



GEF-6 PROJECT IDENTIFICATION FORM (PIF)

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

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PART I: PROJECT INFORMATION

Project Title:	Strengthening capacity for international cooperation in the ecosystem-based management of the Antarctic Large Marine Ecosystem.		
Country(ies):	Chile, India, Namibia, South Africa, Ukraine	GEF Project ID: ¹	9443
GEF Agency(ies):	UNDP	GEF Agency Project ID:	4473
Other Executing Partner(s):	Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)	Submission Date:	19 July 2016
		Resubmission Date:	25 August 2016
GEF Focal Area(s):	International Waters	Project Duration (Months)	48
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP	<input type="checkbox"/>
Name of parent program:	n/a	Agency Fee (\$)	588,306

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
IW-3 Program 7	GEFTF	6,192,694	45,000,000
Total Project Cost		6,192,694	45,000,000

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To strengthen multilateral cooperation in ecosystem-based management of the Antarctic Large Marine Ecosystem (ALME) through supporting national-level institutional strengthening and building the capacity of GEF-eligible countries to meet their marine resource management commitments and obligations under the intergovernmental convention for the Conservation of Antarctic Marine Living Resources, (CCAMLR) to help ensure sustainable ALME fisheries in the context of climate variability and change.

Project Components	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
1. Enhanced ecosystem-based management and monitoring of the Antarctic LME (ALME) through multinational cooperation, multisectoral coordination and partnership	TA	1.1 Institutional, legal and/or policy reforms implemented at the national level in CCAMLR participating developing states to enhance their institutional, legal and policy environment for better	1.1.1 Institutional, legal and policy reviews conducted in CCAMLR participating developing states to identify recommended institutional/legal/policy reforms for improved harmonization and coordination to effectively report to CCAMLR annually. 1.1.2. Priority institutional/legal/policy reforms for improved harmonization and coordination implemented at the national level in the CCAMLR participating developing states. 1.1.3 Improved inter-sectoral, multi-stakeholder coordination at the national level set up in CCAMLR participating development states for improved coordination and improved resources utilization to meet CCAMLR obligations.	GEFTF	1,400,000	9,400,000

¹ Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

² When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCE](#).

³ Financing type can be either investment or technical assistance.

	<p>multi-sectoral coordination and more effective use of resources to meet CCAMLR obligations.</p>	<p>1.1.4 Countries' rights and obligations to CCAMLR fully understood by sectors and domestic actors not represented at CCAMLR meetings for their effective cooperation and collaboration.</p> <p><u>Proposed Outcome indicators (reviewed during PPG)</u></p> <p>i) Five institutional, legal and policy reviews from five CCAMLR participating developing states.</p> <p>ii) Five sets of recommendations for institutional/legal/policy reforms, to be considered by the respective Cabinets, which would enhance their institutional capacity to meet CCAMLR obligations more effectively.</p> <p>iii) Five set of recommendations to enhance the engagement of civil society and the private sector (fishing industry) at the national level in research, monitoring and management of the ALME.</p> <p>iv) Priority institutional/policy/legal reforms implemented by Year 4</p> <p>v) Improved in-country coordination and preparation work prior to CCAMLR meetings in 5 developing states, achieved by Year 3, evidenced in their respective reporting to CCAMLR.</p> <p>vi) Improved report back from CCAMLR meetings to national stakeholders by Year 3, evidenced in the minutes of a coordination forum in five developing countries.</p> <p>vii) Five consultative mechanism established in five developing states to ensure civil society and industry inputs, evidenced by meeting minutes by Year 3.</p>			
	<p>1.2 Increased and more effective participation of developing states in CCAMLR discussions on monitoring and management decisions to realize the sustainable management of the ALME</p>	<p>1.2.1 Increased participation of developing states in CCAMLR scientific, managerial and policy processes.</p> <p>1.2.2 Enhanced representation and responsibilities of developing states as officers in the various organs of CCAMLR.</p> <p><u>Proposed Outcome indicators (reviewed during PPG)</u></p> <p>i) At least one scientist from each of the 5 developing countries participates in the Ecosystems Monitoring and Management Working Group of CCAMLR (WG-EMM) annually for capacity building purpose, especially to participate in discussions on climate change, ecosystems management, and marine spatial planning.</p> <p>ii) At least one scientist from each of the 5 developing countries participates in the Statistics, Assessment and Modelling Working Group of CCAMLR (WG-SAM) annually for capacity building purpose.</p> <p>iii) At least three submissions of research findings made by scientists from the 5 developing countries supported by the project by Year 3.</p> <p>iv) At least one management action proposal related to the improved control of IUU fishing submitted to</p>			

			<p>CCAMLR Scientific Committee by CCAMLR participating developing countries backed up by scientific findings supported by the project by Year 3</p> <p>v) At least two representatives from the five developing countries appointed as officials of one of the Commission's consultative bodies during the project implementation period for a minimum of 2-year term.</p>			
		1.3 Partnership established with private sectors (incl. industry associations) and civil society to enhance the management effectiveness of CCAMLR	<p>1.3.1 Partnerships with private sector (incl. industry association) and with civil society established to enhance the developing countries' efforts towards combating IUU fishing, conducting ecosystem assessment including impacts of climate change, and collecting data that inform marine spatial planning.</p> <p><u>Proposed Outcome indicators (reviewed during PPG)</u></p> <p>i) At least four partnerships formed involving the industry and civil society and any of the five developing states to enhance their joint efforts to combat IUU fishing, to conduct ecosystem assessment, and/or to collect data that inform marine spatial planning.</p> <p>ii) At least three formal partnership between the fishing industry and developing states for the training and deployment of certified fisheries observers on vessels active in CCAMLR fisheries.</p> <p>iii) At least 20 additional observers from developing states trained and certified through the partnership with the fishing industry, ready for deployment in CCAMLR fisheries by the end of the project.</p> <p>iv) At least 5 awareness raising campaigns and/or public relations initiatives organized to disseminate alarming information on climate change-related impacts on ALME in 5 developing countries through partnerships with civil society, using CCAMLR's scientific data and information.</p>			
2. Building technical and analytical capacity to support ecosystem-based management of the ALME	TA	2.1 Increased technical capacity of CCAMLR participating developing states to engage in, and contribute to, multilateral negotiation processes for the conservation and rational utilization of the ALME	<p>2.1.1 Technical and analytical capacity of scientists and fishery managers from the five developing states in CCAMLR-specific data management, fisheries assessment, ecosystem modelling, MCS systems and/or marine spatial planning strengthened through targeted capacity building programs organized by the project (including exchange programs – linked to Outcome 2.2).</p> <p>2.1.2 Improved data collection capacity, technical expertise, and vessel time for ecosystem assessment available to the five developing states through the partnerships with fishing industry and/or non-government organisations (linked to Output 1.3.1).</p> <p>2.1.3 Increased scientific inputs from scientists from the five developing countries to CCAMLR scientific and conservation processes.</p> <p><u>Proposed Outcome indicators (reviewed during PPG)</u></p> <p>i) At least 10 individual capacity building initiatives,</p>	GEFTF	1,800,000	9,600,000

			<p><i>benefitting the five developing states, offered which cover the following subjects:</i></p> <ul style="list-style-type: none"> - <i>Data management systems development and administration to support the acquisition, processing, assimilation, exchange and analytics of CCAMLR-related data.</i> - <i>Monitoring, control and surveillance with emphasis on the detection and prosecution of IUU fishing, strengthening national systems including in respect of flag state responsibility, port state measures, monitoring systems (such as vessel monitoring systems, chain of custody and catch documentation schemes), deterrence (including through policy and legislative reform) and the detection of non-compliance through enhanced information systems and enhanced analytical capacity</i> - <i>fishery monitoring including training and certification of at-sea observers to collect fishery independent data</i> - <i>data analytics, statistical methods and fisheries stock assessment and modelling as a basis for providing advice on precautionary catch limits and in support of other management measures such as move-on rules to secure the sustainability of CCAMLR fisheries</i> - <i>ecosystems research and modelling including in respect of by-catch and non-target species taken incidentally in CCAMLR fisheries, climate change-related impacts and marine spatial planning associated with the establishment of marine protected areas in the CCAMLR Convention Area</i> <p><i>ii) Enhanced capacity realized through the partnerships by Year 4, evidenced in the partnership agreements.</i></p> <p><i>iii) More active participation in the scientific discussions and management decision discussions by the five developing states, evidenced in the records of CCAMLR meetings.</i></p>			
		<p>2.2 Increased collaboration among the CCAMLR member states as well as between CCAMLR member states and non-CCAMLR countries to enhance the technical capacity required for the monitoring, conservation and management of the ALME.</p>	<p>2.2.1 Bilateral and multilateral exchange programmes supported among the five developing states and with other CCAMLR Members in Antarctic science and marine resources management.</p> <p>2.2.2 Joint proposals relating to the management of ALME tabled at the Scientific Committee and/or the Commission</p> <p>2.2.3 Strengthened monitoring, control and surveillance (MCS) measures in the five developing states contributed to ongoing efforts to eliminate IUU fishing in the Convention Area.</p> <p><u><i>Proposed Outcome indicators (reviewed during PPG)</i></u></p> <ul style="list-style-type: none"> <i>i) At least one scientist, or one fisheries manager, from each of the five developing states participated in professional development initiatives or on-the-job training (of up to one month duration) in one of the other four developing states each year of the project.</i> <i>ii) At least 20 scientists or fisheries managers participated in the exchange program.</i> <i>iii) Additional 20 scientists or 10 fisheries managers participated in initiatives implemented by other CCAMLR members including field work and laboratory</i> 			

			<p><i>investigations concerning ecosystem monitoring and function, fisheries monitoring, fisheries resource assessment, and marine spatial planning associated with a) IUU fishing reduction, b) non-compliance reduction, c) establishment of sustainable fisheries, d) establishment of precautionary management actions in response to climate change scenarios, and e) potential marine protected areas.</i></p> <p><i>iv) Strengthened national chain of custody systems in the five developing states for the reconciliation of catch data with trade data implemented following a national-level audit of baseline systems and processes</i></p> <p><i>v) At least four additional states cooperating with CCAMLR through voluntary implementation of the CCAMLR Catch Documentation Scheme.</i></p> <p><i>vi) Port State measures reviewed in the five developing states; response strategies adopted and implemented.</i></p> <p><i>vii) At least two developing states ratified the FAO Port State Measures Agreement by the end of the project.</i></p> <p><i>viii) Flag State vessels monitoring systems for the five developing states operating in the CCAMLR Convention Area reviewed; best practice standard operating procedures adopted and implemented.</i></p>			
3. Demonstrations for the adaptive management of the ALME	TA	3.1 Adaptive management of living resources of the ALME demonstrated by the five developing states through the utilization of assessment and monitoring data to inform management decisions and identify potential areas for marine spatial protection	<p>3.1.1 National-level data assimilation systems in the five developing states reviewed and strengthened.</p> <p>3.1.2 Ecosystem assessment and MCS data, including in respect of IUU fishing and climate change, integrated into decision-making processes related to marine spatial planning and the establishment of marine protected areas in the CCAMLR Convention Area.</p> <p>3.1.3 Demonstration of the adaptive management of the AMLE informs related processes in other ocean regions.</p> <p>3.1.4 Capacity within the five developing states to utilize assessment and monitoring data strengthened to inform management decisions and identify potential protected areas</p> <p>3.1.5 International and national networks, non-government organisations and the fishing industry (such as ASOC, COLTO and ARK) contributed actively their data and expertise to the planning and implementation of marine spatial planning and the establishment of marine protected areas in the CCAMLR Convention Area.</p> <p><u><i>Proposed Outcome indicators (revised during PPG)</i></u></p> <p><i>i) Audits of CCAMLR-data acquisition, processing and assimilation systems and submission processes to CCAMLR databases completed at five developing states; strategies to address issues and gaps identified by the audits prepared, adopted and implementation commenced.</i></p>	GEFTF	2,200,000	20,200,000

			<p>ii) Increased CCAMLR-relevant data by the five developing states, evidenced by their submissions.</p> <p>iii) Quality of submitted data improved, as measured by end of Project standard data quality metrics.</p> <p>iv) Five developing states completed a national –level review of ALME data and information holdings relevant to CCAMLR marine spatial planning initiatives.</p> <p>v) Five developing states submitted inventories of ALME-related data holdings relevant to CCAMLR marine spatial planning initiatives to CCAMLR for consolidation with institutional datasets.</p> <p>vi) Scientists and fisheries managers from developing states participated actively in marine spatial planning initiatives associated with the establishment of marine protected areas by CCAMLR. The size of MPAs proposed will be determined by the conservation values and objectives agreed.</p> <p>vii) Scientists and fisheries managers participate in up to four marine spatial planning initiatives in other ocean regions where they share CCAMLR experience with marine spatial planning processes and outcomes.</p>			
4. Knowledge management, communications of best practice and lessons learnt	TA	4.1 Dissemination of lessons learned and best practices for precautionary and ecosystems approaches to conservation and rational use of ALME resources using multiple media	<p>4.1.1 Standardised procedures established to support the documentation and the codification of lessons learned and best practices</p> <p>4.1.2 A network of scientists, policy makers, fishery managers and private sector stakeholders to exchange information on their national and multilateral initiatives associated with ALME ecosystem processes through a project established information portal on the CCAMLR website</p> <p>4.1.3 Awareness raising and public relations initiatives targeting global audiences delivered in partnerships with the fishing industry and civil society.</p> <p><u>Proposed Outcome indicators (reviewed during PPG)</u></p> <p>i) Project specific information portal established on the CCAMLR website.</p> <p>ii) Quarterly reports presenting project-related activities and outcomes submitted from the five developing states and posted on the CCAMLR website portal.</p> <p>iii) A quarterly analytic summary developed and distributed by CCAMLR to five developing states of portal activity.</p> <p>iv) At least once a year throughout the project implementation period, representatives from civil society and the fishing industry participate with Government partners in a global forum to share information on outcomes and lessons learned through their active engagement in the project.</p>	GEFTF	497,804	1,800,000
		4.2 Experience and knowledge on	4.2.1 Documentations detailing ALME lessons learned disseminated through GEF IW:LEARN-organized activities, including active participation in the biennial GEF IW Conferences, Experience			

		the conservation and management of fisheries in cold water ecosystems shared globally through various global fora including GEF IW:LEARN organized activities	Notes, relevant regional workshops and IW:LEARN website. <i>Proposed Outcome indicators (reviewed during PPG)</i> <i>i) At least 1% of GEF investment in this project allocated to support IW: LEARN related activities.</i> <i>ii) Active participation at the GEF IW Conference throughout the project implementation to showcase project achievements and lessons learned and share knowledge.</i> <i>iii) At least two IW Experience Notes produced during the project implementation period.</i>			
Subtotal					5,897,804	41,000,000
Project Management Cost (PMC) ⁴				GEFTF	294,890	4,000,000
Total Project Cost					6,192,694	45,000,000

C. INDICATIVE SOURCES OF **CO-FINANCING** FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Recipient Government	Recipient governments	In-kind	11,000,000
Recipient Government	Recipient governments	Grants	7,500,000
Others	CCAMLR (the organisation)	Grants and in-kind	2,000,000
Others	Other CCAMLR Members	Grants	5,000,000
Others	Other CCAMLR Members	In-kind	14,500,000
CSO	Scientific Committee for Antarctic Research (SCAR); Antarctic and Southern Ocean Coalition (ASOC)	Grants and in-kind	2,000,000
Private Sector	Association of Responsible Krill Harvesting Companies (ARK); Coalition of Legal Toothfish Operators (COLTO)	Grants and in-kind	3,000,000
Total Co-financing			45,000,000

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS ^{a)}

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) ^{b)}	Total (c)=a+b
UNDP	GEFTF	Global	International Waters		6,192,694	588,306	6,781,000
Total GEF Resources					6,192,694	588,306	6,781,000

a) Refer to the [Fee Policy for GEF Partner Agencies](#).

E. PROJECT PREPARATION GRANT (PPG)⁵

Is Project Preparation Grant requested? Yes No If no, skip item E.

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

⁵ PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$2m (for MSP); up to \$100k for PF up to \$3m; \$150k for PF up to \$6m; \$200k for PF up to \$10m; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

Project Preparation Grant amount requested: \$200,000					PPG Agency Fee: \$19,000		
GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee ⁶ (b)	Total c = a + b
UNDP	GEF TF	Global	International Waters		200,000	19,000	219,000
Total PPG Amount					200,000	19,000	219,000

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁷

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	<i>The Project area (CCAMLR Convention Area) covers 3,700 million hectares with the expectation the Project will catalyze efforts to contribute an additional 50 million hectares under area protection</i>
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	<i>Hectares</i>
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	<i>Number of freshwater basins</i>
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	<i>Annual sustainable harvests of 14 500t of finfish and up to 1.6 million t of krill representing 2% of the global harvest of wild fish secured</i>
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both direct and indirect)	<i>metric tons</i>
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	<i>metric tons</i>
	Reduction of 1000 tons of Mercury	<i>metric tons</i>
	Phase-out of 303.44 tons of ODP (HCFC)	<i>ODP tons</i>
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	<i>Number of Countries: 5 developing countries mainstreaming CCAMLR into national frameworks</i>
	Functional environmental information systems are established to support decision-making in at least 10 countries	<i>Number of Countries: 5 developing countries' ALME environmental information systems enhanced</i>

PART II: PROJECT JUSTIFICATION

⁶ PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

⁷ Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and/or SDCF.

1. *Project Description.* Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area⁸ strategies, with a brief description of expected outcomes and components of the project, 4) [incremental/additional cost reasoning](#) and expected contributions from the baseline, the GEFTF, LDCE, SCCF, and [co-financing](#); 5) [global environmental benefits](#) (GEFTF) and/or [adaptation benefits](#) (LDCE/SCCF); and 6) innovation, sustainability and potential for scaling up.

1. Global environmental and/or adaptation problems, root causes and barriers that need to be addressed

The Southern Ocean surrounds the continent of Antarctica and together they cover an estimated 20% of the planet's surface area or 10% of high seas areas in global oceans. Antarctica harbours 90% of the world's ice by volume and 70% of the world's freshwater. The Southern Ocean is delimited by the Antarctic Polar Front (APF) which forms where the cold Antarctic waters meet warmer waters to the north. The massive Antarctic Circumpolar Current (ACC) circles the continent, providing a partial return to all the major oceans of the world and has a major influence on the regulation of world's climate through global ocean circulation. Change in this large marine environment has far-reaching ramifications for the continued supply of a global ecosystem goods and services.

As anthropogenic climate change progresses, the surface waters in some parts of Antarctica are already warming faster than anywhere else on earth. The temperature in the Antarctic Peninsula has risen by almost 3°C in the past 50 years (5 times faster than any other recorded change) causing some ice shelves to melt. Due to its scale and extremely low temperature, the Southern Ocean is one of the world's most important carbon sinks (both via CO₂ dissolution and removal of CO₂ from productive surface waters) but as temperature and CO₂ levels continue to rise the capacity of the Southern Ocean to serve as a major oceanic sink of CO₂ may be compromised. In addition, increasing CO₂ uptake by the oceans leads to increasing acidity and decreasing pH. This has adverse implications for carbonate and aragonite chemistry threatening the efficiency in which marine calcifying organisms are able to form calcium carbonate with significant implications for marine ecosystems.

It is not well understood how climate change will affect the global supply of goods and services provided by this globally significant ecosystem. The Southern Ocean supports a rich and unique diversity of species, and the isolation and harsh conditions of the sea around Antarctica has resulted in a high degree of endemism that approaches 90% in taxonomic groups such as sponges, crustacean and molluscs. Over 25% of the 200 species of Antarctic finfish are only found south of 60°S. Many of the species of zooplankton, fish, squid, benthic invertebrates, seals, whales and birds that inhabit this environment have evolved unique physiological mechanisms to cope with the extreme cold and narrow temperature ranges. Some species of Antarctic fish, for example, are the only vertebrates in the world that do not use red blood cells to carry oxygen around their bodies. Climate change is likely to have a major impact on these highly adapted, cold-water species, as well as their associated habitats; it is not known whether they will be able to survive or adapt to a warmer and increasingly acidic ocean.

The Antarctic LME is a Class II, moderately productive ecosystem (150-300 gCm⁻²yr⁻¹), linked to the extreme weather conditions and limited light penetration due to winter ice cover. The Antarctic food chain is short and heavily dependent upon Antarctic krill (*Euphausia superba*), a small shrimp-like crustacean which feeds on plankton, and is an essential prey for a range of species of whales, seals, seabirds, squid, and fish. Krill is also commercially exploited by humans for use in the pharmaceutical industry, for bait and as a feed in the aquaculture and mariculture sectors and for direct human consumption. Variations in the extent of winter sea ice can have profound effects on biological primary productivity and hence in the production of krill and the food web overall. With climate change there will likely to be substantial impacts on the krill-based food web.

Human exploitation of the living marine resources of the Southern Ocean commenced on a large scale in the 19th century and has since been responsible for the collapse of a number of populations of marine species. Some seal populations collapsed in the 19th century followed by the great whales in the 20th century and then various finfish

⁸ For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving.

populations. The exploitation of finfish in the Southern Ocean started in the mid-1960s, prior to the establishment of CCAMLR. The marbled rockcod (*Notothenia rossii*) was first to be targeted and, by the 1980s, the stocks of this and other species caught in bottom trawls were overfished; many remain depleted today despite a prohibition of directed fishing on this species having been in place for more than 20 years. Since then three other species have been targeted, the mackerel icefish (*Champsocephalus gunnari*) and Patagonian and Antarctic toothfish (*Dissostichus eleginoides* and *D. mawsoni*). Both species of toothfish are particularly vulnerable to the effects of overfishing due to their long life cycle, and the proliferation of illegal, unregulated and unreported (IUU) fishing has undermined efforts by CCAMLR to maintain sustainable fisheries.

The effects of past exploitation of top consumers and associated changes in top-down forcing (due to competitive release – the “krill surplus hypothesis”, predation switching and related trophic cascade effects) are difficult to partition from the bottom-up forcing associated with longer term changes to the physical environment (such as climate change) and remains one of the key challenges in Southern Ocean biological oceanography. Such challenges are exacerbated by the varying recent responses of top consumer populations to protection from exploitation, and more recent exploitation at lower levels of the Antarctic marine food chain (e.g. fin-fishes and krill). There is consequently an increasing urgency to build or improve existing knowledge bases on ecosystem structure and functioning across the Southern Ocean, particularly as varying levels of historic exploitation are likely to provide a graded series of responses of circumpolar systems across different longitudinal sectors. Such endeavours require long-term commitment to research and monitoring and will have to involve international multidisciplinary co-operation.

Threats to the Antarctic ecosystem can be summarized as follows:

Climate-driven threats:

- Physical and ecological degradation and de-stabilisation (particularly ocean acidification);

Other anthropogenic threats:

- Impacts of bottom fishing gears on vulnerable marine ecosystems (VMEs)
- IUU fishing
- Inadequate precaution with respect to providing for the needs of krill dependent components of the ecosystem
- Introduction of non-native species as a result of anthropomorphic activity
- Pollution, whether of local origin or from global processes that impact the polar regions, e.g. ozone-depleting chemicals and ocean acidification
- Cumulative environmental impacts from tourism and base stations;
- Limited protection of reference and other areas through protected and/or managed area designations.

Efforts to address the threats to the Antarctic began with the regulation of harvesting activities through a series of international conventions: the 1946 International Convention for the Regulation of Whaling, the 1972 Convention for the Conservation of Antarctic Seals, the 1980 Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), and the 1991 Madrid Protocol on Environmental Protection to the Antarctic Treaty. The latter three are part of the Antarctic Treaty System (ATS), which was initiated through a multi-national research programme in 1957-58 in which the 12 nations involved agreed that any political or legal differences would not interfere with the science. These countries then agreed that peaceful cooperation should continue indefinitely, and this led to the negotiation of the Antarctic Treaty, which was signed on 1st December 1959. The Antarctic Treaty still regulates international relations with respect to Antarctica, it guarantees access for research and states that the region shall be used for peaceful purposes only. Treaty Nations agree to refrain from nuclear testing or dumping of nuclear waste, exploration and the exploitation of resources will only be permitted if all members are satisfied that measures are in place to protect the unique environment. Fifty two countries, comprising around 80% of the world’s population, have acceded to the Treaty. Consultative status is open to all countries who have demonstrated their commitment to the Antarctic by conducting significant research. Twenty nine nations have Consultative status, and parties meet annually at the Antarctic Treaty Consultative Meeting (ATCM).

The CAMLR Convention was developed as part of the ATS following concerns about the potential over-exploitation of krill (see Appendix A for detailed profile of CCAMLR's role in fisheries conservation and management). The aim of the Convention is to conserve marine life of the Southern Ocean, where conservation includes rational use of living marine resources. The CCAMLR Convention Area extends north of the ATS Area to the Antarctic Polar Front (a bio-oceanographic rather than a fixed political boundary), and encompasses the whole of the Southern Ocean. The Convention established the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), which is the intergovernmental organization responsible for developing measures necessary for the conservation of the marine life of the Convention Area surrounding Antarctica. Membership of the Commission is open to nations which originally participated in the adoption of the Convention, and any State which has acceded to the Convention may apply to become a Member of the Commission if it is actively conducting research or harvesting activities in the Convention Area. There are now 25 Members of the Commission, and 11 other States have acceded to the Convention but are not Members of the Commission. Within the Commission are designated bodies including a Secretariat (which provides administrative support through an annual budget), a Scientific Committee to provide advice and a Committee for monitoring compliance with conservation measures (See Appendix B for a summary of CCAMLR's regulatory arrangements).

2. The baseline scenario or any associated baseline projects

The baseline supports a formal multilateral system that has been functioning for 35 years that has an objective of conserving Antarctic marine living resources, where conservation includes rational use. The body responsible for this, CCAMLR, has 25 Members and 11 other States have acceded to the Convention. CCAMLR is a member of the Antarctic Treaty System, a body currently with 52 Contracting Parties, which was established in 1961 to promote the Antarctic as a place for peace and research.

CCAMLR Members have developed a unique approach to achieve the aim of the Convention which is based upon two central tenets that evolved from Article II of the Convention namely: (i) Management strives to follow a 'precautionary' approach and (ii) Management follows an 'ecosystem' approach. This means that CCAMLR collects and collates all available data and management decisions are made after the impact of uncertainties and gaps in the data have been assessed. This helps to minimize the risk of long-term impacts, while avoiding the need to delay decisions until all necessary data are available. The decision-making process also attempts to take into account the complex interactions between organisms and physical processes within the Antarctic marine ecosystem. It is this approach that, among other features, distinguishes CCAMLR from other fisheries-related multilateral conventions.

Given that CCAMLR and its members have conducted and integrated a wide range of ecosystem assessments, undergone a threats and root cause analysis, negotiated and brought into force a legal framework (the Convention), and adopted a range of policy, legal and institutional measures aimed at sustainable use of LME resources, it can be reasonably stated that the LME has already undergone the equivalent of a GEF foundational phase or preparation of TDA and SAP. In effect, CCAMLR is already at the stage of implementing the equivalent of a GEF Strategic Action Programme (SAP) agreed to by the parties to the Convention and, via this PIF, is requesting GEF support to advance implementation of these SAP-equivalent commitments and convention obligations by GEF-eligible CCAMLR parties. The CCAMLR programme of action is built upon a complex multilateral institutional arrangement, supported by a Convention, with associated decisions, regulations, measures, standards and procedures that support the Commission's efforts to achieve the objectives of the Convention in securing the conservation and rational use of the Antarctic ecosystem. Article II of the Convention describes its objective and Article IX profiles the functions of the Commission (<https://www.ccamlr.org/en/organisation/camlr-convention-text>). It is these provisions that provide the foundation for the Project which is designed to build on efforts to date by CCAMLR Members to secure the conservation and sustainable use of the living marine resources of the ALME.

As further evidence for this, over a period of 35 years, CCAMLR Members have evolved an integrated suite of measures that provide the regulatory framework for harvesting activities for marine living resources in the CCAMLR Convention Area.

These measures, which are known as ‘conservation measures’, are reviewed and developed at each annual meeting of the Commission, and subsequently implemented by Members during the ensuing intersessional period and fishing season. Conservation measures are published in the annual *Schedule of Conservation Measures in Force* (<http://www.ccamlr.org/en/document/publications/schedule-conservation-measures-force-2015/16> and are summarised at Appendix B). Following their consideration at the annual Meeting of the Commission at the end of October each year, in early November CCAMLR Members are notified of new or amended conservation measures. These are usually implemented on 1 December to align with the start of the fishing season. Conservation measures become binding, according to Article IX.6 of the Convention, around early May of the following year (180 days after the first notification). Some measures apply to a specific period (e.g. a fishing season) while other measures remain in force at all times. Measures that are no longer applicable are removed from the schedule and archived by the Secretariat. CCAMLR also uses non-binding resolutions, which complement the measures, and Members are encouraged to implement each resolution where possible.

The measures include obligations in relation to the provision of vessel details and reporting, the application of near real-time satellite monitoring, participation in a catch documentation scheme relating to unloading and re-exports of targeted living marine resources, inspections of fishing vessels, mechanisms to identify and sanction vessels or individuals confirmed to be associated with illegal, unreported or unregulated (IUU) fishing, the regulation of transshipment and a procedure to monitor compliance by Members with measures adopted by CCAMLR. Procedures for prior notification by Members of their intention to participate in CCAMLR-regulated fisheries in the subsequent season, including procedures for the Scientific Committee to assess aspects associated with research plans and potential impacts on bottom ecosystems are established. Data reporting obligations are stipulated, total allowable catches agreed for individual fisheries in each sub-area or division on the basis of best available science, including for non-target by-catch species, fishery closure procedures detailed, prohibitions on directed fisheries described and mitigation measures to minimise fisheries interactions with seabirds and marine mammals prescribed. Procedures for reporting encounters with vulnerable marine ecosystems (VMS) are described, registry of VMEs established, a framework for marine spatial protection is elaborated and currently a single measure establishes CCAMLR's only marine protected area.

Despite the considerable efforts of the CCAMLR membership, the vast size and inhospitable conditions of the Southern Ocean make it extremely difficult for CCAMLR Members to collect sufficient research and monitoring data, or to enforce CCAMLR objectives in all parts of the Convention Area. There is not uniform implementation of the agreed Measures by all Members with some Members, the majority of which are the developing countries, explaining that a lack of capacity adversely affects their ability to comply fully with all the decisions of the Commission. In addition, the bulk of the marine scientific work in the region is being conducted by a limited number of CCAMLR member countries, principally the economically developed members with a long history in the Antarctic. The Project seeks to address these issues, which largely stem from imbalances and limitations in the engagement and capacity of developing countries in a range of ALME scientific, conservation and management processes.

As a consequence, the baseline assessments of this critical ecosystem and long-term scientific monitoring of the Southern Ocean is under-developed or limited in geographical extent. For example, while the scientific understanding of the benthic fauna in the Southern Ocean has improved through recent programmes such as the Census of Antarctic Marine Life (CAML) and the Scientific Committee for Antarctic Research Marine Biodiversity Information Network (SCAR MarBIN), their distribution and abundance are still poorly understood.

Historically fisheries have targeted marine species such as whales and seals in the Southern Ocean (See Appendix A). The current baseline supports fisheries for four AMLR species: Patagonian toothfish (*Dissostichus eleginoides*), Antarctic toothfish (*Dissostichus mawsoni*), mackerel icefish (*Champscephalus gunnari*) and krill (*Euphausia superba*). Both toothfish species are taken by bottom-set longlines of a variety of configurations, occasionally pots, and to a lesser extent trawls. Both species of toothfish are sought after in restaurants and high-end markets worldwide with the result that it has caught the attention of illegal, unreported and unregulated (IUU) fishing vessels. Icefish are harvested by licensed fisheries in the Southern Ocean using midwater trawls at South Georgia in Subarea

48.3, and using both bottom and mid-water trawls at Heard and McDonald Islands in Division 58.5.2. This species was heavily exploited in the 1970s and 1980s. Concern over the levels of exploitation in these fisheries, and the high annual variability in catches, led to the closure of the fisheries in the early 1990s. Currently, fisheries on mackerel icefish may only occur within two years of a survey, if sufficient stock is assessed to be available. Krill is harvested using mid-water trawls (also with a variety of operational differences). Recent annual catches of mackerel icefish have been in the vicinity of 1,500t.

There are 13 licensed fisheries currently targeting toothfish in Areas 48, 58 and 88, including seven exploratory fisheries. These fisheries are reviewed annually by CCAMLR's Working Group on Fish Stock Assessment (WG-FSA) and the Scientific Committee. The Commission's agreed limits for the current fishing season are defined in the Conservation measures which are annually published on CCAMLR's website (<http://www.ccamlr.org/en/conservation-and-management/conservation-measures>). The annual total catch of both toothfish species within the CCAMLR Convention Area varies between 12,000 t and 17,000 t.

CCAMLR has set precautionary catch limits for krill for Area 48 (Antarctic Peninsula – sub-areas 48.1, 48.2, 48.3 and 48.4) and two Divisions – 58.4.1 and 58.4.2 (East Antarctic). The current fishery (for the last 20 years) is confined to Area 48 and for the last 10 years the maximum total annual harvest from that Area has been around 211,000 t.

CCAMLR has set the total catch limit of krill from Area 48 at 5.61 million t. However, until the Commission has defined the allocation of this total catch limit between smaller management units, the total catch is limited to 620,000 t. This is the “trigger level” – and has no scientific basis other than it is based on the highest historical catches. In relation to the two 58 Divisions, the Commission has set the total catch for 58.4.1 at 440,000 t and for 58.4.2 at 2.645 million t. Until the Commission determines the allocation of that total for 58.4.2 across smaller management units the catch in 58.4.2 is limited to 452 000 t. As a result, for the entire Convention Area where the krill fishery operates, the current total catch is limited to 1,612,000 t.

In relation to marine protection, commercial fishing is currently confined to less than half the Convention Area with fishing in other areas only possible in support of research. Longlining for toothfish is restricted to depths greater than 550m. In addition, CCAMLR declares 1 nautical mile Risk Areas around encounters with vulnerable marine ecosystems. In 2009 it declared its first, and currently only, marine protected area covering 92 000 km² on the South Orkney Islands Southern Shelf (CM 91-03). CCAMLR also formally recognises protection offered under Antarctic specially managed protected areas declared by the ATCM and provides special protection for sites that form part of the CCALMR environmental monitoring programme (CEMP).

In accordance with a precautionary approach, CCAMLR manages all fisheries from the outset. Measures adopted by the Commission prescribe requirements for the initiation of a fishery for any species, in any area, not previously exploited or that has been closed. The measures require Members to notify CCAMLR of their intention to start a new fishery. The notification must be accompanied by a Fisheries Operation Plan and A Data Collection Plan, which is reviewed by the Scientific Committee before being considered for approval by the Commission. CCAMLR generally limits the catch or fishing effort (or both) in these fisheries. It has made it mandatory the requirement to carry a scientific observer on board the fishing vessel.

A new fishery is designated an ‘exploratory fishery’ after its first year. The conservation measure that the Commission has implemented for exploratory fisheries allows for continued regulation of the fishery while the scientific information required for a full assessment of the fishery and stock(s) concerned is being collected.

CCAMLR aims to ensure that an exploratory fishery is not allowed to expand faster than the information to manage the fishery in accordance with the principles of Article II of the Convention is collected. To ensure information is adequate, the Scientific Committee is required to develop (and update annually as appropriate) a Data Collection Plan. This plan identifies the types of data required and how to obtain them from the exploratory fishery. Participating Members are required to provide a Research and Fishery Operation Plan for review by the Scientific Committee and Commission, as well as to submit annually the data specified by the Data Collection Plan. The

Scientific Committee also sets a precautionary catch limit at a level not substantially above that necessary to obtain the information specified in the Data Collection Plan and to undertake assessments and evaluations.

CCAMLR’s discussions about new and exploratory fisheries have highlighted the need to clarify the decisions and management procedures at the various stages of fishery development. In particular, the focus has been on developing uniform criteria for the resumption of ‘lapsed’ fisheries (i.e. those that have ceased operating for some period) and ‘closed’ fisheries (i.e. fisheries closed by a conservation measure). While there is fundamental agreement with the general principle that a notification procedure (as for new and exploratory fisheries) should be followed for the resumption of closed or lapsed fisheries, the details of how and to what extent additional procedures (e.g. for data collection) should be implemented remain under consideration.

A summary of the harvest of marine resources targeted by fisheries managed within the CCAMLR regulatory framework for the period 2005/06 to 2013/14 is presented in Appendix C. Analysis of this data indicates that the participating developing countries (C=Chile, I=India, SA=South Africa, U=Ukraine, N=Namibia) represent the following percentages of catch of the four target species by all developing countries:

Species	C/I/SA/U/N catch (mt)	Total developing countries catch (mt)	% C/I/SA/U/N
Champscephalus gunnari	3,480	3,481	99.97
Dissostichus eleginoides	5,893	7,248	81.30
Dissostichus mawsoni	1,215	6,198	19.61
Euphausia superba	66,565	192,999	34.49

This data underscores the substantial contribution the project could make to sustaining ALME resources via strengthening the engagement and performance of these 5 participating developing countries in ALME fisheries management and meeting their CCAMLR obligations.

The Project will work with the participating developing countries, and the private sector, to strengthen their capacity to comply with the requirements associated with the different stages of the management of a developing fishery through programs of technical support and capacity building. These initiatives will be tailored to address needs, confirmed during the PPG, through exchange programs with other CCAMLR members with a long history of support to these CCAMLR processes, targeted training, support for strengthened institutional processes and industry-sponsored support principally under Components 1 and 2.

3. The proposed alternative scenario, GEF focal area strategies with brief descriptions of expected outcomes and components of the project

Enhanced capacity of developing countries (or GEF-Eligible CCAMLR Member Countries, or GECMCs) in respect of their institutional and policy arrangements will result in their more effective engagement in CCAMLR policy, technical and scientific institutional processes to secure the sustainability of ALME ecosystem goods and services in the long term. Enhanced mechanisms, through CCAMLR, will result in strengthened coordination of science and management efforts in the Antarctic marine ecosystem and, as a consequence, strengthened conservation outcomes. Evidence that these outcomes are being achieved will be available in the form of i) an increase in the frequency and level of participation of GECMCs in CCAMLR processes, particularly working group meetings of CCAMLR's Scientific Committee (SC-CAMLR) (average representation of the 5 GECMCs in CCAMLR working group meetings for the last 4 years is 66%), ii) an increase in the scientific contribution to Scientific Committee and its working group meetings (increased submission of scientific papers and proposed conservation measures relating to Antarctic ecosystems and the management and conservation of the resources of the ALME by GECMC scientists and resource managers), iii) an increase in both the number and diversity of expertise among GECMCs delegations to Scientific Committee and working group meetings, and iv) decisions of the Commission relating to the conservation and rational use of resources of the ALME being traced to initiatives brought to CCAMLR by GECMCs.

An expanded and engaged global network of partners will contribute positively to effective and efficient management of the ALME but increasing the current level of monitoring in the Southern Ocean will require a major international effort. As the capacity of GECMCs to collaborate in this immense challenge is strengthened CCAMLR's role in serving as a coordinating point for some of this effort will be enhanced. The Scientific Committee of CCAMLR has recently developed a formal strategy to promote the involvement of all Members in the scientific work of the organization including through support for a CCAMLR Scientific Scholarship Scheme for early career scientists. CCAMLR will continue to support the actual scholarship as co-funding support to the Project. The Project will supplement this capacity building initiative by contributing resources to support expanded science activities associated with the scholarships, such as extended field research activities, which will lead to i) increased engagement of GECMCs in the work of CCAMLR's Scientific Committee, and ii) improved scientific knowledge and associated quality of scientific advice that supports management-decision making by CCAMLR Members in the Commission. The impacts of the Project will also be seen through GECMCs actively participating in, and contributing to, consortia and networks already working on Antarctic matters of relevance to CCAMLR. Requirements and mechanisms that will promote engagement in these networks by GECMC scientists and policy makers, which are listed in Section 5 below (Coordination), will be described as a result of work undertaken during the PPG.

Expanded knowledge including that secured through improved GECMC engagement will contribute to more complete understanding of Southern Ocean ecosystems with particular benefits for the conservation and management of marine resources that are harvested in CCAMLR-regulated fisheries. Filling current uncertainties, particularly those associated with the impacts of climate change, will be targeted to provide the basis for more robust assessments of the status and trends of harvested resources and associated ecosystem components with the result that CCAMLR's existing precautionary approach to fisheries management will be enhanced and refined. Another significant contribution will be the reduction in IUU fishing by vessels flagged to non-CCAMLR Members and stronger mechanisms to ensure the data required to support decision-making provided by CCAMLR Members, especially GECMCs, is complete and of high quality. Because of the clandestine nature of IUU fishing, an assessment of IUU operations, particularly quantifying their removals, is a major challenge for fisheries managers the world over. While IUU-related fishing has decreased significantly in the CCAMLR Convention Area since its peak in the 1990s, it remains a threat to the sustainability of fish stocks regulated by CCAMLR with the possibility that up to six longliners compete with the CCAMLR-regulated fleet for a toothfish resource where the total annual catch in the Convention Area is only 12 000 mt. An integrated approach to strengthening monitoring, control and surveillance (MCS) measures in the GECMCs, including strengthened port inspection regimes, at-sea monitoring and monitoring and certification of trade flows, supported by the Project will make a major contribution to on-going efforts to eliminate IUU fishing in the Convention Area.

In response to global recognition of the importance of the Southern Ocean in climate regulation, the Project will support collaborative efforts (working with partners identified in Section 5 (Coordination) and to be further elaborated during the PPG) to establish baseline measurements of ecosystem structure and function against which change can be measured. Recently, the Scientific Committee for Antarctic Research (SCAR) established two planning groups focused on the study of the biodiversity and ecosystems within the Antarctic, sub-Antarctic and Southern Ocean regions. SCAR-Ant-ECO (state of Antarctic ecosystems) will add to scientific knowledge on biodiversity that will be drawn upon to inform CCAMLR decision-making. Similarly, the information assimilated under the SCAR-AnT-ERA (Antarctic thresholds) initiative will improve knowledge about biological processes in Antarctic ecosystems, their thresholds and resistance and resilience to change. The active engagement of GECMCs scientists in these initiatives will be facilitated by the Project with the outcomes of their involvement apparent as a result of the relatively low level of contribution that is the baseline.

The four inter-related Components are:

Component 1. Enhanced Multi-national cooperation in the ecosystem-based management and monitoring of the Antarctic LME (ALME) through multinational cooperation, multisectoral coordination and partnership.

The outcomes of this Component will include 1.1: Institutional, legal and/or policy reforms implemented at the national level in CCAMLR participating developing states (or GECMCs) to enhance their institutional, legal and

policy environment for better multi-sectoral coordination and more effective use of resources to meet CCAMLR obligations, 1.2: Increased and more effective participation of developing states in CCAMLR discussions on monitoring and management decisions to realize the sustainable management of the ALME, and 1.3: Partnership established with private sectors (incl. industry associations) and civil society to enhance the management effectiveness of CCAMLR. The Project will support each GECMC to undertake reviews of their policy and institutional frameworks in respect of the Antarctic with a focus on CCAMLR and multi-national engagement. The reviews will consider means to promote and enhance inter-ministerial coordination and actively engage non-government organisations and the private sector, particularly the fishing industry, more effectively in national-level GECMC initiatives associated with conservation and management of the Antarctic LME. Reviews in five GECMCs undertaken during the Project will directly address outcomes i) and ii). Expanded engagement by GECMC scientists in national and international collaborative processes associated with the ALME will be evident in terms of both the diversity of networks supporting collaboration directly relevant to CCAMLR that record active participation by GECMC scientists and the number of GECMC scientists actively contributing to national and international CCAMLR-related initiatives including as officers of the Commission and/or CCAMLR's Scientific Committee. Confirmation that the Project is achieving desired outcomes in this regard will be evident in the form of GECMC contributions and recommendations that are appraised and implemented. Key private sector partners will include national level stakeholders and international bodies such as the Antarctic and Southern Ocean Coalition (ASOC), founded in 1978, the Association of Responsible Krill Harvesting Companies (ARK), established in 2013, and the Coalition of Legal Toothfish Operators (COLTO), launched in 2003 (See Section 5 below). All three organisations already actively participate in CCAMLR meetings as observers and are also represented on the national delegations of some CCAMLR members. Project outcomes will reflect the contributions of these organisations to Project-related initiatives at the national level in relation to marine spatial protection planning, initiatives to combat IUU and ecosystem-related research.

Component 2. Building technical and analytical capacity to support ecosystem-based management of the ALME. This Component will achieve increased technical capacity in the five GECMCs to contribute to the conservation and management of the ALME. Contributions to this component will include increased collaboration among the five GECMCs, between the five GECMCs and other CCAMLR members, and between the GECMCs members and non-CCAMLR members, for the monitoring, conservation and management of the ALME to achieve strengthened science-based decision-making relating to the conservation and management of the ALME. It will include bilateral and multilateral capacity building activities, including exchange programmes, among the five GECMCs and with other CCAMLR Members in Antarctic science and marine resources management. A minimum of four exchanges will be supported annually. Capacity building activities will include the review and strengthening of national-level data assimilation systems for the five GECMCs resulting in quality-assured data from these GECMCs being mainstreamed into CCAMLR data systems to contribute to CCAMLR decision-making. Scientists and fishery managers from the five GECMCs will participate in in CCAMLR-specific data management, fisheries assessment, ecosystem modelling, MCS systems and/or marine spatial planning targeted capacity building (including exchange programs) activities. The result will be increased scientific inputs from GECMC scientists to CCAMLR scientific and conservation processes (measured by the impact of scientific documents submitted and input to conservation measures adopted by the Commission) including from early career scientists supported under the CCAMLR Scientific Scholarship Scheme as a co-financed contribution to the Project. It will include partnerships with fishing industry and/or non-government organisations in the five GECMCs to support active contributions by the fishing industry (e.g. vessel time, ecosystem data, expertise, etc.) and non-government organisations (e.g. experts, technical advice) to ALME research and conservation initiatives including in regard to marine spatial planning (MSP) and marine protected areas (MPA), joint initiatives to combat IUU fishing and private sector sponsored research funding. Evidence of these outcomes will be in the form of four joint initiatives, partially supported by the Project, relating to the management of ALME brought forward by the participating GECMCs to the Scientific Committee and/or the Commission the outcomes of which are reflected in formal decisions adopted by the Commission. Proposals for new or amended existing conservation measures submitted to CCAMLR Scientific Committee Working Groups, the Scientific Committee itself or the Commission, which will include fisheries management (including in respect of IUU fishing), marine spatial planning and climate-related research against the baseline and the number of papers accepted for consideration by the Scientific Committee, increases will be linked to Project-related activities. Conservation and management-related outcomes will include strengthened monitoring,

control and surveillance (MCS) measures in the GECMCs, including reviewed port inspection regimes (supporting national action for at least two of the GECMCs to ratify the FAO Port State Measures Agreement) and reconciliation of catch data with trade data as a major contribution to on-going efforts to eliminate IUU fishing in the Convention. The number of States cooperating with CCAMLR through voluntary implementation of the CCAMLR catch documentation scheme is increased by four at least partially as a result of Project-supported initiatives to GECMCs.

Component 3. Demonstrations for the adaptive management of the ALME. This Component will support i) up to four (4) initiatives led by GECMC scientists and fisheries managers, or undertaken in collaboration with scientists and managers from other CCAMLR members, that assimilate ecosystem assessment and MCS data, including in respect of IUU fishing and climate change, that will be incorporated into decision-making processes related to marine spatial planning and the establishment of marine protected areas in the CCAMLR Convention Area. The initiatives will demonstrate adaptive management of the AMLE that will inform related processes in other ocean regions, and ii) the development of additional capacity within the GECMCs to utilise assessment and monitoring data to inform management decisions and identify potential protected areas (including through initiatives such as formal training and exchange opportunities) that results in at least one early career scientist in each of the five GECMCs actively participating in the design, development and introduction to CCAMLR of proposals for the establishment of MPAs. GECMCs data systems and procedures supporting these activities will be reviewed and strengthened. The MPA proposals will include reference areas for monitoring environmental change arising from climate variability or other anthropogenic activity. GECMCs, will work with other CCAMLR Members and with international and national networks, non-government organisations and the fishing industry (such as ASOC, COLTO and ARK) all of which have been represented in CCAMLR scientific committee meetings that have considered this PIF proposal), to plan and implement these initiatives.

Component 4. Knowledge management, communications of best practices and lessons learnt. The project will establish and support i) a network of scientists, policy makers and fishery managers to exchange information on their national and multilateral initiatives associated with ALME ecosystem processes including through a project established information portal on the CCAMLR website, ii) information dissemination on ecosystems and precautionary processes in the Southern Ocean disseminated to global audiences through multi-media platforms (social media, websites, video, etc.), iii) partnerships with the fishing industry and civil society to deliver awareness raising and public relations initiatives to global audiences, and iv) direct contributions detailing ALME lessons learned material to GEF IW:LEARN-organized activities, including GEF IW Conferences. At least one percent of the GEF IW investment through this project will be allocated to support the IW:LEARN-related activities.

4. Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTE, LDCF, SCCF and co-financing

The expected contributions from the baseline is significant. To be quantified during the PPG, contributions by CCAMLR Members (both GEF eligible and donor states) include substantial investments by national programmes in Antarctic marine ecosystem, oceanographic and fisheries research. In addition, CCAMLR Members make significant investments in vessel monitoring both at sea and in-port. At-sea monitoring programmes include the deployment of vessels and aircraft to remote areas of the Southern Ocean where clandestine operations by IUU operators are undertaken. These monitoring and surveillance exercises entail considerable cost.

Civil society makes an important investment particularly in relation to advocacy, communications and awareness raising on the importance of biodiversity conservation in the ALME and its possible impacts far beyond the ALME.

The fishing industry regulated by CCAMLR in the Southern Ocean makes a direct contribution to fisheries research and monitoring which includes i) full collaboration in CCAMLR's a programme of shipboard scientific observation which requires all fishing vessels to host CCAMLR scientific observers, ii) providing a direct contribution to expanding knowledge of Southern Ocean fisheries and ecosystems, including but not limited to data provision, support to mark recapture initiatives, collection of biological data, the provision of information concerning vulnerable marine ecosystems (VMEs), and iii) utilisation of fishing vessels as survey platforms for acoustic surveys of krill in the South-west Atlantic and research in data poor toothfish fisheries.

While budgetary contributions reflect the equal financial engagement of Members in CCAMLR, they do not reflect the policy or scientific contributions of different Members to the work of the Commission. The majority of scientific and technical contributions to CCAMLR are contributed by Members that are not GECMCs which is a reflection on the limited capacity of the GECMCs to actively contribute to CCAMLR-supported processes. Similarly, GECMCs' capacity to meet their marine resources management commitments and obligations under the CCALMR is limited compared to non-GECMCs, despite the fact that the GECMCs' capacity to harvest marine resources in the areas under CCAMLR jurisdiction at times exceeds that of non-GECMCs. Therefore, in order to improve the overall management effectiveness and the on-the-ground impacts of management decisions made by CCAMLR, it is important to strengthen the capacity of GECMCs to meet their commitments and obligations and to actively participate in the policy and scientific discussions facilitated by CCAMLR leading to the ecosystem-based management of the ALME based on the precautionary approach.

The project proposes to meet its objective of improved management of the ALME through strengthening the capacity of GECMCs to contribute to policy, scientific and technical initiatives and to meet their obligations, and through improving the quality of knowledge available to support decision-making in CCAMLR. The incremental cost is the additional investment required to achieve the active contribution of GECMCs to knowledge and management of Southern Ocean ecosystems and processes, including knowledge and adaptive management to changes that are occurring as a result of climate change, and to strengthen their participation in the decision-making processes of CCAMLR.

5. The global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The Southern Ocean is the conveyor belt of global oceanographic processes being the common feature on the southern boundary of the planet's three major oceans; the Indian, Atlantic and Pacific. Global environmental benefit will accrue as a result of the Project's contribution to an improved understanding of the role of the Southern Ocean to global oceanographic processes and global climate systems. The knowledge contributed by the Project in this area will supplement efforts at the GECMC national level to build capacity to more effectively contribute to both national and international negotiations regarding climate change. Building capacity for GECMC's participation in CCAMLR will lead to tangential benefits through informing national level preparations and engagement for those CCAMLR Members in other related multilateral processes. Global benefits across a diverse range of sectors will be generated as a result. Continued enhancement of management arrangements for shared AMLR will result from further strengthening multilateral cooperation on ecosystems and precautionary approaches to conservation and management and enhanced compliance with rules and regulations within the CCAMLR Convention Area. The reduced incidence of IUU fishing that will be achieved as a result of this will result in global benefit by securing sustainable sources of highly valued cold water AMLR for global markets.

The improved understanding of the Southern Ocean's globally significant, often unique, biodiversity will also lead to improved conservation efforts and management effectiveness. Knowledge acquired through the project can also be applied to limit adverse effects from emerging economic activities, such as tourism, and manage these activities in a more sustainable manner. Antarctic terrestrial and coastal tourism is an area of direct interest to many of the 52 States that participate in the Antarctic Treaty; thus, improved knowledge of the ALME will be highly crucial to avoid additional advancements in tourism or mariculture in this fragile ecosystem in an unsustainable manner.

Although research has suggested a series of distinct biogeographic zones in the Southern Ocean biological diversity there remains largely undescribed. This is as a consequence of relatively limited sampling effort that has been supported in Antarctica, its remoteness, harsh environment complicated by extensive ice, the cost of supporting field operations and a concentration of sampling effort within relatively close proximity of field bases.

Major biogeographic unknowns include the Amundsen Sea, the Western Weddell Sea, and the continental shelves underneath floating ice shelves, which because of ice conditions and inaccessibility, are poorly sampled. And the deep sea in the Southern Ocean remains relatively poorly described. As in excess of 90% of the Southern Ocean is greater than 1,000 m deep biological sampling has concentrated in shallower waters. The relatively few

investigations to the Antarctic deep sea have described diverse habitats, including hydrothermal vents, seeps, and mud volcanoes. On the coast, until recently the inter-tidal region was considered to be virtually devoid of life. Evidence is accumulating from regions such as the Antarctic Peninsula and islands of the Scotia Arc, that the intertidal zone is host to a diverse and rich community of organisms that can survive the huge variations in environmental conditions.

The Register of Antarctic Marine Species (RAMS), georeferenced records in SCAR-MarBIN, which forms the Antarctic Regional Node of OBIS (Ocean Biogeographic Information System), compiled under the aegis of the Scientific Committee for Antarctic Research (SCAR), records over 1 million distribution records, representing over 8,800 species from more than 1,300 families of Antarctic marine organisms. Researchers have predicted that, on the shelf alone, there could be as many as 17,000 species, implying that much of Antarctica's biodiversity remains to be described.

In relation to endemism, knowledge of the isolation of the Antarctic has increased as understanding of its relationship to the sub-Antarctic and the deep sea has expanded. Although previous estimates of over 80% endemic species for many benthic groups have been reduced by recent studies, rates of around 50% or more within a class are common (Bryozoa: Cyclostoma 47%, Cheilostoma 56%; Mollusca: Cephalopoda 54%, Bivalvia 43%, Gastropoda 74%, Pycnogona 55%, Ascidiacea 44%). These numbers may rise as the use of molecular techniques identifies cryptic species in the region.

The lack of detailed knowledge of the status of the majority of marine species means it is difficult to register Antarctic species as threatened or endangered. At least 4 species of cetacean and 18 species of birds found in the Southern Ocean are currently classified as threatened or endangered on the International Union for the Conservation of Nature Red List. Although there have been no recorded extinctions in the Antarctic, considering that many species are known from a single encounter, evidence substantiating the status of individual species is not available. There are currently no records of successfully established invasive marine animal species within the Southern Ocean. The rate of discovery of new species at deep shelf, slope, and abyssal depths is high, such that even recognizing whether species are native or alien may prove challenging.

The Project will facilitate the exchange of management and conservation efforts in the Southern Ocean ecosystem within GECMCs, across the membership of CCAMLR, throughout the ATS and globally. By improving ALME management and conservation, the Project will improve ecosystem health and associated ecosystem services such as seafood security and economic opportunities related to sustainable fishing and tourism. The Project will promote the mainstreaming of gender into ALME processes. The capacity building and outreach activities supported through the Project will encourage gender equality and provide training in the development and harmonization of gender-balanced opportunities across all institutional components of the Project.

6. Innovation, sustainability and potential for scaling up

Innovativeness:

Effective conservation and management of marine living resources in the Southern Ocean ecosystem demands an innovative approach. The unique environment, the cosmopolitan political interests, the suspension of sovereign claims and the absence of extended jurisdiction (except in relation to several relatively small areas under national jurisdiction), the absence of a resident community, its remoteness, the internationally shared commitment to its conservation and observable changes associated with climate change require interventions that are innovative. At the time that it was negotiated, the CCAMLR Convention enshrined innovative provisions related to precaution and an ecosystems approach to AMLR management. That innovation has since been integrated to fisheries management and conservation arrangements worldwide. Since it became operational, CCAMLR has pioneered innovations in relation to the collection and analysis of data utilizing fishing vessels, fishery-independent on-board scientific observation and the best available science to support decision-making. In addition, a suite of compliance related tools including vessel registries, a catch documentation scheme, a satellite-based vessel monitoring system and a compliance evaluation procedure have been developed and applied to CCAMLR-regulated fisheries. CCAMLR's

often pioneering implementation of these tools, procedures and systems reflects the innovative approach adopted by CCAMLR Members in the past. Current and future threats and challenges mean that it will be essential that such innovation continue to evolve and be applied in the future.

Sustainability:

The sustainable provision of goods and services from the Southern Ocean is a key objective of the Project. While currently relatively poorly understood, threats from climate change and ocean acidification may adversely impact existing ecosystem processes. The Project will deliver sustainability-related outcomes in the following critical respects i) scientific and policy capability to generate and use appropriate data to support ecosystem and precautionary decision-making in the ALME will be enhanced to provide the necessary support to long term institutional processes that actively engages an increasingly capable CCAMLR community with active participation of GECMCs, ii) IUU fishing will be reduced to the extent that threats to the sustainability of conservation and management arrangements put in place by CCAMLR are minimized, iii) the active engagement of additional stakeholders, such as the fishing industry and civil society, in both ALME science and management deliberations will increase the shared responsibility for the development, implementation and management of processes supporting a precautionary and ecosystems approach to management of the ALME, and iv) reference protected areas will provide critical information regarding environmental change in the absence of other anthropomorphic impacts contributing to an enhanced understanding of ecosystem changes that will address some of the existing uncertainties that are taken into account in decision-making.

Potential for scaling up:

Individual CCAMLR Member and CCAMLR community-wide coordinating processes will offer opportunities for replication and scaling up in other multilateral institutional arrangements and national level processes. The mechanisms supporting the engagement of the fishing industry and civil society may also inform efforts to partner with industry and civil society on larger scales or in other ocean regions. There is also significant potential for scaling up the protected area demonstrations within the CCAMLR Convention Area and in other ocean regions. The institutional processes and partnerships in CCAMLR supporting the collection of data, its analysis, the formulation of scientific advice, the consideration of scientific advice in policy-level decision-making and the regular review of the compliance of stakeholders with the conservation and management decisions of the Commission will also offer replication potential on large scales.

2. Stakeholders. Will project design include the participation of relevant stakeholders from [civil society](#) and [indigenous people](#)? (yes /no) If yes, identify key stakeholders and briefly describe how they will be engaged in project design/preparation.

Representatives from civil society will be actively engaged in the Project design process (see below). There are no indigenous human populations on the Antarctic continent.

All GECMC stakeholders are an integral part of the Antarctic Treaty System, including the Antarctic Treaty, the Committee for Environmental Protection and CCAMLR. The Antarctic Treaty was signed in Washington on 1 December 1959 by the twelve countries whose scientists had been active in and around Antarctica during the International Geophysical Year (IGY) of 1957-58. It entered into force in 1961 and now has 52 Parties which meet annually as the Antarctic Treaty Consultative Meeting (ATCM). The Convention for the Conservation of Antarctic Marine Living Resources (CAMLR Convention) entered into force in 1982. The CAMLR Convention Area applies between the Antarctic continent and the northern boundary of the Southern Polar Front an oceanographic and biological boundary as opposed to one established on the basis of geographic coordinates. The objective is conservation of Antarctic marine living resources where conservation includes rational use. It has 25 Members and 11 additional States have acceded to the Convention. The Protocol on Environmental Protection to the Antarctic Treaty was signed in Madrid on October 4, 1991 and entered into force in 1998. It designates Antarctica as a “natural reserve, devoted to peace and science” The Madrid Protocol established the Committee for Environmental Protection

(CEP) as an expert advisory body to provide advice and formulate recommendations to the ATCM in connection with the implementation of the Environment Protocol. The CEP meets every year in conjunction with the ATCM. Status and Activities of GECMCs:

Chile: The Government of Chile established the Chilean Antarctic Institute (INACH), as the sole governmental agency responsible for coordinating, planning and executing active scientific work as a contribution to this and other peaceful endeavours, in accordance with international administrative agreements, using the Institute as a means centralizer and manager of the activities conducted in the Chilean Antarctic Territory. In compliance with Chilean National Policy on Antarctica the Institute encourages inter alia scientific research, technology and innovation on an international basis in Antarctica; participation in the Antarctic Treaty System and international forums; taking action for the dissemination of knowledge on Antarctica and the instilling of related values within the nation of Chile; and advising the Ministry of Foreign Affairs on Antarctic matters. Chile maintains five polar bases.

India: The Indian Antarctic Program is a multi-disciplinary, multi-institutional program under the control of the National Centre for Antarctic and Ocean Research, Ministry of Earth Sciences. It was initiated in 1981 with the first Indian expedition to Antarctica. In 1983, India became a Consultative Party to the Antarctic Treaty and a member of Scientific Committee on Antarctic Research (SCAR). In 1986, it became a member of CCAMLR. In 1997, India ratified the Protocol on Environmental Protection. India constructed its first research station in 1983 - the Dakshin Gangotri Antarctic research base, which was replaced by the Maitri base in 1990. This was followed by a third station, Bharati, which was constructed in 2012. The focus of the Indian Antarctic Program is atmospheric, biological, earth, chemical and medical sciences. India collaborates with the international community as a member of the Intergovernmental Oceanographic Commission, Regional Committee of Intergovernmental Oceanographic Commission in Coastal Indian Ocean (IOCINDIO), International Seabed Authority (ISBA), and the State Parties of the United Nations Convention on the Law of the Seas (UNCLOS).

Namibia: Namibia's major fisheries policies described in a 1991 White Paper entitled Towards Responsible Development of the Fisheries Sector were passed into legislation through the 1992 Marine Fisheries Act. The Act recognises environmental uncertainties must be accommodated in responsible fisheries management. The Ministry of Fisheries and Marine Resources aims to: re-building of depleted stocks, support effective monitoring, control and surveillance, promote 'Namibianisation', strengthen the services of the Ministry and successfully promote regional co-operation in marine fisheries. It is the lead Government agency involved in regional and international fisheries and supports a range of stakeholder partnerships, including with BirdLife International's Albatross Task Force, leading to a significant reduction in seabird mortality from Namibian fisheries. Namibia became a Member of CCAMLR in 2000 but is not a party to the Antarctic Treaty.

South Africa: South Africa is one of the founder members and signatories to the Antarctic Treaty and has maintained a strategic presence in Antarctica since 1960 and also at the Prince Edward Islands and Gough Island. In 2003, Cabinet approved the transfer of the scientific research functions of the South African National Antarctic Program (SANAP) from the Department of Environmental Affairs (DEA) to the Department of Science and Technology (DST). DEA retains responsibility for all logistics and infrastructure. The National Research Foundation (NRF) is the agency responsible for grant making on behalf of the DST. South Africa's commitment to SANAP is underscored by the construction of a new Antarctic Supply and Research Vessel that was delivered in early 2012 at a cost of some US\$170-200 million. South Africa's Antarctic programs are also supported through academic institutions.

Ukraine: The Soviet Union was one of the founder members of the Antarctic Treaty and the CCAMLR Convention and has a long history of engagement in Antarctic science and fisheries. Following the dissolution of the USSR the National Antarctic Scientific Center of Ukraine, which was established in 1995, has operated one year-round station in Antarctica. Research supported at the Vernadsky station includes atmospheric physics, the ozone hole, and oceanography. In 2004 the National Antarctic Scientific Center of Ukraine joined the Antarctic Treaty as a Consultative Party and in 2006 Ukraine adopted a law on Ukraine Activity in the Antarctic. Ukraine has participated in the work of CCAMLR and SCAR since 1994.

Other key stakeholders include members of the ATS and the Committee on Environmental Protection, the Scientific Committee for Antarctic Research (SCAR), the Agreement for the Conservation of Albatross and Petrels (ACAP), The Antarctic and Southern Ocean Coalition (ASOC), the Association of Responsible Krill Harvesting Companies (ARK), the Coalition of Legal Toothfish Operators (COLTO), the WWF and IUCN Global Marine Programme that have already engaged and provided support for other initiatives in the region.

3. Gender Considerations. Are gender considerations taken into account? (yes /no). If yes, briefly describe how gender considerations will be mainstreamed into project preparation, taken into account the differences, needs, roles and priorities of men and women.

The Antarctic is the only unpopulated continent on the planet, and the only human inhabitants of this icy world are transient populations of scientific researchers and tourists. Although the geographic scope of the proposed project focuses on the Antarctic, it will operate through the broad network of stakeholders at the national and international level.

The project will create socio-economic benefits through building the institutional capacity of GECMCs. The project will provide support to address the gender dimension by providing targeted interventions to enable women and men to participate in, and benefit equally, from Antarctic-related initiatives. The education and training components will advocate the direct involvement of both women and men, and will incorporate the provision of training in the development and harmonization of gender-balanced policies frameworks. To ensure that the gender perspective is successfully incorporated into the ALME project, a gender audit will be conducted during the PPG, to help identify potentially gender sensitive issues and to incorporate gender considerations into the project design.

4 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).

Risk	Rating	Mitigation Measure
CCAMLR is not able to reach consensus agreement to engage in the Project.	L	The Project concept has been developed on the basis of broad consultation among CCAMLR Members. The PPG will continue to ensure that the project is harmonized with past, current and planned future CCAMLR initiatives.
The challenges of coordinating a large number of different countries and industry and civil society stakeholders results in slow progress or jeopardizes key outputs.	M	The project preparation phase will aim to ensure collaborating countries and other stakeholders are fully committed to the Project. Coordination mechanisms will be established to facilitate communications among Project stakeholders.
Political sensitivities and lack of consensus between CCAMLR Members hinder the progress on outputs or result in one or more GECMCs withdrawing their support for the project.	M	Efforts will be made during the PPG to ensure that potential Project-related political sensitivities are identified and appropriately addressed in the Project design.
Civil society and/or industry stakeholders do not engage in the Project due to financial constraints or policy differences that cannot be reconciled during the PPG.	M	The PPG will provide opportunities for the active engagement of civil society and industry so that policy views are fully considered during the design phase.
Climate change impacts on Antarctic ecosystem processes at a pace, and at a magnitude, that adversely affects the capacity of science to understand implications and for management to respond	M	Assign priority to science-based climate change research to inform decision-making.
Illegal, unregulated and unreported fishing activities adversely impact the fisheries management arrangements established and monitored by CCAMLR Members	M	CCAMLR Members assign additional resources to detecting, reporting on and combating IUU fishing operations that undermine the conservation and management arrangements established by CCAMLR

The challenges of coordinating a large number of different partner organizations, which jeopardizes or results in slow progress on key outputs.	M	The project preparation phase will aim to ensure collaborating organizations are fully informed of their role and responsibility in Project implementation.
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5. Coordination. Outline the coordination with other relevant GEF-financed and other initiatives.

The United Nations Development Programme (UNDP) addresses poorly managed and uncoordinated human activities across sectors that are threatening shared international water resources and the livelihoods of people who depend on them. The organisation has now established itself as one of the leading international organizations supporting the improved institutional processes supporting the management and conservation of both freshwater and marine transboundary water bodies. UNDP-GEF projects in the IW focal area aim to achieve a comprehensive, ecosystem-based approach to the sustainable management of international waters and to address both development and ecological needs. UNDP has supported catalytic and foundational activities for over a dozen successful GEF LME projects in all the world’s major developing regions, leading to the adoption and implementation of Strategic Action Programmes across each of these LMEs. UNDP is also the lead GEF agency for the GEF’s IW: LEARN program, which promotes portfolio-wide knowledge sharing on transboundary waters including marine ecosystems. UNDP will leverage their afore-mentioned expertise and build upon its programmatic strengths in support of the proposed project and in coordinating the activities.

The ALME project will coordinate activities through CCAMLR and with the following initiatives:

- *The Antarctic Treaty System (ATS)*, within which CCAMLR functions as a separate international convention, and the associated Committee for Environmental Protection (CEP) will be key partners. CCAMLR has formal observer status to both the ATS and the CEP (together with the Scientific Committee for Antarctic Research (SCAR) and the Council of National Managers of Antarctic Programs (CONMAP)). Arrangements have been put in place for reciprocal reporting on areas of mutual interest between CCAMLR, the ATS and the CEP and these will be used to support consultative arrangements for the Project.
- *Integrating Climate and Ecosystem Dynamics in the Southern Ocean (ICED)*, is an international multidisciplinary programme launched in response to the increasing need to develop integrated circumpolar analyses of Southern Ocean climate and ecosystem dynamics. ICED was developed in conjunction with the Scientific Committee on Oceanic Research (SCOR) and the International Geosphere-Biosphere Programme (IGBP), through joint support from the Integrated Marine Biogeochemistry and Ecosystem Research (IMBER) and Global Ocean Ecosystem Dynamics (GLOBEC) programmes. The ICED vision is to develop a coordinated circumpolar approach to better understand climate interactions in the Southern Ocean, the implications for ecosystem dynamics, the impacts on biogeochemical cycles, and the development of sustainable management procedures.
- *The Scientific Committee on Antarctic Research (SCAR)*, charged with the initiation, promotion and coordination of scientific research in Antarctica and associated programs including the Southern Ocean Observing System (SOOS), an international collaborative monitoring programme for the Southern Ocean, SCAR MarBIN an international network of scientists and institutions supporting shared databases for Antarctic marine life and SCAR’s emerging programmes of scientific research associated with Antarctic ecosystems (Ant-ECO) and ecosystem resilience and adaptation (AnT-ERA).
- *The Agreement for the Conservation of Albatross and Petrels (ACAP)* and CCAMLR have already established a formal arrangement for collaboration. The main vehicles for collaboration are ACAP’s Seabird By-catch Working Group (SBWG) and CCAMLR’s Working Group on Incidental Mortality Arising from Fishing (WG-IMAF).
- *The Antarctic and Southern Ocean Coalition (ASOC)* was founded in 1978 in response to the possibility of mineral and gas prospecting in Antarctica. ASOC took an active interest in the negotiation of the Convention establishing CCAMLR in the early 1980s. ASOC has observer status at both the ATS and CCAMLR and its coalition partners, including WWF, contribute to the scientific work of CCAMLR. ASOC maintains an active engagement in Antarctic conservation particularly in relation to the creation of a network of marine protected areas in the Southern Ocean, minimizing pollution from vessels, and mitigating

- the impacts of climate change.
- *WWF* participates as an observer in CCAMLR meetings as a member of the Antarctic Southern Ocean Coalition (ASOC). *WWF*'s Antarctic and Southern Ocean Program focuses on four principle threats to the Antarctic and Southern Ocean: IUU fishing, invasive species, marine pollution and climate change.
 - *IUCN's Global Marine and Polar Programme* also supports a range of initiatives related to marine protected areas, invasive species and climate change.
 - *The Council of National Managers of Antarctic Programs (CONMAP)* was established in 1988 as an international association to develop and promote best practice in managing the support of scientific research in Antarctica. Each country that is a signatory to the Antarctic Treaty 1959 normally establishes a National Antarctic Program, which has national responsibility for managing the support of scientific research in the Antarctic Treaty Area on behalf of its government and in the spirit of the Antarctic Treaty. COMNAP currently brings together the National Antarctic Programs of 28 countries. CCAMLR, SCAR and CONMAP meet regularly to discuss items of mutual interest particularly in the area of capacity building and supporting early career scientists.
 - *The Association of Responsible Krill Harvesting Companies (ARK)* was established in early 2013 to support the scientific and fishery management work of the CCAMLR Scientific Committee and the Commission. In addition to providing an information hub concerning krill harvesting and the Antarctic ecosystem ARK members actively support scientific research by making their fishing vessels available as research platforms. ARK has observer status to the regular meeting of the Commission.
 - *The Coalition of Legal Toothfish Operators (COLTO)* was launched in 2003 by fishing companies with offices in Australia, New Zealand, Spain, France, South Africa, Chile, Argentina, Uruguay, United Kingdom and Namibia. The coalition was established to combat illegal fishing of toothfish and promote sustainable fishing practices on toothfish stocks. COLTO also participates in CCAMLR meetings as an observer.
 - *The International MCS Network* was established in 2008 to improve the efficiency and effectiveness of fisheries-related monitoring, control and surveillance (MCS) activities through enhanced cooperation, coordination, information collection and exchange among national organizations and institutions responsible for fisheries-related monitoring, control and surveillance. It prepares analyses and studies related to IUU fishing, promotes communications on IUU fishing with and between members, develop cooperation and information sharing capabilities among member nations to work regionally and globally to prevent, deter and eliminate IUU fishing and supports training and development initiatives for of MCS officials in member nations to improve their operational effectiveness, enhance their skills and build their capacity to address IUU fishing.
 - Additional partnerships to be further researched during the PPG will include the World Ocean Council (WOC) and the Intergovernmental Oceanographic Commission (IOC).

Within the CCAMLR community, coordination will be focused on CCAMLR's Scientific Committee (SC-CAMLR) and its Working Groups particularly the Working Group on Ecosystems Monitoring and Management (WG-EMM). The SC-CAMLR and the WG-EMM meet annually. It is during the meeting of SC-CAMLR that additional coordination consultations will take place particularly with civil society and industry organisations participating in CCAMLR meetings as observers. Additional consultations and engagement will occur in the margins of other Antarctic-focused meetings such as the annual meetings of the Antarctic Treaty Consultative Parties and the Committee on Environmental Protection which will also involve the Scientific Committee on Antarctic Research (SCAR).

Another important coordination resource will be IW:LEARN and LME:LEARN. The PPG will draw on IW:LEARN resources to assist with informing the design of the ALME Project. That resource will also be utilized as Project implementation proceeds to communicate lessons learnt, achievements and challenges experienced. The Full-Sized project will dedicate at least 1% of GEF resources to portfolio learning primarily through IW:LEARN mediated mechanisms. The biennial GEF International Waters Conference will also be an important venue for coordination and information sharing.

6. Consistency with National Priorities. Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes /no). If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.

The project is fully consistent with the various commitments made by GECMC's under the CCAMLR Convention and the conservation measures reviewed and adopted annually by the Commission (<https://www.ccamlr.org/en/conservation-and-management/conservation-measures>).

7. 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.

The Project will draw upon the lessons learned and accumulated knowledge of GEF LME projects within the IW portfolio and other focal areas of GEF particularly the Biodiversity and Climate Change focal areas. Project learning and experience sharing activities will be coordinated with IW:LEARN and LME:LEARN. Project experience will be periodically shared with other GEF IW focal area initiatives through the biennial GEF IW Conferences.

Dissemination of information and best practices will be facilitated through formulation and implementation of a communications strategy including, but not limited to, a Project-dedicated facility on the CCAMLR website. This public domain facility will serve as the archive for Project-related documentation, activity description, progress reporting. In addition to GEF-related reporting through UNDP, an annual review and reporting process will be integrated to CCAMLR's established Scientific Committee annual programme of work. Technical and work programme implementation review will take place in the mid-year Working Group on Ecosystems Modelling and Management (WG-EMM). Relevant components of the Project will undergo similar review in the Working Group on Fish Stock Assessment (WG-FSA). The results of these reviews will then be considered by the Scientific Committee which, in its annual reporting to the Commission, will appraise the Commission of issues arising with Project implementation, outcomes achieved and planned future work. In this way the knowledge accumulated throughout Project implementation will be preserved within CCAMLR institutional processes while also providing a means to inform the global community of Project developments, lessons learned and achievements.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT⁹ OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):
(Please attach the [Operational Focal Point endorsement letter](#)(s) with this template. For SGP, use this [SGP OFP endorsement letter](#)).


NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mr. Miguel STUTZIN	Oficina de Asuntos Internacionales	Ministerio del Medio Ambiente Oficina de Asuntos Internacionales San Martin 73 Santiago, Chile Tel:+56 2 2573 5879 Email:mstutzin@mma.gob.cl	27 APRIL 2016
Mr. Sushel KUMAR	Special Secretary	Ministry of Environment, Forests and Climate Change Room 506, Fifth Floor Prithvi Wing Indira Parayavaran Bhawan Jor Bagh Road	25 MAY 2016

⁹ For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

		New Delhi, 110-003. India Tel: +91 11 2469 5242 Email:asmef.susheel@gov.in	
Mr. Teofilus NGHITILA	Director of Environmental Affairs	Ministry of Environment and Tourism Private Bag 13306 Windhoek, Republic of Namibia Tel:+ 264 61 284 2751 Fax:+ 264 61 240 339 Email:tnghitila@met.na, tnghitila@yahoo.com	10 JUNE 2016
Mr. Zaheer FAKIR	Acting Deputy Director-General	Department of Environmental Affairs Private Bag X 447 Pretoria, 0001 South Africa Tel:+ 27 12 310-3828 Fax:011 27 12 310 -3541 Email:Zfakir@environment.gov.za, Zfakir21@gmail.com	20 APRIL 2016
Oleksandr TARASENKO	Head of Department of International Cooperation	Ministry of Ecology and Natural Resources of Ukraine 35 Mytropolyta V. Lypkivskogo Str. Kyiv, 03035 Ukraine Tel:+38044 206 20 28 Fax:+380442063111 Email:o.tarasenko@menr.gov.ua	1 JULY 2016

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies¹⁰ and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Adriana Dinu, Executive Coordinator, UNDP-GEF		25 August 2016	Akiko Yamamoto, RTA for Water & Ocean Governance	+251 91 250 3316	akiko.yamamoto@undp.org

C. ADDITIONAL GEF PROJECT AGENCY CERTIFICATION (APPLICABLE ONLY TO NEWLY ACCREDITED GEF PROJECT AGENCIES)

N/A

¹⁰ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF