAs management and capacity building. Component 1 is aligned with two entry points of the GEF-7:

BD-1-1: Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors.

BD-2-7: Assist direct drivers to protect areas and species and improve financial sustainability, effective management and ecosystem coverage of the global protected area estate.

63. In **Component 2**, GEF resources (USD 2,622,375) will address barrier #2 investing in technical assistance for participatory elaboration of pilot plans for the management of coastal marine ecosystems; assessment of needs to develop local community capacities, develop strategies and local capacity building plans and their implementation, identify good practices, strengthen community certification schemes, and to develop incentives to promote the participation of local actors and their pilot implementation. Component 2 is alligned with the following entry point of GEF-7:

BD-1-1: Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors.

64. Finally, **Component 3** will have incremental GEF funding (USD 369,634) to monitor and evaluate, with emphasis on financing activities to monitor the project progress and compliance with indicators, mid-term and final external evaluations, systematization of experiences and lessons learned from the project, preparation of outreach materials, and dissemination of partial and final results and project outputs.

## 6) Global environmental benefits

65. The project will generate global environmental benefits, consistent with the national development priorities, sustainable in the long term by the local and regional benefits that will generate in terms of environmental sustainability, improved livelihoods, cultural reaffirmation and valuation of the natural coastal marine heritage. The main global environmental benefits to be achieved as a result of the project are: (a) Conservation and sustainable use of globally significant biodiversity in main coastal marine ecosystems in Chile, in 1,700,000 hectares of direct coverage and 400,000 hectares with potential of indirect coverage via replication; (b) Incorporation of conservation and sustainable use of biodiversity into policy and planning frameworks; (c) Improved capacity of at least 200 people (100 men and 100 women in communities prioritized for the conservation and sustainable use of coastal marine ecosystems); and (d) Improved MPA management effectiveness (Baseline and percent increase to be validated during PPG phase).

66. These benefits will translate into direct benefits to marine species, many of which are of global significance, including, but not limited to: molluscs such as mussels (*Mytilis chilensis*), choro mussel (*Choromytilus chorus*), gracilaria seaweed (*Gracillaria spp*), Chilean kelp (*Lessonia trabeculata and L. nigrescens*); birds and mammals: Humboldt penguins (*Spheniscus humboldti*), Peruvian diving petrel (*Pelecanoides garnottii*), bottlenose dolphins (*Tursiops truncatus*), dark dolphin (*Lagenorhynchus obscurus*) and fin whale (*Balaenoptera physalus*), minke whales (*B. acutorostrata*), Humpback whale (*Megaptera novaeangliae*), orca (*Orcinus orca*), pilot whale (*Globicephala melas*), sea otter (*Lontra felina*), among the most relevant. Likewise, the development of capacities, strengthening MPA management, good environmental and socio-economic practices, and other project actions will provide additional benefits in terms of adapting to climate change at the level of coastal marine ecosystems, contributing to the conservation of biodiversity of global importance.

67. The project proposed will contribute, through the generation of global environmental benefits, to the following Aichi Targets: (i) Target 1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.; (ii) Target 2: By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems; (iii) Target 3: By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or

reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions; (iv) Target 6: By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits; and (v) Target14: By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable. See Annex E for more detail on the specific contributions

68. At local and national level, the benefits of the project are: (a) Conservation and maintenance of ecosystem services provided by coastal marine ecosystems (artisanal and industrial fisheries); (b) Cultural, aesthetic and spiritual benefits: beauty of the landscape, places of cultural and religious significance, territorial identity; valuation of natural marine coastal heritage; (c) Benefits to the local economy by ensuring and improving livelihoods; and (d) Social benefits in terms of partnership and empowerment of local communities and local stakeholders. In terms of population quality of life and well-being: marine species used as healthier and less contaminated food, more frequent consumption if properly managed.

## **7) Innovation, sustainability and potential for scaling up**

### *Innovation*

71. The proposed project is innovative in the Chilean context as it proposes the development of management and governance models for coastal marine ecosystems that currently do not exist in Chile. The project aims to integrate stakeholders at the national, regional and local level so that they can protect key biodiversity areas based on an approach that starts from the communities and moves towards the ecosystems. In particular, it seeks to empower local communities in the process of mainstreaming biodiversity conservation into the territorial planning process. As discussed in paragraph 14, while the current planning system follows a top-down participatory approach, there is a limited strategic vision for long-term BD planning within the areas of influence of Marine Protected Areas. The proposed project will work with local communities to develop their capacity and build collaborative relationships from the ground up. In addition, the proposed project will seek to develop and test management practices and governance systems that can be adopted by the Biodiversity and Protected Area Service once the Law that creates it is approved by Congress.

### Sustainability

72. The project is in line with the national development objectives on issues related to biodiversity protection. Chile has developed a robust baseline of programs and policies to support biodiversity protection but work is still needed regarding coastal marine ecosystems. The project will generate mechanisms to support public sector decision-making based on an ecosystem approach to fisheries (EAF). It will facilitate the application of EAF principles by local communities (artisanal fishermen and women), in the development and implementation of community level management plans to conserve and sustainably use coastal marine ecosystems.

73. The project will have a strong emphasis on local capacity building with the aim to develop an environment that is conducive for the management and governance of ecosystems both at the community and institutional level. The participatory mechanisms that will be applied will ensure that key stakeholders will be the real owners of the project. The project will be sustainable in the long term once local organizations and municipalities assume the leadership of the project. Access to financing will be facilitated once local actors prioritize actions to implement and these actions are included into local development plans. The promotion of good practices for management of coastal marine ecosystems will contribute to the sustainability of results on the ground. Finally, information dissemination activities will help raise awareness about the value of these ecosystems.

### Replicability

74. The complementarity between the project and Chile's policies and national/provincial plans will ensure a high potential for replication. So far, Chile has established four EBSAs—two of these are covered by the project as pilot sites. Therefore, currently there are two more EBSAs where lessons learned and project experiences can be replicated. The local participatory models are commonly used by FAO, and can also be replicated in other municipalities not covered by the project. The systematization of lessons learned will be used to promote the replication of project results both at the national and the international level.

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[1] For full descriptions of the HCS please see Montecino and Lange (2009) “The Humboldt Current System: Ecosystem components and processes, fisheries, and sediment studies” in *Progress in Oceanography*, v83, i1-4, pg 65-79; and Serra et al. (2008) Sustainability of the Humboldt current large marine Ecosystem, in *Frontline observations on Climate change* at <http://humboldt.iwlearn.org/es/informacion-y-publicacion/HumboldtPDF.pdf>.

[2] 2017. State of the Main Fisheries in Chile (*Estado de las principales pesquerías chilenas*). The report for 2017 can be found here: [http://www.subpesca.cl/portal/618/articles-100052\\_recurso\\_1.pdf](http://www.subpesca.cl/portal/618/articles-100052_recurso_1.pdf)

[3] There are 43 formal fisheries in Chile. For 25 of these, their respective Scientific Technical Committee has defined the status of the resource ( based on biological points of reference, or PBR in Spanish). The remaining 18 fisheries do not have a formal PBR. Access to these resources is currently closed, therefore they are considered as under full exploitation.

[4] The industrial sector uses trawls which are regulated by the Undersecretariat of Fisheries and Aquaculture.

[5] Latest Environmental Information Report by Sernapesca from may 2018, can be found:  
[http://www.sernapesca.cl/sites/default/files/informe\\_semestral\\_2018\\_mayo\\_vf.pdf](http://www.sernapesca.cl/sites/default/files/informe_semestral_2018_mayo_vf.pdf)

[6] Artisanal fisheries in Chile are defined as fishermen operating boats smaller al 18 mt and less than 50 tons of capacity

[7] Araos, F., Godoy, C., De Andrade, R., Ther, F., Gelcich, S., Salas, C. “Conservación Marina y Costera en Chile: trayectorias institucionales, innovaciones locales y recomendaciones para el futuro” In: Ferreira, L.; Pardo, M.; Aledo, A.; Ortiz, B.; Schmidt, L. (eds) *Dimensões humanas das mudanças Ambientais e climáticas em áreas protegidas e vulneráveis em países de Iberoamerica*. Campinas: Editora UNICAMP, Brasil, (in press).

[8] GEFID No. 1236, “Conserving Globally Significant Biodiversity along the Chilean Coast”. Implemented by the Ministry of Environment with the support of UNDP.

[9] GEFID No. 2772, “Building a Comprehensive National Protected Areas System: A Financial and Operational Framework. SNAP is the Spanish acronym for National Protected Areas System.

[10] Coastal zoning in Chile includes various conservation categories, such as Benthic Resource Management Areas (BRMA) and Marine Protected Areas (MPAs) including Multiple Use Marine Protected Areas (MUMPAs) , which will be the focus of this project.

[11] ECMPO is the Spanish acronym for Espacio Costero Marino de los Pueblos Originarios. Supreme Decree No. 134-08 (2009, [http://www.subpesca.gob.cl/portal/615/articles-9548\\_documento.pdf](http://www.subpesca.gob.cl/portal/615/articles-9548_documento.pdf)). This decree establishes the rules under which an association of indigenous communities are assigned a delimited marine space for their administration.

[12] Estrategia Nacional de Bioversidad (ENB, in Spanish) published in 2018 and a specific chapter for marine issues and is available at: [http://portal.mma.gob.cl/wp-content/uploads/2018/03/Estrategia\\_Nac\\_Biodiv\\_2017\\_30.pdf](http://portal.mma.gob.cl/wp-content/uploads/2018/03/Estrategia_Nac_Biodiv_2017_30.pdf)

[13] National Decree 475 (January 1995). <http://bcn.cl/1w2pe>

[14] Members of the CNUBC: Minister of National Defense (presides), Undersecretariat of Marine, and representative of the Undersecretariat of Regional Development, the Undersecretariat of Fisheries, the Ministry of Planning, the Ministry of Public Works, the Ministry of Housing and Urbanism, the Ministry of Transport and Telecommunications, the Ministry of National Goods, the Chilean Army, the National Tourism Service, and Ministry of Environment.

[15] The law that proposes the creation of the SBAP and SNAP can be found here: <http://portal.mma.gob.cl/wp-content/uploads/2014/06/ProyectoLeyServicioBiodiversidad.pdf>. This law is yet to be approved.

[16] The proposed bill was developed with the support of the GEF (Project ID 2772, Building a comprehensive National Protected Areas System: A financial and operational framework). The full text of the bill (in Spanish) can be found here: <http://portal.mma.gob.cl/wp-content/uploads/2014/06/ProyectoLeyServicioBiodiversidad.pdf>

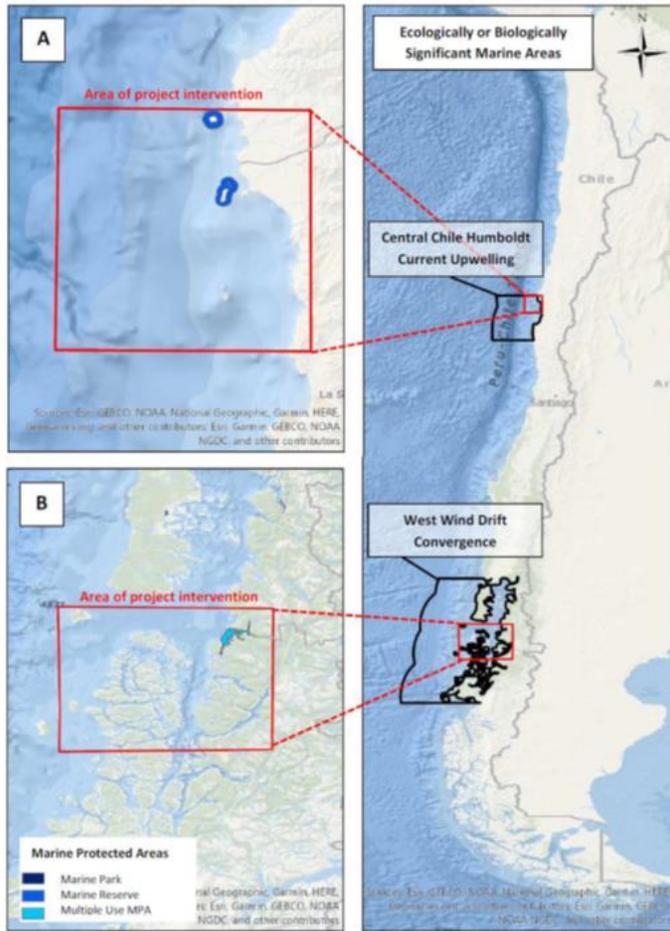
[17] Ley General de Pesca y Acuicultura (LGPA) N° 18.892 of 1989 and modifications introduced by Ley N° 20.657 of February 9th, 2013.

[18] <http://www.politicanacionaldealgas.cl/>

[19] Law No. 20.925 from 2016, which creates a monetary incentive program for the repopulation and planting of ecologically and economically important algae. The law will last 10 years and will support ventures that will benefit artisanal fishermen, organizations of artisanal fishermen and other small enterprises that comply with Law No. 20.416. See <https://www.leychile.cl/Navegar?idNorma=1091690> for the full text of the law.

## 1b. Project Map and Coordinates

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



**Figure 1.** Marine and coastal areas of project governance and management intervention (red areas) within two Ecologically or Biologically Significant Marine Areas (EBSAs) in the Chilean coast (black lines) in: A) Central Chile Humboldt Current Upwelling System; and B) West Wind Drift Convergence for the GEF project proposal "Strengthening management and governance for the conservation and sustainable use of globally significant biodiversity in coastal marine ecosystems in Chile". Within the marine and coastal areas of intervention (red lines), marine protected areas are shown (legend).

## 2. Stakeholders

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

Indigenous Peoples and Local Communities

Civil Society Organizations

Private Sector Entities

If none of the above, please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

### Stakeholders

#### *Public Agencies*

Ministry of Environment (MMA)

### Interest / Role in the preparation and design of the project

Executing agency: Leads the project design process. Calls for institutions and key players. Organization of consultation and design validation workshops at central and regional/local level.

Regional Secretariats of the MMA (pilot sites)

Direct and local coordination with municipalities and pilot communities to gather baseline information, organization of local consultation processes.

Ministry of Economy, Development and Tourism

Participation in consultation and design validation processes.

Undersecretariat of Fisheries and Aquaculture (SUBPESCA)

Co-executing agency: Provides technical information. Participates in consultations and project design validation processes. Zonal Departments will collaborate with municipalities and communities to gather information and organization and participation in consultation processes.

National Fisheries and Aquaculture Service (SERNAPESCA)

Co-executing agency: Provides technical information. Participates in consultations and project design validation processes. Zonal Departments will collaborate with municipalities and communities to gather information and organization and participation in consultation processes related to marine parks and reserves.

Dirección General del Territorio Marítimo y Mercante (DIRECTEMAR)	Provides technical information. Participates in consultations and design validation processes.
Ministry of Defence, Undersecretariat of the Armed Forces (CNUBC, CRUBC)	Provides technical information. Participates in consultations and project design validation processes.
Regional Governments and Councils (CORE)	Assistance in the local coordination with municipalities and communities to gather information and organize consultation processes. Participation in consultation processes and design validation at regional/local level.
Municipalities and Municipal Councils of coastal areas and pilot areas.	Assistance in the local coordination with municipalities and communities to gather information and organize consultation processes. Participation in consultation processes and design validation at regional/local level.
Undersecretariat of Regional and Administrative Development (SUBDERE)	Direct coordination with municipalities. Participates in consultations and project design validation processes.
Provincial Government of pilot sites	Participation in consultations and project design validation. Provides technical information for the project design.
Association of Chilean Municipalities	Participation in consultations and project design validation. Provides technical information for the project design.
<i>Non-Governmental Organizations</i>	
World Wildlife Fund (WWF)	Participation in consultations and project design validation. Provides information on experience and lessons learned related to the project design.
Wildlife Conservation Society (WCS)	Participation in consultations and project design validation. Provides information on experience and lessons learned related to the project design.
<i>Users</i>	
Local organizations	Participation in consultations and project design validation. Provides information on experiences. Identification of good practices and local wisdom.

With respect to indigenous peoples the consultations and joint work with the project will take place according to the protocol established by the National Corporation for Indigenous Development (CONADI, in Spanish). The consultation process will also consider FAO guidelines for consultation with indigenous communities, consensus and prior agreements (<http://www.fao.org/3/a-i4413e.pdf>).

### *Academia*

Pontificia Universidad Católica de Chile. Universidad Austral de Chile. Universidad Católica del Norte and Regional Research Centres (CEAZA, INCAR) and others

Participation in consultations and project design validation. Provides information on experiences and research on project themes.

## **3. Gender Equality and Women's Empowerment**

**Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).**

69. In 2013, the total number of fishers in the Artisanal Fisheries Register was 91,395 fishers (22% women and 78% men). Women have a high participation in artisanal capture fisheries (seashore collectors, shellfish divers, fishers as such and artisanal vessel owners). Women represents a 79.8% (17,922 people) of the total number of fishers registered in the category of ‘seashore collectors’ (seaweed collectors, seashore collectors and free divers). It is also worth noting that they have registered 544 artisanal vessels, what accounts for 4.6% of the total artisanal vessels registered in the country. As of December 2013, there were 1,034 organizations registered, of which 29 were only women, 316 only men and 689 women and men. The regions of Coquimbo and Aysen, where the pilot project sites are located, have the largest number of organizations and the largest number of women-only organizations. Although the work at the coastline is carried out by women, many of them are informal workers and, therefore, legally non-existent. There are few women organized in unions and other groups or leaders.

The project will consider the different roles of men and women, and how their unique and individual contributions can be maximized within the context of the project strategy and implementation. To do so, in a first stage, and prior to the CEO endorsement, a gender participatory analysis (through consultative workshops and during the selection of communities) will be carried out in the project selected areas to assess which is the baseline in terms of gender inequality, and which are the possible spaces for further action. Such analysis will include a review of the gender background in terms of the situation of people in the area (access to resources, services, organizations, characteristics, gaps, achievements), the gender approach already in place by the government and other entities, and other relevant data. So we will identify gaps on which the project can act in order to contribute to gender equality.

70. Hence, the project will consider the different roles of men and women, and how their unique and individual contributions can be maximized within the context of the project strategy and implementation. The design phase will include the active participation of women's organizations (through consultative workshops and during the selection of communities) and ensure balanced participation of

women in planning and implementation activities. The activities of the design phase will include practical steps to ensure equal access for men and women to all aspects of design process and to the development and implementation phase. Specific actions to consider may include: i) support to existing women's organizations; (ii) promote and support the participation of women in good practices proposals by selecting them as executing partners of activities at the pilot sites; (iii) ensure equal representation of men and women in training and raising awareness activities; and iv) involve women in the M&E activities at the pilot sites and in the dissemination of good practices. The M&E strategy will also consider specific indicators to measure the impact of the project by gender, what will be included in the Project Results Framework.

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

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

**Improving women's participation and decision-making; and/or**

**Generating socio-economic benefits or services for women.**

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

Yes

#### **4. Private sector engagement**

**Will there be private sector engagement in the project?**

Yes

**Please briefly explain the rationale behind your answer.**

71. The project will engage different types of stakeholders coming from the private sector. Under Chilean law, artisanal fishermen are considered as single-unit private enterprises. Similarly, tour operators working in the project areas and artisanal-fishermen

cooperatives are considered either small- or medium-sized enterprises. Finally, salmon farms and a few large tour operators are considered mid- to large-sized companies. All these private enterprises are links within the blue economy chain and benefit directly from the services provided by the marine ecosystems targeted by the project.

## 5. Risks

**Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)**

Potential Risks	Probability	Mitigation Measures
Changes in institutional administrations and organizations, priorities, and/or work approach of strategic partners and collaborators from public and private agencies, and NGO can affect decision-making, continuity of the project, as well as appropriate scaling of experiences and lessons	Medium-high	Interagency agreements will be promoted to ensure the continuity of actions before possible changes. In addition, the knowledge of key stakeholders and other groups will be increased to raise awareness of the need to implement actions to reduce threats and remove barriers to the conservation and sustainable use of coastal marine ecosystems. The implementation of mechanisms for interagency coordination and community participation will serve to reinforce collaboration and support the continuity of the processes in case of institutional change.
Insufficient interagency coordination at the national, regional and local level and shortcomings in cooperation mechanisms with the private sector and local institutions leads to delays in the implementation of project activities.	Medium-high	Mechanisms for inter-agency coordination and cooperation between public institutions, the private sector and local organizations will be developed and strengthened to adequately address the conservation and sustainable use of coastal marine ecosystems at three levels: national, regional, and local. These mechanisms will contribute to improving current levels of participation and coordination. The development of capacities of key actors involved will contribute to improving the dissemination of information among the different actors and geographic levels, improving coordination.
Biodiversity Service not created during the execution of the project	Medium-high	Agreements and commitments with municipalities interested in pilot zones.

<p>The lack of interest and commitment of local communities and their organizations and the municipalities of the pilot areas in participating in the project translates into low levels of participation that jeopardize the implementation, achievement and sustainability of the results and objective of the project.</p>	<p>Medium-high</p>	<p>The methodological and strategic approach of the project will be highly participatory. During the design phase, the selection of municipalities and pilot communities will be based on the level of interest and commitment, and will be the subject to consultations to confirm their participation. The activities will be carried out in areas that have the approval, ongoing support, and explicit active participation of key stakeholders of the local community. Agreements will be signed with the Municipalities prior submission to and approval by most the Municipal Councils. Agreements will be signed with local organization prior submission to the directives of each organization and approved by majority. If possible, work will be carried out with various local organizations in each pilot area, promoting awareness and developing capacities of the different entities and leaders, so that members of the organizations support the continuity of the activities, since they are main stakeholders in securing the project results that will contribute to the sustainability of their livelihoods and food security.</p> <p>In the pilot sites, there are no indigenous communities with EMCPO requests, but during the design phase of the project, the communities will be invited to know and participate in the project. The process of consultation and joint work with the project, will be developed according to the protocol established by the National Corporation for Indigenous Development (CONADI, in Spanish). This consultation process will also consider the FAO guidelines for consultations with indigenous communities, consensus and prior agreements (<a href="http://www.fao.org/3/a-i4413e.pdf">http://www.fao.org/3/a-i4413e.pdf</a>).</p>
<p>Risks of climate contingencies and climate change. Occurrence of severe events during the development of the project, which implies significant changes in the conditions for the implementation of the project in the areas of intervention and pilot communities.</p>	<p>Medium-low</p>	<p>Take into consideration climate risk and its impact on project design, specifically measures of adaptation to the expected effects of climate change. Training programmes at the local level including climate risk and adaptation. Good conservation practices and sustainable use of coastal marine ecosystems will consider aspects of adaptation to contribute to resilience to the effects of climate variability.</p>

## 6. Coordination

**Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.**

73. FAO-GEF Project # 6955 ‘Strengthening the Capacity to Adapt to Climate Change of the Chilean Fisheries and Aquaculture Sector’. The objective of the project is to reduce vulnerability and increase adaptability to climate change of the fishery and aquaculture sector in Chile. This project includes the development of decision-making mechanisms, stakeholder participation and development of capacities, in relation to the effects of climate change on fisheries at national, regional and local levels. The lessons learned in the development of these mechanisms will be considered by the project proposed and incorporated into its processes (stakeholder participation, capacity building). Measures of adaptation to the effects of climate change to be implemented in the pilot projects will be considered by the project proposed when selecting good practices for the conservation and sustainable use of biodiversity. Likewise, the experiences and lessons learned in terms of sharing information with beneficiaries and mechanisms for replication will be also incorporated by the project proposed.

74. GEF-UNDP Humboldt Project – Phase II, shared between Chile and Peru, and in the process of formulation, proposes to work on an ecosystem approach of the Humboldt Current Large Marine Ecosystem (HCLME), which covers several million km<sup>2</sup> of ocean, to recover fisheries, through education, markets, better fisheries management, monitoring and control. The main difference of the project proposed with this project is that the scale of action prevents the implementation of a system of effective governance at the local level, since it encompasses two countries and a Large Marine Ecosystem, which is what this proposal aims at, a system of governance that conserves and ensures the sustainability of a marine ecosystem as a whole, beyond specific fishery resources. Both projects will coordinate closely through their executing institutions and implementing agencies, sharing experiences and lessons learned.

75. Likewise, lessons learned from the implementation of GEF-UNDP Project # 1236 ‘Conservation of biodiversity of global significance along the Chilean coast’ will be considered, including: (i) improve governance by incorporating local actors to MPAs management; (ii) strengthen management tools at the local level; (iii) that territorial planning be recognized in binding instruments; (iv) the participation of the academia is very important to generate knowledge for better decision-making without forgetting the traditional or empirical knowledge; (v) the arrangements made for the effective management of the territory must be recognized through some rule or legislation to make them last in time, hence, the importance of bringing the actions of the projects to the community level; (vi) networking is essential to replicate good practices in other communities of the country and go beyond the borders so they can also be incorporated by other countries, especially when we are working in seas and oceans, where there is great connectivity through currents.

## 7. Consistency with National Priorities

**Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions**

Yes

**If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc**

76. The project is aligned with the National Biodiversity Strategy, which main objective is to conserve the country's biodiversity, promoting its sustainable management to protect its vital capacity and ensuring access to the benefits for the well-being of present and future generations. The strategy is being updated and includes the following priorities for coastal marine ecosystems: 1) promote the sustainable use of biodiversity for human well-being, reducing threats to ecosystems and species, 2) raise awareness, promote participation, information and knowledge about biodiversity, as the basis for the population well-being, 3) develop solid institutions, good governance and fair and equitable sharing of the benefits of biodiversity; 4) insert biodiversity objectives into public and private sector policies, plans and programmes, and 5) protect and restore biodiversity and ecosystem services.

77. The project is in line with the general objective of the National Protected Areas Policy of effective implementation of the total marine protected areas of Chile and, the specific objective of incorporating the participation of the different actors, as appropriate, for the creation, management and evaluation of protected areas. The project is aligned with the Chilean Seaweed Farming and Restocking Policy, which seeks to increase the available biomass of algal resources of ecological and economic significance through a bonus system for artisanal fishers, their organizations, and micro and small enterprises that implement algal restocking activities.

78. The project is consistent with the National Aquaculture Policy, whose general objective is to promote the highest possible level of economic growth of Chilean aquaculture over time, within a framework of environmental sustainability and equitable access to the activity. The project is also consistent with the voluntary programme of the Municipal Environmental Certification System (SiCAM) in support of municipalities that wish to start a Local Environmental Management process. The proposal is in line with the specific objectives of the Climate Change Adaptation Planning for Biodiversity, linked to biodiversity research and capacity building; promotion of sustainable productive practices for biodiversity adaptation to climate change and maintenance of ecosystem services; integration of biodiversity objectives into planning tools; and strengthening of the National System of Protected Areas.

79. In addition, this project is inserted in Priority B: Governance of Natural Resources and Forestry, farming and cattle Systems and Fisheries under Climate Change Scenarios of the FAO Priority Framework for Technical Assistance in Chile 2015-2018, and its

themes : i) Promote participatory and inclusive territorial strategies for the development of family farming and artisanal fisheries; (ii) Institutional strengthening for the sustainable management of natural resources in climate change scenarios; and (iii) Protection of biodiversity, conservation of natural and genetic resources for food security. This project will also support FAO Strategic Objective 2 (SO2), Increase the provision of goods and services from agriculture, livestock, forestry and fisheries in a sustainable manner.

80. Finally, the project is aligned with the Sustainable Development Objectives, specifically Objective 14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development, and its Target 14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans; 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; and 14.b Provide access for small-scale artisanal fishers to marine resources and markets.

## **8. Knowledge Management**

**Outline the Knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.**

81. Knowledge management will be a transversal activity throughout the project, to develop institutional report, promote continuous learning, produce documentation for project scaling, and visibility strategies for capacity development and political impact. The experiences and lessons learned on important elements will be systematized and published (e.g., model of sustainable governance, good biodiversity conservation and sustainable use practices, mainstreaming gender approach, participatory processes and capacity development) in formats and languages adapted to the diverse audiences (decision makers and authorities, technicians, and communities). This information will be disseminated through various means to raise awareness about the importance and value of Chilean coastal marine ecosystems. Likewise, the experiences at the local level will be shared to promote successful experiences replication and scale up. FAO and Chilean government Web platforms will be available to access to existing knowledge and disseminate information.

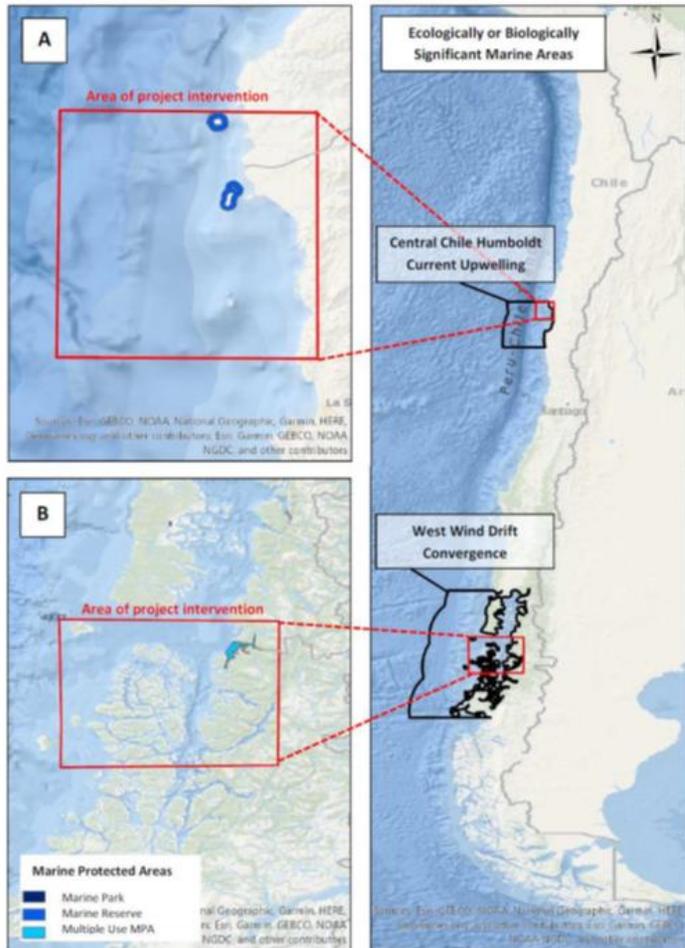
**Part III: Approval/Endorsement by GEF Operational Focal Point(S) and GEF Agency(ies)**

**A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).**

<b>Name</b>	<b>Position</b>	<b>Ministry</b>	<b>Date</b>
Miguel Stutzin	GEF Operational Focal Point for Chile	Ministry of Environment	9/12/2018

## ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place



**Figure 1.** Marine and coastal areas of project governance and management intervention (red areas) within two Ecologically or Biologically Significant Marine Areas (EBSAs) in the Chilean coast (black lines) in: A) Central Chile Humboldt Current Upwelling System; and B) West Wind Drift Convergence for the GLF project proposal "Strengthening management and governance for the conservation and sustainable use of globally significant biodiversity in coastal marine ecosystems in Chile". Within the marine and coastal areas of intervention (red lines), marine protected areas are shown (legend).

## ANNEX B: GEF 7 Core Indicator Worksheet

Use this Worksheet to compute those indicator values as required in Part I, Table F to the extent applicable to your proposed project. Progress in programming against these targets for the program will be aggregated and reported at any time during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

<b>Core Indicator 1</b>	<b>Terrestrial protected areas created or under improved management for conservation and sustainable use</b>					<i>(Hectares)</i>
	<i>Hectares (1.1+1.2)</i>					
				<i>Expected</i>		<i>Achieved</i>
				PIF stage	Endorsement	MTR    TE
Indicator 1.1	Terrestrial protected areas newly created					
Name of Protected Area	WDPA ID	IUCN category	Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			Sum			
Indicator 1.2	Terrestrial protected areas under improved management effectiveness					
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score		
				Baseline		Achieved
				Endorsement	MTR	TE
		Sum				
<b>Core Indicator 2</b>	<b>Marine protected areas created or under improved management for conservation and sustainable use</b>					<b>30335</b> <i>Hectares</i>
	<i>Hectares (2.1+2.2)</i>					
				<i>Expected</i>		<i>Achieved</i>
				PIF stage	Endorsement	MTR    TE

Indicator 2.2	Marine protected areas under improved management effectiveness		30335					
Indicator 2.1	Marine protected areas newly created							
Name of Protected Area	WDPA ID	IUCN category	Hectares					
			Expected		Achieved			
			PIF stage	Endorsement	MTR	TE		
			Sum					
Indicator 2.2	Marine protected areas under improved management effectiveness							
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score (Scale 1-3)				
				Baseline		Achieved		
				PIF stage	Endorsement	MTR	TE	
<i>Isla Chañaral de Aceituno</i>	063		2695	<i>Unknown</i>				
<i>Isla Chañaral de Aceituno</i>	063		3778	<i>Unknown</i>				
<i>Pitipalena - Añihue</i>	161		23862	<i>Unknown</i>				
			Sum	30335	<i>Unknown</i>			
<b>Core Indicator 3</b>	<b>Area of land restored</b>						<b>(Hectares)</b>	
				Hectares (3.1+3.2+3.3+3.4)				
				Expected		Achieved		
				PIF stage	Endorsement	MTR	TE	
Indicator 3.1	Area of degraded agricultural land restored							
			Hectares					
			Expected		Achieved			
			PIF stage	Endorsement	MTR	TE		

Indicator 3.2	Area of forest and forest land restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 3.3	Area of natural grass and shrublands restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 3.4	Area of wetlands (including estuaries, mangroves) restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
<b>Core Indicator 4</b>	<b>Area of landscapes under improved practices (hectares; excluding protected areas)</b>					<i>(Hectares)</i>
			Hectares (4.1+4.2+4.3+4.4)			
			Expected		Expected	
			PIF stage	Endorsement	MTR	TE
Indicator 4.1	Area of landscapes under improved management to benefit biodiversity					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.2	Area of landscapes that meet national or international third-party certification that					

	incorporates biodiversity considerations								
Third party certification(s):				Hectares					
				Expected		Achieved			
				PIF stage	Endorsement	MTR	TE		
Indicator 4.3	Area of landscapes under sustainable land management in production systems								
				Hectares					
				Expected		Achieved			
				PIF stage	Endorsement	MTR	TE		
Indicator 4.4	Area of High Conservation Value Forest (HCVF) loss avoided								
				Hectares					
				Expected		Achieved			
				PIF stage	Endorsement	MTR	TE		
<b>Core Indicator 5</b>	<b>Area of marine habitat under improved practices to benefit biodiversity</b>					<b>1700000 Hectares</b>			
Indicator 5.1	Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations								
Third party certification(s):				Number					
				Expected		Achieved			
				PIF stage	Endorsement	MTR	TE		

Indicator 5.2	Number of large marine ecosystems (LMEs) with reduced pollution and hypoxial					
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
<b>Core Indicator 6</b>	<b>Greenhouse gas emission mitigated</b>					<b>(Tons)</b>
			Tons (6.1+6.2)			
			Entered		Entered	
			PIF stage	Endorsement	MTR	TE
			Expected CO2e (direct)			
			Expected CO2e (indirect)			
Indicator 6.1	Carbon sequestered or emissions avoided in the AFOLU sector					
			Tons			
			Entered		Entered	
			PIF stage	Endorsement	MTR	TE
			Expected CO2e (direct)			
			Expected CO2e (indirect)			
			Anticipated Year			
Indicator 6.2	Emissions avoided					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			Expected CO2e (direct)			
			Expected CO2e (indirect)			



Indicator 7.4	Level of engagement in IWLEARN through participation and delivery of key products					
	Shared water ecosystem	Rating (scale 1-4)				
		Rating		Rating		
		PIF stage	Endorsement	MTR	TE	
<b>Core Indicator 8</b>	<b>Globally over-exploited fisheries Moved to more sustainable levels</b>					<i>(Tons)</i>
			Metric Tons			
			PIF stage	Endorsement	MTR	TE
<b>Core Indicator 9</b>	<b>Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products</b>					<i>(Tons)</i>
			Metric Tons (9.1+9.2+9.3)			
			Expected		Achieved	
			PIF stage	PIF stage	MTR	TE
Indicator 9.1	Solid and liquid Persistent Organic Pollutants (POPs) and POPs containing materials and products removed or disposed					
	POPs type	Metric Tons				
		Expected		Achieved		
		PIF stage	Endorsement	MTR	TE	
Indicator 9.2	Quantity of mercury reduced					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE

Indicator 9.3	Number of countries with legislation and policy implemented to control chemicals and waste					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.4	Number of low-chemical/non-chemical systems implemented particularly in food production, manufacturing and cities					
			Number			
		Technology	Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
<b>Core Indicator 10</b>	<b>Reduction, avoidance of emissions of POPs to air from point and non-point sources</b>					<i>(Grams)</i>
Indicator 10.1	Number of countries with legislation and policy implemented to control emissions of POPs to air					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 10.2	Number of emission control technologies/practices implemented					
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 10.3	Number of countries with legislation and policy implemented to control chemicals and waste					
			Number of Countries			
			Expected		Achieved	

			PIF stage	Endorsement	MTR	TE
<b>Core Indicator 11</b>	<b>Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment</b>					<i>(Number)</i>
					Number Achieved	
					MTR	TE
				Female		
				Male		
				<i>Total</i>		

## ANNEX C: Project Taxonomy Worksheet

Use this Worksheet to list down the taxonomic information required under Part1 by ticking the most relevant keywords/topics//themes that best describes the project