



REQUEST FOR CEO ENDORSEMENT
PROJECT TYPE: Full-sized Project
TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT INFORMATION

Project Title: Integrated management of marine and coastal areas of high value for biodiversity in Continental Ecuador			
Country(ies):	Ecuador	GEF Project ID: ¹	4770
GEF Agency(ies):	FAO	GEF Agency Project ID:	615692
Other Executing Partner(s):	Ministry of the Environment (MAE), Conservation International Foundation (CI) will act as an Implementation Partner	Resubmission Date:	June 10, 2014
GEF Focal Area (s):	Biodiversity	Project Duration(Months)	48
Name of Parent Program (if applicable):		Project Agency Fee (\$):	419,879
	> For SFM/REDD+ <input type="checkbox"/> > For SGP <input type="checkbox"/> > For PPP <input type="checkbox"/>		

A. FOCAL AREA STRATEGY FRAMEWORK²

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Co-financing (\$)
BD-1	Outcome 1.1: Improved management effectiveness of existing and new protected areas	Output 1: New protected areas (4 conservation areas) and coverage (ca. 15,000 hectares) of unprotected ecosystems.	GEFTF	1,346,120	6,027,317
BD-2	Outcome 2.1: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation.	Output 2. National and subnational land-use plans (4 for costal marine conservation areas and 70 for mangrove areas) that incorporate biodiversity and ecosystem services assessments	GEFTF	2,394,858	10,938,290
BD-2	Outcome 2.2: measures to conserve and sustainably use biodiversity incorporated in policy and regulation frameworks.	Output 1: Policies and regulatory frameworks (4) for productive sectors.	GEFTF	517,810	2,441,540
Total project costs				4,258,788	19,407,147

¹ Project ID number will be assigned by GEFSEC.

² Refer to the Focal Area/LDCF/SCCF Results Framework when completing Table A.

B. PROJECT FRAMEWORK

Project Objective: To develop an integrated management approach for the use and conservation of coastal and marine areas of high biodiversity value, by establishing conservation areas, strengthening mangrove concessions and integrating biodiversity conservation in fisheries management within conservation areas.						
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Confirmed Co-financing (\$)
1. Integrated management of high-value coastal areas for biodiversity	TA	<p>1.1. Four new coastal-marine conservation areas (c.a., 15,000 ha) will be under integrated and effective management leading to stabilizing or increasing the detection of green turtle, olive ridley sea turtle and leatherback turtle nesting sites.</p> <p>Target:</p> <p>a) > 50/90 points in the GEF PA management effectiveness tracking tool</p> <p>b) 15,000 ha protected including >122 km protected turtle nesting site beaches</p> <p>c) Turtle traces $\text{km}^{-1} \text{day}^{-1}$ and nests $\text{km}^{-1} \text{day}^{-1} \geq \text{PY 1 baseline}$ (<15% variation)</p> <p>1.2. Biodiversity conservation integrated into the management of mangroves under concession granted to community groups</p> <p>Target:</p> <p>a) >96,000 ha of mangrove under valid concessions</p> <p>b) Population of biodiversity and ecosystem health species indicators (crab, dark clam) ></p>	<p>1.1.1. Four new coastal-marine areas legally established and under integrated and effective management. Target: 4 new MPAs covering $\geq 15,000$ ha</p> <p>1.1.2. Biodiversity baseline established and operating monitoring system of key biodiversity indicators including turtle traces and nets in each of the new MPAs</p> <p>Target: 4 baseline established and biodiversity monitoring systems working, one for each of the new MPAs</p> <p>1.1.3. Four management plans agreed with sectoral authorities, autonomous decentralized governments (GADs) and users of coastal marine resources including zoning and land-use planning incorporating economic valuation and protection of sensitive habitats and species (e.g. beaches where marine turtles nests, intertidal ponds, rocky reefs)</p> <p>Target: 4 plans agreed</p> <p>1.1.4. Priority actions of the management plans implemented with the GADs including the management of solid waste, the regulation of fishing and tourism, and the control of domestic and stray animals</p> <p>Target: The GADs in the four conservation areas have implemented management systems for the coastal front, management of solid waste and sewage, and control of stray animals.</p> <p>1.2.1. Management of mangrove concessions strengthened by supporting community group concessionaires in implementation of community monitoring and control plans and zoning and planning of resource use and conservation of mangrove biodiversity</p> <p>Target: ≥ 49 concessions implement basic measures of sustainable management including measures for the conservation of biodiversity of high value</p>	GEFT F	2,640,495	13,852,838

		<p>PY 1 baseline in mangrove concession area (<15% variation)</p> <p>c) Population and spread of Hawksbill sea turtle (<i>Eretmochelys imbricata</i>) and the American crocodile (<i>Crocodylus acutus</i>) \geq PY 1 baseline in mangrove concession area (<15% variation)</p>	<p>1.2.2. 21 new mangrove concessions granted and three existing concessions expanded (898 ha). Target: >37,000 ha under new concessions or expanded concessions</p> <p>1.2.3. A financial support mechanism for mangrove concessions that transfers at least USD 1 000 000 a year to community groups for investment in mangrove conservation Target: At least 80% of the concessions are incorporated in the SOCIO MANGLAR mechanism (> 42,000 has)) transferring at least USD 1 000 000 a year</p>			
2. Conservation of biodiversity in fishery management	TA	<p>2.1 Sustainable rights based management (RBM) of fisheries implemented in coastal MPAs and mangrove concession areas resulting in stabilization or increase in the catches of main fishing resources (i.e., red crab, dark clam, lobster, Pacific bearded brotula and octopus) Target: a) Fisheries RBM plan implemented in 5 MPAs and catches monitored (144,000 ha) b) fisheries RBM plan implemented in >25,000 ha under mangrove concessions and catches monitored c) CPUE average \geq PY 1 baseline</p>	<p>2.1.1. A fisheries RBM plan operating within the Galera-San Francisco Marine Reserve that includes the Pacific bearded brotula, lobster and octopus</p> <p>2.1.2. A fisheries RBM plan for lobster operating within the El Pelado Marine Reserve</p> <p>2.1.3. Two fisheries RBM plans for the dark clam operating within the El Morro Mangrove Wildlife Refuge and the Cayapas Mataje Mangrove Ecological Reserve</p> <p>2.1.4. A fisheries RBM plan for red crab operating within the Churute Mangrove Ecological Reserve</p> <p>2.1.5. Twelve fisheries RBM plans implemented in mangrove concessions.</p>	GEFT F	1,031,006	3,074,129
3. Strengthening of the regulatory framework for the conservation and management of marine and coastal biodiversity.	TA	<p>3.1 Conservation measures for the sustainable use of coastal marine biodiversity mainstreamed in regulatory framework for mangrove concessions, fisheries in MPAs, and for the municipal management of coastal zones Target: > 12/18 in the GEF BD policy and regulatory framework tracking tool</p>	<p>3.1.1 Regulation of mangrove concessions updated by MAE</p> <p>3.1.2. Regulation of fisheries management in MPAs adopted by MAE</p> <p>3.1.3. National ICM strategy adopted</p> <p>3.1.4. Five ordinances for coastal management that articulates the new MPAs</p>	GEFT F	142,452	933,642
4. M&E and information dissemination	TA	<p>4.1. Project implementation based on RBM and application of lessons learned and good practices in future interventions, facilitated</p>	<p>4.1.1. Project M&E system operational, providing constant information on project progress in achieving outcomes and outputs</p> <p>4.1.2. Midterm and final evaluations</p> <p>4.1.3. Project best practices and</p>	GEFT F	242,942	317,000

		lessons learned published			
		4.1.4. Webpage for information-sharing and exchange of experiences			
			Subtotal	4,056,895	18,177,609
			Project management Cost (PMC)	201,893	1,229,538
			Total project costs	4,258,788	19,407,147

C. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

Sources of Co-financing	Name of Co-financer (source)	Type of Co-financing	Co-financing Amount (\$)
Government	MAE	Cash	4,914,854
		In-kind	4,609,744
Government	MAGAP	Cash	500,000
		In-kind	1,500,000
Government	INP	In- Kind	263,787
GEF Agency	FAO	Cash	75,540
		In-kind	175,000
NGO	CI	Cash	1,881,170
		In-kind	-
NGO	HIVOS	Cash	478,900
		In-kind	72,000
NGO	WildAid	Cash	125,000
		In-kind	125,000
International Organization	UNHCR	Cash	-
		In-kind	77,000
International Organization	GIZ	Cash	500,000
		In-kind	-
NGO	FAN	Cash	610,000
		In-kind	192,796
NGO	NAZCA	Cash	-
		In-kind	100,000
NGO	CEDEAL	Cash	115,000
		In-kind	35,000
Local Government	GADP GUAYAS	Cash	300,000
Communities	"6 de Julio" Crab harvesters Association	Cash	120,000
		In-kind	60,000
Communities	Balao Crab harvesters and fishermen Association	Cash	84,000
		In-kind	40,000
Communities	"25 de Julio" Crab harvesters and fishermen Association	Cash	58,800
		In-kind	165,340
Communities	"21 de Mayo" Crab harvesters and artisanal fishermen	Cash	58,800
		In-kind	165,340
Communities	Puerto Tamarindo" Crab harvesters, artisanal fishermen and associated activities Association	Cash	54,400
		In-kind	17,600

Communities	"Mondragón" Artisanal Fishery Production Cooperative	Cash	59,200
		In-kind	135,600
Communities	Isla Escalante Alliance	Cash	30,000
		In-kind	30,000
Communities	"Puerto Buena Vista" Crab Retailers Association	Cash	87,360
		In-kind	55,600
Communities	"El Conchal" Artisanal Fishery Production Cooperative	Cash	70,200
		In-kind	270,500
Communities	"Los Ceibos" Crab Retailers Association	Cash	32,832
		In-kind	87,600
Communities	"Puerto La Cruz" Artisanal Fishery Production Cooperative	Cash	142,800
		In-kind	49,764
Communities	Northern Mangroves Artisanal fishermen and bioaquatic products collectors Association (APARPROBIMN)	Cash	-
		In-kind	164,000
Communities	"San Lorenzo" Africanecuadorian Mangrove Bioaquatic Products Artisanal Collectors Federation	Cash	-
		In-kind	242,000
Communities	Eloy Alfaro" Mangrove Bioaquatic Products Artisanal Collectors Federation	Cash	-
		In-kind	103,000
Communities	Campanita" Africanecuadorian Mangrove Bioaquatic Products Artisanal Fishermen Association	Cash	-
		In-kind	23,000
Communities	"Palma Real" Bioaquatic Products Artisanal Collectors Association	Cash	-
		In-kind	17,700
Communities	"El Viento" Bioaquatic Resources Artisanal Collectors Association	Cash	-
		In-kind	17,700
Communities	La Barca" Fishermen and Bioaquatic Products Collectors Association	Cash	-
		In-kind	9,400
Communities	11 de Octubre" Fishermen and Bioaquatic Products Collectors Association	Cash	-
		In-kind	91,200
Communities	"Tambillo" Mangrove and Bioaquatic Products Producers and Collectors Association	Cash	-
		In-kind	36,000
Communities	"Luchando por San Antonio" Bioaquatic products Artisanal Collectors Association	Cash	-
		In-kind	11,000
Communities	Canchimalero" Afroecuadorian Mangrove Artisanal Fishermen of Bioaquatic Products Association	Cash	-
		In-kind	70,000
Communities	Guachal" Afroecuadorian Artisans and Artisanal Fishermen Association	Cash	-
		In-kind	13,600
Communities	El Bajito" Afroecuadorian Artisanal Fishermen of Bioaquatic Products Association	Cash	-
		In-kind	34,560
Communities	"18 de Octubre" Mangrove Bioaquatic Products Collectors Association	Cash	-
		In-kind	17,700
Communities	"Fe y Progreso Tolita Pampa de Oro" Afro Women Association	Cash	-
		In-kind	13,500
Communities	"Artelangosta" Artisanal Fishermen of lobster from Cabo San Francisco Organization	Cash	-
		In-kind	16,260
Total Co-financing			19,407,147

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL, AREA AND COUNTRY¹

N/A

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount (\$)	Co-financing (\$)	Project Total (\$)
Local consultants	1,066,828	4,267,312 ³	5,334,140
International consultants			-

G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? NO

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

³ Cofinancing of local consultants corresponds mainly to staff time of organizations presenting cofinancing letters.

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF⁴

Even though the project strategy and overall structural design stays the same as approved in the PIF, there has been an important expansion in the scope of the project due to new government priorities, in particular in terms of mangrove biodiversity and ecosystem conservation, which are to be covered by an addition of USD 1.2 million in STAR Biodiversity resources (not approved in the PIF, new endorsement letter attached to the submission of this CEO endorsement request) and USD 7 million in additional co-financing coming from original and new partners. The changes and their rationale are as follows:

A minor change can be observed in component 1. The species of high marine biodiversity value for their global importance as threatened or vulnerable, which conservation will be targeted by the creation of marine protected areas, are now green turtle (*Chelonia mydas*, EN), olive ridley turtle (*Lepidochelys olivacea*, VU), hawksbill turtle (*Eretmochelys imbricata*, CR), leatherback turtle (*Dermochelys coriacea*, VU) and coastal crocodile (*Crocodylus acutus*)⁵. Information gathered during project preparation proved nesting sites are threatened in many beach areas in the case of turtles, and crocodile is being consumed as bush meat in some mangrove areas.

Also in component 1, the approach to surveillance and control is now focused at directly strengthening mangrove concessioners own surveillance and control systems at community level instead of directly strengthening the government Units for Control and Surveillance (UCV). Engaging directly the communities in this activity was assessed to be a more cost effective approach allowing UCVs to rely on the systems of each mangrove concessions to develop a network to control large extensions of coastal areas.

During the project preparation the feasibility of a financial mechanism to provide direct support to concessionaries for the protection of mangroves was to be analyzed. Since the formulation of the PIF MAE has decided to expand the positive experience from the implementation of the forest conservation incentive mechanism, "Socio Bosque"⁶, (Forest Partner) created in 2008 providing financial incentives to owners of native forests, moorlands and other native vegetation in exchange of conservation compliance with basic conservation and protection measures⁷. Based on this experience MAE has created the incentive mechanism "Socio Manglar" (Mangrove Partner) to financially support communities conserving mangrove ecosystems. During the project preparation some activities were supported related to consultations regarding the operational modality of this new mechanism and MAE has requested this project to assist in the capacity development and technical assistance to concessionaries, so they are ready to comply with all requirements the incentive mechanism will request. It is expected that Socio Manglar will be operational in late 2014. With this mechanism in place the scope of the project in terms of ha of mangrove ecosystems under conservation and sustainable use, has been significantly expanded from 37,000 ha proposed in the PIF to 96,000 ha included in the final project design.

The Government has expressed it is of the utmost priority to implement Socio Manglar in all mangrove concessions (96,000 ha of which the project will directly support its implementation in at least 42,000 ha). However, 12,000 ha are under concessions that have expired, which would render concessionaries impossible to access the incentive. All of these expired concessions are found in the Cayapas-Mataje Mangrove Ecological Reserve (REMACAM), in the Esmeraldas Province in the northern part of Ecuador's coast. Since the original PIF only included concessions in Manabí, Santa Elena and Guayas provinces, the MAE has requested project partners CI Ecuador and FAO to include

⁴ For question A.1-A,7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter "NA" after the respective question

⁵ This species is categorized as critically endangered and it is included in the red list of reptiles of Ecuador. In 2006, MAE adopted the national strategy for in situ conservation of the coastal crocodile (*Crocodylus acutus*), which was published in Official Register 422, dated December 21st, 2006.

⁶ Agreement 169 published in the Official Gazette 482 of December 5th, 2008.

⁷ Socio Bosque is financed through fiscal resources, international cooperation and other contributions. Participation in the program is voluntary, interested parties sign a 20 years agreement.

REMACAM in Esmeraldas, as one of the project interventions areas. This has significantly increased the coverage of the project in terms of another coastal marine zone of highly importance for biodiversity conservation, but often neglected largely due to, among other reasons, its proximity to the conflictive Northern Border Zone with Colombia.

MAE's investment in the Socio Manglar's mechanism represents USD 4,000,000 in a period of four years which is part of the additional co-financing to match the additional USD 1,200,000 requested in GEF funds from Ecuador's biodiversity STAR allocation. Those additional funds will not only support capacity development to access Socio Manglar in REMACAM, but also in the other mangrove concessions in the other provinces. Hence the project scope is being enhanced, searching to promote integrated marine coastal management in a lot broader area of the Ecuadorian Coast line, through strengthening of mangrove concessions, creation of new MPAs and development of fisheries systems.

Altogether this does not represent a shift in the original project strategy, but rather an acknowledgement of the need to increase the project geographic area to target barriers that are present all throughout the coastline. Therefore, information on the baseline programmes and projects has been updated and expanded (in section A.4 below), since new baseline initiatives have been identified during the full project preparation. Among those new initiatives are the activities carried out by HIVOS, who also becomes a new executing partner for the project that will be responsible for executing the project in REMACAM.

A.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Updates Reports, etc.

Ecuador ratified, in 1993, the CBD and developed under the leadership of MAE the "Política y Estrategia Nacional de Biodiversidad 2001-2010" (National Biodiversity Policy and Strategy 2001-2010).⁸ The project is aligned with the following strategies of the mentioned document: (i) **Strategy 1** "Consolidate and enhance the sustainability of productive activities based on native biodiversity," (ii) **Strategy 2** "Guarantee the existence, integrity and functionality of the components of biodiversity: ecosystems, species and genes", (iii) **Strategy 3** "Balance pressures for the conservation and sustainable use of biodiversity," and (iv) **Strategy 4** "Ensure respect for and exercise of individual and collective rights of citizens to participate in decisions related to access and control over resources, and guarantee that benefits of conservation and use of biodiversity and knowledge, innovations, and practices of communities and local populations are fairly and equally distributed."

A.2 GEF focal area and/or fund(s) strategies, eligibility criteria and priorities.

The project is aligned with GEF's Biodiversity Strategy. The first component of the project is linked to **Objective 1** on the improvement of the sustainability of protected area systems, and **Objective 2** on the inclusion of the conservation and sustainable use of biodiversity in land and sea productive areas and sectors. In relation to Objective 1, component 1 will support Outcome 1.1, to improve the effectiveness of the management of new and existing protected areas. Four new sea-coastal areas will be established for sustainable management, to strengthen the national system of protected areas, where sea-coastal biodiversity is still underrepresented. The new areas will include around 15,000 hectares, and the main focus will be to mitigate the pressures from tourism development, overfishing, and pollution from land based sources. The new areas have been selected based on their importance for conservation priorities of identified threatened marine biodiversity, including zones where sea turtles nest. The areas will include beach zones and will extend one mile offshore, which include the reserve area for the production of bioaquatic species, as established by fishing authorities.⁹ The management of these areas, in order for them to incorporate measures for biodiversity conservation, will be an integrated management exercise which will involve all sectors, such

⁸ Adopted by Executive Decree 2232 published in Official Register 11, dated January 30, 2007.

⁹ Agreement 134, dated July 24th, 2007. In this area, industrial fishing is banned and only certain types of artisanal fishing can be carried out.

as the fishing authority (SRP), the sea authority (DIRNEA), the tourism authority (MINTUR), autonomous decentralized governments and environmental authorities.

Additionally, component 1 will support Outcome 2.1, increase of land and sea landscapes that are sustainably managed and form part of biodiversity conservation. To support this Outcome the project will support the conservation of mangrove habitats and biodiversity, by strengthening the management of 49 mangrove areas. These are managed by local groups based on mangrove sustainable use and protection agreements that have already been signed (commonly known as mangrove concessions). Local community groups will be supported in strengthening their skills as related to the development and implementation of monitoring and control plans, and will draw up mutual agreements related to the use of mangrove resources. Additionally, six local groups will be supported in drafting baseline studies and management plans to access new mangrove concessions. A financial incentive mechanism will also be implemented to sustain mangrove concessions and their conservation activities.

Component 2 will, with its focus at conserving fishery resources, also support Outcome 2.1. The project will support the development and implementation of fishery management systems based on access rights within MPAs and mangrove concession areas. Systems will be developed for fisheries of dark clams and crabs in mangrove areas (i.e., REMACH, REVISMEM, and REMACAM) and octopuses, lobsters and Pacific bearded brotuloes in stony areas (i.e. REMGSF and RMEP). These systems will allow for the conservation and improved utilization of fishery resources by local communities and conservation of populations in protected areas so that, in turn, they will distribute biomass in sea environments. To develop these actions, all mangrove concessioners will be supported in designing and implementing management plans for mangrove fisheries resources. These experiences will be the basis for fisheries management models for other MPAs of mainland Ecuador.

Component 3 will support Outcome 2.2 to incorporate measures for the conservation and sustainable use of biodiversity in policies and regulatory frameworks. To improve the regulatory framework for ICM based on project experiences and developed practices, proposals will be presented for the following: (i) update of the rules for mangrove concessions granted to traditional users; (ii) regulations for fishing in MPAs; (iii) national ICM strategy; and (iv) a model for local government's coastal management ordinances. Proposals will be developed through advisory and participatory processes that will focus on incorporating the conservation and sustainable use of marine biodiversity in sectoral regulations.

Finally, the project will contribute to the achievement Aichi Targets 6, 8, 11 and 12.

A.3 The GEF Agency's comparative advantage:

The same as in PIF

A.4 The baseline project and the problem it seeks to address:

Information on the baseline programmes and projects has been updated and expanded given that several baseline initiatives, included in the PIF, have finalized and new ones have been identified during the full project preparation as follows:

1. Waterfront management.

To protect the rich biodiversity, the government has created a network of 16 protected marine and coastal areas (MPAs) in continental Ecuador¹⁰. MPAs are part of the Natural Heritage Areas of the State (PANE),

¹⁰ Except from the Galapagos National Park and Galapagos Marine Reserve, which are in the Galapagos archipelago located at 972km from the mainland coast of Ecuador.

which is one of the constitutive elements of the National System of Protected Areas (SNAP) managed by the MAE. The MPAs network covers 332,968 hectares, which are under different management categories and constitute 5.2% of the territorial sea of continental Ecuador (6,353,800 hectares)¹¹. One of the most outstanding areas is Machalilla National Park, which was created in 1979 and has 56,184 hectares of land area and 14,430 hectares of marine area. One of the justifications for its creation was the protection of the main nesting beaches of sea turtles known at that time. The park has 22,570 km of sandy beach and 42,500 km of rocky beach. Recently MAE is applying a new category for the declaration of MPAs, “national recreation area”¹², which includes the recreational use of the beach and the conservation of valuable elements of biodiversity. It is defined as an area of 1000 hectares or more where there are mainly scenic beauty, recreation and tourism resources in a natural environment, easily accessible from populated centers. The MAE has had promising results with the management of Playas de Villamil National Recreation Area¹³, covering 2,478 hectares of mangrove remnant areas, located in an area of mass tourism (Playas canton, Guayas province).

MAE is also implementing the “National Program for Solid Waste Integrated Management” (PNGIDS), focused on promoting the management of solid waste in the municipalities of Ecuador. The two main goals of this Project are (i) that at the end of in 2014 70% of the country’s population dispose of waste in a sanitary landfill technically managed, and (ii) to eliminate open dumps in all municipalities of the country by 2017. Through the PNGIDS, MAE has supported the design of sanitary landfills for Manta and Santa Elena municipalities. The PNGIDS also organizes annual beach cleanup events¹⁴ to raise awareness among residents and visitors about marine debris and its impact on biodiversity of high conservation value such as sea turtles.

At local level, some Decentralized Autonomous Governments (GADs) are more sensitive to the conservation of natural areas and support the work of the MPAs. For example, the Provincial Government of Guayas created the “provincial conservation area system” which aims to declare, during the 2012-2016 period, at least 10,000 hectares as provincial conservation areas¹⁵. Some municipalities have begun to regulate activities in their beaches. In 2013, the Municipality of Salinas issued the “Regulatory Ordinance of Productive Activities and Integrated Management of San Lorenzo, Chipipe, La Milina, Puerto Lucia, and Punta Carnero beaches of Salinas canton in the Province of Santa Elena”¹⁶. This ordinance includes topics such as vehicles circulation, pet management and beach cleaning. The municipality of Puerto Lopez is currently working on gathering information regarding the status of solid waste, with emphasis on closure of the current sanitary dump.

Authorities seek to establish management mechanisms that reconcile development needs with biodiversity conservation. Based on the finding that turtles nest in 32 beaches of the Ecuadorian coast, there are four areas not yet protected under the SNAP: (a) the section between San Mateo and San Lorenzo (ca. 20 km in Manabí province); (b) the section between Salango and San Pedro (ca. 46 km between southern Manabí province and northern Santa Elena province); (c) the section between Engabao and Playas (ca. 22 km in Guayas province); and (d) the section between Subida Alta and Agua Piedra in Puná Island (ca. 11 km in the province of Guayas). To this end and in coordination with this Project, MAE, besides managing all the MPAs, during the next four years, will allocate resources for the development of the technical document on alternatives for MPAs management, draft ministerial agreements, and monitor and socialize the creation process of new MPAs, including the proposal to create the mangrove ecosystem area in the Portoviejo River estuary. The new

¹¹ In June 2016, Ecuador ratified its secession to the UN Convention on the Law of the Sea (UNCLOS), which structured adjacent sea in 12 miles of territorial sea and 200 miles of exclusive economic zone.

¹² LFANVS

¹³ The protected area was created through Agreement 163 (published in the Official Gazette Supplement of February 1st, 2013), and comprises 2,478.12 hectares of beaches and mangrove remnants.

¹⁴ In peak seasons of coast and highlands holidays (i.e., February and August), and in the International Beach Cleanup Day.

¹⁵ Albán, M., S. Suarez & J. Camacho. 2012. Planificación Estratégica del Sistema de Áreas de Conservación del Gobierno Provincial del Guayas (Strategic Planning of Areas Conservancy System of the Provincial Government of Guayas) 2012 – 2016. Final Advisory Report. Environment Directorate of the Provincial Government of Guayas, Ecuadorian Center of Environmental Law, and The Nature Conservancy. Guayaquil. 112 pp.

¹⁶ Published in the Official Gazette of the Autonomous Municipal Government of Salinas Canton, Issued on March 6th, 2013.

MPAs should prepare a management plan, draft ministerial agreement, and undertake monitoring and socialization activities. As part of the management plans, the MAE will invest funds in restoration activities and sustainable productive enterprises in Chone River estuary, as well as in conservation activities in the middle and lower basin of Ayampe River, which provides Puerto Lopez canton with hydrological resources. To support monitoring and control, they will also deliver a boat and motor to the Mangrove Guides Association.

Additionally, MAE will carry out a benthic and ecosystem mapping and subtidal and intertidal quantitative inventories of marine biodiversity in 6 MPAs and 4 areas of possible expansion. These activities will provide baseline information on biodiversity status in the area, and will motivate the National Environmental Fund¹⁷ (FAN) to include resources to support the new MPAs¹⁸ in Protected Areas Fund (FAP) programming. MAE's total investing is USD1,862,873.

Conservation International has supported the MPAs management in Ecuador. In Phase 3 of ETPS, CI-Ecuador supported the strengthening of the management of five MPAs (REMGSF, RVSMCP, REVISIMEM, PNM and REMACOPSE), and provided specific resources to support the creation of two new protected areas (RMEP, ANRPV). Support included basic fishery management in the REMGSF. During phase 4 of ETPS, CI-Ecuador will provide technical assistance, training and equipment to support: (i) the process of creating new MPAs; (ii) the preparation of the relevant management plans; and (iii) capacity building of municipalities in ICM for a total amount of USD300,000.

WildAid will contribute with technical assistance, training and equipment to design the control and oversight systems of the four new MPAs, and to incorporate these new aspects in the municipal coastal management ordinances (USD 150,000). Guayas GADP will invest USD 100,000 in promoting the declaration of the Gulf of Guayaquil as a Biosphere Reserve.

2. Management of mangrove concessions

Mangrove concessions have been a useful tool to maintain the forest cover. Concessions are actually a collective rights scheme around Territorial Use Rights in Marine Fishery (TURF)¹⁹, which have been mainly useful for crab and dark clam fishermen/women. In 2008 the performance of mangrove concessions was evaluated²⁰, finding that not all concessions are developed similarly. Some concessionaries failed to overcome the initial barriers for implementation; however, those who could get the concession obtained important social and economic benefits²¹. At the beginning of 2014 there were 49 concessions (59,000 hectares), but 12,500 hectares of mangrove correspond to expired concessions, especially in the REMACAM. The most successful mangrove concessionaries have developed empirical mangrove management schemes based on Rights-Based Management (RBM). There are 17,000 hectares of concessions that implement empirical RBM schemes. The most remarkable cases are 6 de Julio, Balao and Nuevo Porvenir in crab management, and Costa Rica in dark

¹⁷ FAN is a NGO that manages several funds for nature conservation and manages the FAP which aims to diversify the funding sources for public protected natural areas, providing stable financial resources in the long term. FAP provides sustainable funding for basic operating expenses in PANE protected areas.

¹⁸ FAP delivers USD 89,000 monthly to each protected area to cover basic operating costs.

¹⁹ Christy, F.T. 1983. Derechos de uso territorial en las pesquerías marítimas: definiciones y condiciones (Territorial use Rights in Marine Fishery: definitions and conditions). FAO. Doc.Tec.Pesca 227: 11 pp.

Marschke, M., Armitage, D., Van An, L., Van Tuyen, T. & Mallee, H. 2012. Do collective property rights make sense? Insights from central Vietnam. *International Journal of the Commons* 6(1): 1–27.

Gallardo, G., W. Stotz, J. Aburto, C. Mondaca, & Vera, K. 2011. Emerging commons within artisanal fisheries. The Chilean territorial use rights in fisheries (TURFs) within a broader coastal landscape. *International Journal of the Commons* 5(2):459–484.

²⁰ Coello, S., D. Vinuesa & R. Alemán. 2008. Evaluación del desempeño de los acuerdos de uso sustentable y custodia de manglar de la zona costera del Ecuador (Performance Assessment of Agreements on Mangrove Sustainable use and Custody in the coast of Ecuador). Ministry of Environment of Ecuador – Conservation International – International Union for Conservation of Nature (IUCN) – IUCN World Commission of Protected Areas – Program to support the decentralized management of natural resources in the three provinces of northern Ecuador (PRODERENA) – Ecobiotec. July 2008: 52pp. + 4 Figures + 17 Tables + 5 Appendices + 29 maps.

²¹ Coello, S. & Altamirano, M. 2007. Buenas Prácticas de Aprovechamiento y Uso de Recursos Costeros en Ecuador. Una guía para su sistematización y elementos a considerar para impulsarlas (Best Practices on Coastal Resources Exploitation and Use in Ecuador. Systematization Guide and Elements to Consider for their Promotion). AVINA - ECOBIOTEC - ECOCOSTAS – Ministry of Environment – Conservation International. Ecuador: 129 pp.

clam management. Among other things, these groups established a system for collecting fishing information, as well as internal regulations to limit fishing effort and minimum capture size.

The MAE takes specific actions to enhance the management of mangrove concessions, since the recovery of these areas requires long-term *in situ* work. Moreover, in recent years there have been efforts to support the creation of new concessions by the Sustainable Coasts and Forests project of USAID. There are several groups interested in getting concessions, especially within MPAs. In the 2010 update of the regulations for mangrove concessions, the possibility of granting custody areas within protected areas was excluded²². However, it is recognized that well-managed concessions can be an important support for the control and monitoring of MPAs. A very interesting case is REMACH, where there are 17 well-organized groups of crab fishers (1300 fishermen), who have traditionally worked within the reserve and catch large amounts of crab (about 3,180,000 units of male crabs per year) which are mainly sold in Guayaquil. REMACH management has allocated areas to each group and has reached informal agreements with crab fishermen, but cannot deliver concessions (which are a legal instrument that sets stronger commitments between the parties) despite the interest and willingness of crab fishermen.

Regarding monitoring and surveillance, community control systems of some concessions, depending on their level of development, have achieved to discourage external fishermen entering the area. Successful concessions have achieved to catalyze the support of maritime authorities in patrolling and arresting infractors. Mangrove concessionaries also invest in the conservation of areas within their custody. Investments are mainly in kind (e.g., time allocated to patrolling and monitoring of catches), although they also spend money in fuel purchasing and maintenance of boats and outboard motors. The MAE has triggered positive incentives for further conservation activities by providing small funds for such investments. Some concessionaries have also been supported by small grants programs (e.g. USAID), to fund this type of investments.

The Humanist Institute for Cooperation with Developing Countries (HIVOS) develops, since January 2013, the regional Project "Recovery of Dark Clam as a Resource for Food Security of picker families in communities of three Pacific countries" (UE DCI Food 2012/301/117), which is funded by the European Union. In Ecuador, the Project is implemented by a partnership between the Federation of Artisanal Mangrove Products Pickers (FEDARPON) and the Federation of Artisanal Mangrove Bio aquatic Products Pickers (FEDARPROBIM), in 11 communities within the REMACAM. The Project consists of four components: 1) Strengthen organizations to advocate for mangrove conservation, 2) Support the regulation of clam sustainable use, 3) Generate and systematize knowledge, and 4) Disseminate information to raise awareness on the importance of mangrove products. The project contributes to strengthen local capacities to advocate for mangrove conservation, especially of clam, as a source of food security, and support the development of education and training processes, collective rights and territory management that enable laying local foundations for social viability for the management of mangrove concessions that are within the REMACAM. At the national level, the Project enables a more direct dialogue between mangrove users for the development of public policies aimed to ensure the sustainability of conservation actions, sustainable use, and proper monitoring and evaluation of project implementation.

MAE will provide public resources to strengthen, through the SGMC, the already existing mangrove concessions, to expand the coverage of the concessions that have expressed their interest, and to create new concessions. A key action will be the elimination of the restriction to grant mangrove concessions within MPAs²³, and will implement control and surveillance activities. A financial mechanism to provide direct support to concessionaries for the protection of mangrove under their custody and the associated biota will

²² Agreement 129 (published in the Official Gazette 283 of September 21st, 2010), Article 7c.

²³ Announced by the Natural Patrimony Undersecretariat in the project design workshop of March 18th, 2014

also be implemented. This incentive has been called “Socio Manglar” (Mangrove Partner) and rises from the implementation of the “Socio Bosque”²⁴, (Forest Partner) experience implemented since 2008, which includes the direct delivery of financial incentives to owners of native forests, moorlands and other native vegetation, as a compensation for the conservation and protection of these areas²⁵. The Socio Manglar mechanism is under final development and is expected to start operation in late 2014 with an investment of approximately USD 1,000,000 per year (USD 4,000,000 until 2018). Finally, the MAE will perform a diagnosis about the relationship between climate change and coastal marine resources, identifying vulnerabilities to possible impacts of climate change in the coastal marine profile. Altogether MAE will invest USD 7,499,900

HIVOS will be responsible for implementing activities to enhance the concessions that are within the REMACAM. They will also conduct awareness and communication campaigns addressing the clam consuming public, restaurant owners and intermediaries, in order to position the importance of mangrove as provider of resources, and the need to promote their responsible consumption (USD 420,000).

The MAGAP, through the Territorial Link Unit of Esmeraldas of the Rural Good Living Program²⁶, will invest USD 1 million in the strengthening of practices of sustainable use and development of productive activities derived from the resources of mangroves by organizations using this ecosystem, as a mean to combat poverty in the area. Same activities will be promoted by the United Nations High Commissioner for Refugees (UNHCR), who will conduct support actions for the development of productive alternatives of fishery products of the mangrove in the border area with Colombia (USD 77,000 per year).

CI-Ecuador will provide support for the other concessions, including the expansion of three concessions, the update of mangrove concessions in El Oro province and the creation of four new concessions in Guayas province, based on previous experiences. CI will also provide technical assistance for management of the concessions and equipment for control and surveillance activities by the concessionaries (USD 654,702).

GIZ (German Technical Cooperation) has completed negotiations with the Government of Ecuador for the implementation of their “Climate Change, Biodiversity and Sustainable Development Program” (ProCamBío). Their overall activity plan shows they will invest USD 250,000 in actions related to mangrove concessions strengthening. The starting phase of this Project will match with the fine-tuning of GIZ activities for the 2014-2016 period.

The Decentralized Autonomous Government of the Province of Guayas has committed an investment of USD 200,000 to support concessions in the province of Guayas and especially “Cerrito de los Moreños” concession and RAMSAR site “Mangroves of Interior Estuary of the Gulf of Guayaquil Don Goyo”²⁷.

Moreover, mangrove concessionaries make daily investments in concessions care. During the phase of information collection for the preparation of the project, it was estimated that Puerto Roma concessionaries invest approximately USD 10,000/year in kind and USD 12,600 in cash to manage an area of 232 hectares (approximately USD 97 per hectare per year). In broad terms, mangrove concessionaries in Guayas and Esmeraldas invest, as a whole, USD 1,741,436 and USD 847,660, respectively.

Through the *UN REDD Program – Output 1 National Forest Monitoring System* UNJP/ECU/083/UNJ, which supports the elaboration of the land use map of the country, FAO will support the identification, through RAPIDEYE images, of actual mangrove areas in continental Ecuador. A dendrologic guide will also

²⁴ Agreement 169 published in the Official Gazette 482 of December 5th, 2008.

²⁵ Socio Bosque is financed through fiscal resources, international cooperation and other contributions. Participation in the program is voluntary, interested parties sign a 20 years agreement.

²⁶ The Rural Good Living Program is an initiative of the MAGAP and the International Fund for Agricultural Development (IFAD).

²⁷ Comprises an area of 15,337 hectares located in the inner estuary of the Gulf of Guayaquil which was declared RAMSAR site on February 2nd, 2013. In the RAMSAR site is located the Cerrito de los Morreños concession.

be developed to facilitate the identification of forest and shrub species of mangrove forests along the country's coastal line. This information will complement the activities of the total mangrove area research and the biodiversity inventory (USD 75,540.00)

3. Artisanal fisheries in mangrove concessions and MPAs

Historically, fisheries policy in Ecuador has been implicitly of open access. Fishing regulations have always been focused on closures, setting limits to the minimum size of fish caught and to fishing gears, but no limits have been set to catch volume or fishing effort. Mangrove concessionaries developed empirical RBM systems, but Fishing Authorities have not capitalized on these lessons learned. Just in 2013, the SRP began to introduce catch volume limits and fishing effort limits of two new fishing resources: hake²⁸ (*Merluccius gayi*) and common eel²⁹ (*Ophichthus remiger*). Current regulations of dark clam and crab do not include catch and effort limitations. Fishing in MPAs is competence of the MAE, and the REMACH is the area of most work in this regard, where crab fisher organizations working within the reserve are being involved and organized around an informal RB fisheries management system (a TURF scheme based on the experience of mangrove concessions).

The National Fisheries Institute (INP as per Spanish acronym) performs research on some mangrove species, in order to assess their use potential, diversify production, promote the development of the fishing industry and achieve optimal and rational use. Since 2011, INP has encouraged the participatory monitoring of mangrove crab to know its population density and reproductive aspects. Comparison of results of years 2011 and 2012 with the 2013, indicates that the crab population declined in abundance. This resulted in an adjustment to the dates of the provisional ban on its collection (twice a year). For 2014, the provisional ban was established between 1 and 31 March, period identified as one with the higher percentage of females ovate. INP works through the crab program, which collaborates with crab fishermen associations.

Since 2013, the National Institute of fisheries of Ecuador (INP), executes the project "*Estimation and projection of the resources fishery-aquaculture for the economic and social strengthening of the Ecuadorian fishing sector 2013-2018*" funded by the National Ministry of science and technology (SENECYT), whose investment is USD10 million. The study covers the areas exploited by artisanal and industrial fisheries along the entire coastal line, with emphasis on the are within eight nautical miles from the mainland coast, and is focused on the analysis of the population status of traditionally exploited fishery resources, diagnosis of ecosystem and its relationship with the organisms that are developed, as well as parameters that allow for the evaluation of the use of fishing gear and propose their optimisation. The project also seeks to generate and propose new alternatives for environmental friendly aquaculture production, and the development of techniques of farming of marine species of commercial interest.

CI-Ecuador will provide technical assistance and training to strengthen fisheries management systems of mangrove concessions. In coordination with this project, CI-Ecuador will be responsible for the design and implementation of the lobster management system at RMEP (output 2.1.1.), design of dark clam fisheries baseline in REVISMEM (output 2.1.2), and will support the fishing management experiences at REMGSF and REMACH with technical assistance and equipment (output 2.1.3). CI will also provide funds to support MAE in monitoring of the implementation of fishery management plans and will publish each plan and upload it in SIMCE the digital versions (USD 477,351). Work with lobster and bearded brotula in the REMGSF will be complemented by field actions carried out by Nazca Institute (USD 100,000).

²⁸ Agreement 018 signed on April 16th, 2013. The agreement limits the industrial fleet to 30 boats and sets an annual fishing quote of 850 tons.

²⁹ Agreement 202 signed on November 7th, 2013. The agreement limits the industrial fleet to 10 boats and limits fishing efforts to 900 pots per boat.

The MAE will work in the design of fisheries management systems, their approval and monitoring, as well as in the monitoring of fisheries management plans (USD 136,200).

Additionally, REMACAM, REMGSF and REMACH receive funds from the FAP³⁰ (FAN will contribute with USD 498,531 in kind for managing these MPAs), and it is expected that towards the end of the project, REVISMEM and RMEP will also be included in the FAP. WildAid will provide technical assistance for the development of robust control and monitoring system through a contribution of USD 75,000. In the third and fourth years of the Project, HIVOS will support the development of dark clam management system in the REMACAM, on the basis of the experiences developed in the REVISMEM and the concessions during the first two years of the project (USD 80,000).

Through its SENEYCYT project, INP performs surveys on landings of Pacific bearded brotula, red crab, dark clam and octopus in specific areas of the coast of Ecuador Manta, Puerto López and Santa Rosa (bearded brotula), Puerto Bolívar, Puerto Jeli, Naranjal, Balao, Churute (crab and clam) y Anconcito (pulpo). Based on the date, INP will recommend different measures of management of these resources. Pacific bearded brotula and Octopus resources are not yet subject to fisheries management in the country. The information generated by the INP, along with the data coming from the current project, will determine the state of health of the populations of the mentioned resources and strengthen the management of these resources in the mangrove ecosystem and the AMPs of the continental Ecuador (USD263,787).

4. Regulatory framework

Mangroves have several regulatory instruments for their conservation and management. The authority responsible for their management is the MAE. In 1990, the LFANSV was amended to declare all mangroves (including those on private property) as State property, so they can only be used through concessions³¹. The SGMCM is also responsible for mangrove concessions and for coordinating the Control and Monitoring Units (UVC)³². Concessions are agreements between the Ecuadorian government and a group of organized users, so they can make use and custody public property for 10 years. Concessions are granted to an organization (ie association or cooperative) which has been legally established, in order to make sure that users make orderly use of the resources existing in the mangrove. These concessions may be renewed depending on the performance of the licensee group. In 1999, the regulatory framework was established³³ for traditional mangrove users to request the use of mangrove areas for exploitation, through the signature of a sustainable use and custody agreement³⁴ issued by the MAE.

The first concessions were awarded in 2000 and a number of them have been renewed the last years. In 2003 a chapter on the mangrove was included in the Unified Text of Secondary Environmental Legislation which establishes, among other things, that mangroves will be administered by management areas corresponding to the jurisdiction of each Harbormaster³⁵. By 2006³⁶, mangrove cover had increased from 146,938 hectares in 1995³⁷ to 148,230 hectares. In 2008, the Ecuadorian government decided that shrimp farms that had

³⁰ FAP includes 30 protected areas, of which eight are MPAs and three are part of this project: REMACAM, REMGSF, and REMACH. FAP expects to fund all PANE areas by 2016.

³¹ Law 91 published in the Official Gazette 495 of August 7th, 1990.

³² The PMRC established the Conservation and Monitoring Units (UCV) as an integration mechanism between authorities with jurisdiction over the various coastal resources (e.g., fishing, intertidal zone), coordinated by the Captain of the Port. The agreement creating the Marine and Coastal Management Undersecretariat (SGMCM) establishing the responsibility of coordinating the UCVs (Agreement 024 of the MAE published in the Official Gazette 558 of March 27th, 2009)

³³ Executive Order 1102 published in Official Gazette 243 of July 28th, 1999. Subsequently, instructions to grant agreements for mangrove sustainable use and custody were issued (Agreement 172 published in the Official Gazette 365 of January 20th, 2000), which was updated through Agreement 129 (published in the Official Gazette 283 of September 21st, 2010) and Agreement 144 (issued on August 9th, 2011).

³⁴ Henceforth the term mangrove concessions will be used to refer to agreements on mangrove sustainable use and custody.

³⁵ Harbormasters are the maritime control authority and are managed by the National Directorate of Aquatic Spaces (DIRNEA).

³⁶ CLIRSEN. 2007., op.cit.

³⁷ CLIRSEN. 2007. Update of multitemporal study of mangroves, shrimp farms and saline areas in the Ecuadorian continental coast to 2006. MAE-PMRC: 77 pp.

unlawfully occupied mangrove areas must reforest the affected area³⁸. In 2011 it was established that the cost for loss of environmental goods and services reaches USD 89,273.01 per hectare³⁹. This value applies in penalties for cutting, burning or destroying mangrove forests. These important regulatory changes have led to the appropriate management of mangrove resources.

At MPAs level, control and monitoring responsibilities lies with the MAE, but beaches are the responsibility of GADs. Manta, Puerto López and Santa Elena municipalities already have management ordinances. The PNBV mentions the ICM in subparagraph k of 2.12 policy⁴⁰: "To promote and establish coordinated regulations between the levels of the government for integrated coastal management and land use of coastal and island edges".

MAE will lead the updating of the standard on mangrove concessions based on the experiences resulting from this project (USD 8,624). Towards the end of the Project, CI-Ecuador will support the development of the fishing regulations in MPAs and will be responsible for promoting their implementation in REMGSF, RMEP, REVISEMEM, and REMACH. (USD 449,118). HIVOS will promote the strengthening of organizations for political influence in mangrove conservation (USD 50,900). GIZ will support activities to strengthen the regulatory framework in regards to the national ICM strategy (USD 250,000). CEDEAL will contribute to the community empowerment of African people who are settled in the REMACAM, and will be working on the inclusion of women in decision-making of biodiversity and territory management (USD150,000), while WildAid will prioritize actions to generate greater response by the port authorities to meet immediate actions associated with illegal fishing (USD25,000)

A.5 Incremental / Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCE/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

Incremental investment of GEF would cover activities grouped into three components:

Integrated management of high-value coastal areas for biodiversity

This project proposes to create MPAs in four sectors where it has been determined that sea turtles nest. The main focus will be the conservation of sea turtles, which are charismatic endangered species, as a central element to prove the value of beaches and raise public awareness on the importance of preserving this ecosystem. In the turtle nesting beach areas, that require protection, this project will provide the needed support so that flexible and participatory management systems are established. For this purpose, the category of "national recreational area" has been selected, since it combines the recreational use of beaches with the conservation of valuable biodiversity species. Local stakeholders will also join management of MPAs and participatory processes for the preparation of management plans will be carried out. A key player is the local municipality that will seek to integrate the conservation of the beaches and support for the new MPAs in its strategic planning. The four beach sectors that require protection (according to table 2 and figure 4 in the FAO project document) are located in the municipalities of Manta, Puerto Lopez, Santa Elena, Playas, and Guayaquil.

The project will provide technical assistance so that all concessions will apply basic measures of sustainable management. Such measures include, at least: (i) an organization that plans, implements and evaluates management actions, and which resolves conflicts that arise among its members and applies sanctions on

³⁸ Executive Order 1591 published in the Official Gazette 454 of October 27th, 2008.

³⁹ Resolution 056 of the MAE published in the Official Gazette 496 of June 21st, 2011.

⁴⁰ i.e., "to promote the creation of a polycentric structure of human settlements that promotes territorial cohesion".

offenders, (ii) a control and monitoring system that protects the whole concession; and (iii) a set of management measures agreed upon for the sustainable use of resources that are exploited. For this purpose, existing good practices and successful experiences will be identified, and a horizontal transfer of knowledge will be performed (from fisherman/woman to fisherman/women) and the update of concession management plans will be supported. The basic management scheme will be replicated to extend it to other local groups and mangrove areas under concession. MAE will draw up a ministry agreement to eliminate the restriction to grant concessions in protected areas, which will help crab catcher groups of REMACH fulfill requirements and will allow concessions to be granted within other MPAs (such as REMACAM and REVISMEM).

To promote biodiversity conservation, the project will provide information and will encourage grantees of concessions to protect important mangrove species. The project will also support the update of management plans and the inclusion of protective measures of endangered species such as the coastal crocodile and sea turtles. The matching of these actions with national strategies or valid action plans for the conservation of wildlife will be facilitated. In order to promote the sustainability of these actions, the project will support the grantees of concessions that are interested in becoming Mangrove Partners under the Socio Maglar incentive programme. The purpose of this is to develop skills and abilities to manage funds and invest them appropriately. Finally, the project will ask control authorities to include mangrove concessions in their priorities and to strengthen inter-institutional mechanisms for the coordination and cooperation within a UCV context.

2. Conservation of biodiversity in fishery management

The project will enhance the empirical practices applying RBM in six mangrove concessions, which will be used as illustrative cases. Technical assistance and training will be provided to strengthen existing systems and subsequently they will be replicated at six other concessions using the fisherman/woman to fisherman/woman methodology. Fishery management systems that set reference limits to facilitate decision making will be supported. Fishing management models of dark clams and crabs to be developed will be replicated at other mangrove concessions, after the project is implemented. It is also expected that this experience will influence regulations of the exploitation of these resources under the authority of the SRP.

Additionally, the project will sponsor the development of practical experiences of RBM for dark clams, crabs, lobsters, octopuses and Pacific bearded brotula⁴¹ at five MPAs. The development of skills of fishermen and MPA personnel will concurrently be supported. Finally, based on project experiences, a regulation of fisheries in MPAs will be drawn up that will guide fishing management in the rest of protected areas.

3. Strengthening of the regulatory framework for the conservation and management of marine and coastal biodiversity.

This project will propose a national ICM strategy to be analyzed at the highest level by the Inter-Institutional Sea Committee. In a complementary manner, skills at five municipalities will be developed to integrate the IMC approach in their operations and coastal management ordinances as well as management plans of the four new MPAs. In concrete the project will support the preparation and adoption of coastal management ordinances of the municipalities of Manta, Puerto Lopez, Santa Elena, Playas, and Guayaquil. Ordinances will include, among others, measures to prevent and mitigate impacts caused by stray animals, pollution caused by light, and dunes and native biota destruction. At each GAD, the coordination of municipal planning and the management plan of MPA will be supported. Finally, the implementation of a tourism certification scheme for

⁴¹Lobster, octopus and Pacific bearded brotula fishery resources extracted from MPAs are in great demand and have a great value.

beaches will be supported (i.e. Standard number NTE INEN 2631:2012) as a mechanism for planning and organizing tourism activities (although certification will not necessarily be sought).

Scenario without GEF involvement

Sea turtle nesting beaches are deteriorating, reducing their reproduction and threatening the size of the population of these vulnerable species including green, ridley, hawksbill and leatherback turtles. Considering the global situation of populations of sea turtles, and especially of the hawksbill turtle, the loss of eggs and hatchlings is a great threat for their survival. The fisheries of dark clams and crabs at REMACAM and of the Gulf of Guayaquil could collapse. In REMACAM, the situation is critical and could potentially cause overfishing of the ecosystem with the consequent degradation of the food chain and severe social and economic impacts on local populations. It is possible that some concessions will become nonviable due to the inability to manage the territory and control the pressure of external fishermen accustomed to free access. There will be a greater degree of deterioration and the potential collapse of fishing resources of the MPAs. The efficiency of the management of MPAs would be limited by deficient fishing management. The plundering of fish stock and the damage caused to biodiversity might continue and could increase due to the negative impact on the ecosystem.

Alternative scenario with GEF's intervention

Nesting beaches of sea turtles will be protected by coordinating their conservation in an MPA scheme inserted in an ICM context with the support of the municipal governments. A long-term conservation system will be established to guarantee that turtles can nest and that their descendants can return to the beaches where they were born. The population and local stakeholders will become aware of the importance of the conservation value of nesting beaches. There will be mechanisms and capacities to collaboratively manage protected coastal areas with municipal governments as part of the IMC context. At least the capture of dark clams and crabs in REMACAM and in the Gulf of Guayaquil will be stabilized and their collapse avoided. Most of the grantees of concessions strengthen the protection of mangrove areas, by control and monitoring systems that are efficient, with the support of control authorities, and they implement RBM schemes appropriate for local conditions. An incentive scheme (Mangrove Partner) to provide long-term financing to fund investment needs for mangrove management will be implemented. The grantees of mangrove concessions will contribute to the protection and conservation of highly-valued biota. MAE will have the skills and know the procedures needed to manage mangrove concessions, in a decentralized manner, and to provide support to grantees of concessions. The capture of dark clams and crabs in REMACH and REVISMEM will be stabilized, at least, along with the capture of lobsters, octopuses and Pacific bearded brotula in REMGSF and RMEP. Management capacities and RBM models that can be replicated in other MPAs will be developed. There will be regulations for managing fisheries within MPAs.

A.6 Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks:

Risk statement	Likelihood ⁴²	Mitigation measures
Lack of interest of municipal Decentralized Autonomous Government to preserve its waterfront and invest in improving their waste and sewage management systems, stray animal's control and waterfront infrastructure ordinance.	High	The first year, the project will focus on the awareness and engagement of citizens in areas where new Marine Protected Areas will be established. There will be local teams to call the participants, clear doubts, provide reliable information and promote the organization of management committees for the protected areas to be created
Fishermen working inside the Marine Protected Areas refuse to be part of the fisheries management schemes, because they're used to	High	Awareness-raising, information and involvement of fishermen. Initially the main focus would be on sensitizing fishermen of the five Marine Protected Areas on the State of fisheries resources and the damage that

⁴² Estimate of likelihood: High, Moderate High, Moderately Low, or Low, as per the FAO Project Cycle Guidelines.

free access systems		the free access system causes. The information on fisheries management systems based on usage rights will be provided and experience in mangrove concessions will be displayed. Finally, participatory processes will be carried out to assign rights-based fisheries management systems along with fishermen in each Marine Protected Area.
Reluctance to sustainable management on coastal areas because owners of adjoining lands think that its ownership and access to the beach might be affected.	Moderate	Awareness-raising with focus on landowners at the waterfront and their involvement in participatory planning processes.
Reluctance of some local residents to protect the nests and sea turtles because of ingrained habits such as using Bush meat.	Moderate	Awareness and involvement will be particularly important to mitigate this reluctance. In the first year there will be emphasis on sensitization of the communities that are known for using sea turtles as Bush meat.
Difficulties in inter-institutional coordination among the entities associated with coastal areas management under sustainable management	Moderate	Component 1 approach will address this risk by establishing management processes among all the sectors that are operating in conservation areas under sustainable management
Reluctance of some population segments to comply with current regulatory framework regarding marine biodiversity conservation and management.	Moderate	There will be participatory and transparent processes to analyze the elements that are an integral part of the marine biodiversity conservation and management regulatory framework. A technical team will provide relevant information and inputs related to specific cases of benefits derived from marine and coastal biodiversity conservation. A FAO specialist will give inputs related to benefits achieved with responsible fishing and fisheries management that restricts free access to fishery resources.
Restricting mangrove concessions inside protected areas has not been eliminated	Moderate	The Ministry of Environment has indicated that before the project starts, it will emit a Ministerial Agreement reforming the existing regulation.
Mangrove concessions have Limited financial sustainability	Moderate	Mangrove concessions financial sustainability depends on the diversification of sources of income. The design of the financial support mechanism for mangrove concessions, including a financial strategy, will identify diverse sources and financing strategies that mitigate the potential impact of this financing risk, which will be researched, developed and applied. In addition, the project will strengthen the capacity of the persons that are in charge of concessions on the use of tools and financial strategies for the achievement of profitable conservation results.
The lack of clear and effective management rules and procedures, and the inadequate co-participation of users in their implementation, may cause conflicts and prove inadequate to protect ecosystems.	Moderate	Strengthening of the regulatory framework in specific topics, such as : (i) A proposal to traditional users to update the regulations of mangrove concessions ; (ii) A fishing in marine protected areas regulation proposal ; (iii) integrated coastal management national strategy proposal ; (iv) Ordinance model of Coastal management
Modification of dynamics and coastal morphology as a result of the increase of sea level and climate change	Low	The Review of the baseline will contain the physical aspects (i.e. morphology and dynamics of the coast) of the areas where the new Marine Protected Areas will be established. The monitoring of the management plan of each Marine Protected Area will include: (i) Beach profiles allowing to follow the erosion processes - sedimentation and (ii) Climate Change indicators. In addition, the participatory planning process will include discussion of the potential impacts of climate change in the areas and the adaptation measures that were necessary.

A.7 Coordination with other relevant GEF financed initiatives

FAO, MAE, CI- Ecuador and HIVOS will collaborate with other GEF programs and projects where synergies with this project can be found. Collaboration will be undertaken through: (i) Direct communications between GEF agencies and executing partners from other programs and projects; (ii) exchange of information and dissemination material among projects; and (iii) participation in forums and mechanisms for interagency coordination on policies and action plans for the promotion and conservation of marine and coastal biodiversity, with representatives of national, provincial and municipal institutions, local community organizations and other civil society organizations. In order to guarantee an effective coordination and

collaboration between different initiatives, specific coordination responsibilities have been assigned to the Project Management Committee (see below) and included in the terms of reference of the Technical Chief, which results shall be explicitly reflected in the Project Progress Reports (PPRs).

The project must develop special collaboration with the following projects, among others:

- 1) The GEF project, "*Conservation of Coastal and Marine Biodiversity in Ecuador*" implemented by the Inter-American Development Bank and executed by MAE will generate useful information for the management of protected areas and mangrove concessions that are included in this project. Coordination mechanisms will be established in order to promote synergies and exchange of experiences that contribute to integrated coastal management and to the conservation and sustainable use of marine and coastal biodiversity.
- 2) The Small Grants Program (SGP), which is funded by GEF and implemented by the United Nations Development Program (UNDP). In the fifth operational phase (2012-2014) most of the allocation is intended at the conservation of biodiversity in four ecosystems: Moorland, dry forest, mangrove and tropical humid forest. The SGP implements the FSP "*Our Corridors for Good Living*" (#4375) with the objective of promoting social and economic connectivity and it includes two mangrove areas: Estuary of Chone river- La segue; and Estuary of Portoviejo river and wildlife refuge Corazon island and Fraguatas. Initiatives of artisanal fishing and harvesting of red crab and dark clam are financed in these areas.
- 3) The project "*Updating of the National Biodiversity Strategy of Ecuador and its Plan of action for the implementation of the Strategic Plan for Biological Diversity for 2011-2020 and the Aichi goals*" funded by GEF, implemented by UNDP Ecuador and executed by MAE. The objective of the project is to integrate the obligations of the country to the CBD in its national development and sectorial planning frameworks. The project started in October 2012 and will end in 2014. To ensure coordination between both proposals, steps have been taken so that this project supports activities for the implementation of the plan of action, regarding marine and coastal biodiversity.
- 4) The project "*Sustainable management of biodiversity and water resources in the corridor Ibarra-San Lorenzo*", funded by GEF, implemented by the Territorial Network-San Lorenzo and executed by MAGAP and IFAD, aims to promote the conservation of biodiversity as well as the sustainable management of forests and land, in the corridor Ibarra-San Lorenzo, to preserve and improve the provision of environmental services in the area, reduce poverty and promote social inclusion for the benefit of indigenous peoples and local communities. This project will be completed in 2017 and includes, among other actions, reforestation of mangroves on the estuary of the rivers Santiago and Mataje (i.e., REMACAM). Coordination mechanisms will be established in order to promote synergies and exchange of experiences that contribute to integrated coastal management and the conservation and sustainable use of marine and coastal biodiversity in the North of the province of Esmeraldas.
- 5) The project "*Financial Sustainability of Protected Areas from the SNAP*", financed by GEF, implemented by UNDP and executed by MAE. Its objective is to improve the financial sustainability of the SNAP and their subsystems. The project includes demonstration of financial sustainability in seven areas of the PANE which include the REMGSF
- 6) The global project "*Standardized Methodologies for carbon accounting and the assessment of ecosystem services in Blue Forests*" funded by GEF, implemented by UNEP and executed by GRID-ARENDAL. The project will generate a methodology and information about carbon sequestration in coastal environments and ecosystem services. The project includes a pilot project in Ecuador, to be executed by CI-Ecuador in coordination with MAE, with activities for the evaluation of mangroves' ecosystem services and the strengthening of mangrove concessions.
- 7) The regional proposal on mangroves in the marine landscape of the Eastern Tropical Pacific, recently submitted to GEF, to be implemented by CI and co-executed with UNESCO and the

environmental authorities of Ecuador, Colombia, Panama and Costa Rica, will promote the exchange of experiences in conservation and sustainable use of mangrove forests, and the development of policies and regional plans of action. The project will use the regional experiences that contribute to the sustainable management of mangroves and will contribute to the experiences and lessons learned in Ecuador.

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

B.1. Describe how the stakeholders will be engaged in project implementation:

The design of the project is based on participatory processes with local stakeholders and the development of capacities of groups using coastal and mangrove ecosystems and biodiversity.

New MPAs and their management plans will be created under highly participatory methodologies seeking to promote local governments in the driving seat. The project will promote local stakeholders awareness of the value of sea turtle nesting beaches and develop local initiatives that integrate them into their daily lives. As a result, stakeholders will be empowered and will participate in activities to manage their beaches and monitoring sea turtles nesting habits (through simple mechanisms appropriate for communities).

Working with mangrove concessionaries implies direct collaboration responding to their needs regarding capacity development of sound mangrove resource and biodiversity management and sustainable fisheries management through an RBM approach. The design of the project recognizes the cultural differences that exist between groups, which result in work labor divided by gender, as it happens in Esmeraldas. In REMACAM, the women are the dark clam collectors, whereas in concessions on the Guayaquil Gulf dark clam collection is done by men. The project will identify and recognize the good practices that have been developed by concessionaries and will use them as foundation for the capacity building processes. Technical assistance shall be based on the scheme of transfer of practices fisherman/woman to fisherman/woman, and will take into account the cultural specificities of the groups.

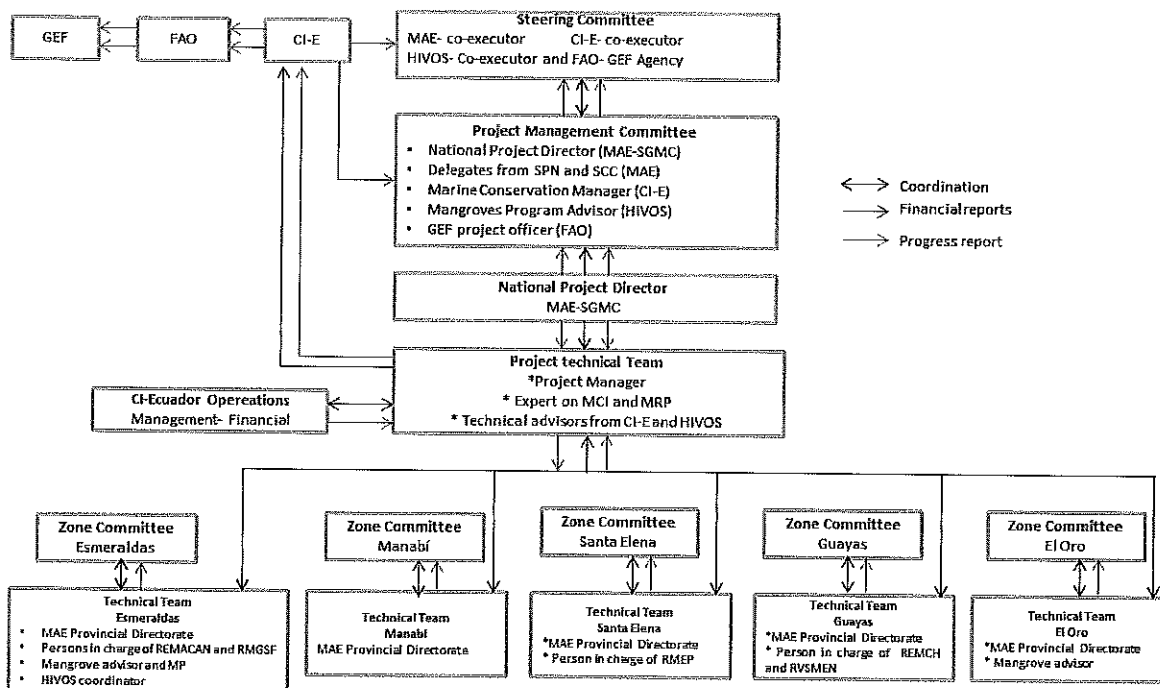
Strengthening of the regulatory framework will be carried out based on participatory and consultative processes. This will facilitate mainstreaming perspectives of key stakeholders and contribute to the ownership of these instruments.

The Food and Agriculture Organization of the United Nations (FAO) will be the GEF Implementing Agency. The Ministry of Environment of Ecuador (MAE), Conservation International Ecuador (CI Ecuador) and the Humanist Institute for Cooperation with Developing Countries (HIVOS) will be the Project Executing Partners. The mangrove concessionaire organizations (table 5), the municipal governments of Manta, Puerto Lopez, Santa Elena, Playas and Guayaquil, the Provincial Government of Guayas, the Inter-Institutional Sea Committee are the project beneficiaries. International cooperation (GIZ, UNHCR), national (NAZCA, FAN, CEDEAL) and international NGOs (WildAid) will be supporting the process

The MAE will be the lead project executing partner and CI-Ecuador and HIVOS will be the main co-executing partner. The three project executing partners will be responsible for ensuring coordination of the four project components, as well as coordination and collaboration with the beneficiaries and other partners. MAE will be responsible for decision-making, providing guidance and supervising the overall execution of the project. As per request of MAE⁴³, CI Ecuador will be in charge of the technical-programmatic, administrative and financial execution of the project, through an agreement with FAO.

⁴³ Letter MAE-D-2014-0133 of March 6 2014.

Through a subcontract with CI-Ecuador, HIVOS will be responsible for the implementation of project activities in the Cayapas-Mataje Mangrove Ecological Reserve (REMACAM), in close coordination with the Provincial Direction of MAE in Esmeraldas.



B. 2. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCE/SCCF):

The project will contribute to fostering of food security and income generation for fishermen. Mangrove concessions are instruments of territorial management based on access rights that help to counteract the pressures of free access to fishery resources.

The project will directly benefit 1,300 *concheros* and *cangrejeros*, who are mangrove concessionaries (ca. 6,500 people taking into account five persons per family). 384 out of them are women Afro-Ecuadorian *concheras*, mainly in the Cayapas - Mataje estuary, whose income is essential to sustain their families.

In addition, direct beneficiaries will be the fishermen of Pacific bearded brotula (240 fishermen), lobster (140 fishermen) and Octopus (50 fishermen) of the marine reserve Galera San Francisco (ca. 2,150 people taking into account five persons per family). Also, the four new MPAs will become ecotourism attractions due to its turtle nesting conservation activities, thus generating income for the people involved in this activity (local tourist services)

The project mainstreams gender in the project cycle, since the design phase, where the participation of women (e.g., harvesters of dark clam, tour operators) in the consultation workshops, contributed to their effective empowerment as social stakeholders. The project recognizes the role of the family in the generation of income and socio-economic differences between men and women. The project will promote women empowerment to (i) to sustain sources of income, (ii) explore mechanisms to prevent child labor in mangrove, and (iii) women involvement in the project activities.

B.3 Explain how cost-effectiveness is reflected in the project design:

The project's strategy was chosen after an analysis of the following alternatives:

In the protection of sea turtle nesting site beaches, a protected area participatory management model was chosen (including GAD management, local stakeholders and control authorities) and was made compatible with the activities in which the surrounding communities engage (the possible categorization of a national recreation area). The application of a strict conservation model was rejected (i.e. preservation) since the analysis demonstrated that this second alternative would have generated great conflicts and incurred greater pressures upon the beaches. It is very likely that an exclusive model would have generated the rejection of the proposal and would have meant the loss of an opportunity to protect these high-value biodiversity sites.

A community management model of mangrove areas will be aimed for through the strengthening of mangrove concessions in order to establish greater effectiveness in the conservation of the areas under their management. The idea of applying a stronger direct top-down management of the mangroves was ruled out by government entities as previous experience has shown that those groups, that coexist with the mangroves, better know the areas and react quickly in their adaptive management when changes occur.

The idea of managing fisheries using traditional fishing models that focus management on a Maximum Sustainable Yield (MSY) was also dismissed, as decision-making becomes complex among artisanal fishers. A TRP and LRP focused management model was chosen, as they are a simple way of organizing decision-making. Also, the use of stock assessment methodologies and the determination of reference points applied to data-poor fisheries were chosen, due to the fact that there is no adequate information in any of the areas that will be worked on for the application of traditional methodologies. Lastly, the RBM was chosen based on the collective rights of TURFs, as positive and promising experiences have occurred in many similar situations throughout the world.

C. DESCRIBE THE BUDGETED M&E PLAN

The below is the summary of the budgeted M&E plan for further details please see the FAO Project Document sections 4.5 and 4.6

Type of M&E Activity	Responsible Parties	Time-frame	Budget	Remarks
Inception Workshop	ETP/CI-Ecuador; FAO (PTM with support from LTO, BH and FAO-GEF Coordination Unit	Within two months of project start up	9,500	
Project Inception Report	ETP/CI-Ecuador; FAO PTM approved by LTO, BH and FAO-GEF Coordination Unit	Immediately after the workshop	500	
Field-based impact monitoring	Project technical team /CI-Ecuador; fishermen organizations and mangrove beneficiaries associations participating in the project	Continually	30,000	10% of project coordination time, technical workshops for identification of indicators, M&E workshops
Supervision visits and rating of progress in PPRs and PIRs	Project technical team /CI-Ecuador; FAO (PTM, LTO, FAO-GEF Coordination	Annual or as required		FAO visits will be financed through GEF agency fee.


	Unit)		55,262	Project coordination visits (not including FAO) will be financed by the project travel budget
Project Progress Reports (PPR)	Project technical team /CI-Ecuador	Six-monthly	10,000	5% of project coordination time
Project Implementation Review report (PIR)	FAO (LTO y PTM) with the Project Technical Team support. . PIRs cleared and submitted by the FAO GEF Coordination Unit to the GEF Secretariat	Annual	-	Financed through GEF agency fee
Technical reports	ETP/CI-Ecuador; FAO (LTO, GO)	As appropriate	17,540	
Co-financing Reports	ETP/CI-Ecuador with the otre co-financing partners' inputs	Annual	4,000	(2% of project coordination time)
Mid-term Evaluation	External Consultant, FAO Office for Evaluation in consultation with the project team including the FAO GEF Coordination Unit	At mid-point of project implementation	40,000	The project will pay for independent evaluation consultant team. The agency fee will pay for expenditures of FAO staff time and travel
Final Evaluation	External Consultant, FAO independent Evaluation Office in consultation with the project team including the FAO GEF Coordination Unit, and other partners	At the end of project implementation	40,000	The project will pay for independent evaluation consultant team. The agency fee will pay for expenditures of FAO staff time and travel
Terminal Report	Project technical team /CI-Ecuador; FAO (PTM, LTO, FAO GEF Coordination Unit and TSCR report Unit	At least two months before the end date of the GCP Agreement	0	
Total Budget			206,802	

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

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

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mgs. Lorena Tapia Nuñez	Minister of Environment	Ministry of Environment of Ecuador	24 April, 2014

B. GEF AGENCY(IES) CERTIFICATION

Agency Coordinator, Agency Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Gustavo Merino Director, Investment Centre Division. Technical Cooperation Department FAO Viale delle Terme di Caracalla 00153, Rome, Italy		June 10, 2014	Maria Mercedes Proanio, FAO-GEF Project Task Manager, FAO Representation in Ecuador		MariaMercedes.Proanio@fao.org
			Rikke Olivera, Programme Officer FAO GEF Coordination Unit	+39 0657055701	Rikke.Olivera@fao.org
Jeffrey Griffin Officer-in-Charge for daily matters FAO GEF Coordination Unit Investment Centre Division FAO				+3906 57055680	GEF-Coordination-Unit@fao.org

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

Please see Appendix 1 to the FAO-GEF Project Document

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

Comments by the German Council Member

1. Clearly define the role of different entities in the planning and implementation of project-relevant activities (MAE Subsecretaría de Recursos Pesqueros, MAGAP, Fuerzas Armadas, GADs, SENPLADES, and others) - especially since inter-agency coordination with regards to coastal & marine conservation represents a major challenge in the country.

Section 1.1.3 of the FAO project document shows the institutions that are essential for the project and with whom it will be closely coordinated. Section 4.2 in the FAO project document describes in detail the institutional arrangements for project execution securing the involvement of all key partners. Zone committees will be established to facilitate coordination with local stakeholders. In the field, each output will have specific coordination with specific institutions.

2. Coordinate with other initiatives that work in protected areas and their buffer zones at landscape level in the country, for example:

a. Project GEF II (has designed some interesting instruments for coastal & marine management, e.g. monitoring of biodiversity in Machalilla National Park).

b. GESOREN - GIZ (management effectiveness evaluation, design and management of connectivity corridors, participatory conservation & use mechanisms, etc.).

c. GIZ Climate Change, Biodiversity and Sustainable Development Program (ProCamBio)

Coordination mechanisms will be established with GEF project, "*Conservation of Coastal and Marine Biodiversity in Ecuador*" implemented by the Inter-American Development Bank and executed by MAE, for promoting synergies and exchange of experiences that contribute to integrated coastal management and to the conservation and sustainable use of marine and coastal biodiversity. The information generated by this project will be useful for the management of protected areas and mangrove concessions that are included in this project.

During project preparation coordination has been established with PROCAMBIO (**Climate Change, Biodiversity and Sustainable Development Program**), the new GIZ project in the region. The starting phase of this Project will match with the fine-tuning of GIZ activities for the 2014-2016 period. While they are still defining the specifics of their cooperation, their overall activity plan shows they will invest in actions related to mangrove concessions strengthening. Section 1.1.2 of the FAO project document illustrates the coordination between PROCAMBIO and this project

Coordination with other initiatives is also described in section 4.1 of the FAO project document

3. The envisaged creation of new protected areas (Component 1) should carefully analyze territorial planning aspects and local development aspirations. Governance issues should be at the heart of any such activity (see IUCN matrix of protected areas and governance types); the new subsystems of the SNAP shall be taken into account (GADs, private and community PAs).

During project preparation, the five municipalities that are involve in the creation of the four new Marine Protected Areas (Manta, Puerto López, Santa Elena, Playas y Guayaquil) were contacted and they stated that they support this Project. However, after the change of administration in May 2014, it will be necessary to visit the new mayors to represent the project and seek their active participation (Manta, Puerto López and Santa Elena). Coastal area governance is a key factor and highly participative processes will be developed to connect the protected areas with municipal planning and to include local stakeholders in the protected area management (through management committees). This project will develop experiences easy to apply to the rest of the MPAs of continental Ecuador. The National Recreation Area has been chosen as the category for the four new marine protected areas because it allows combining both the protection of the turtle nesting beaches for biodiversity conservation and livelihood activities of local communities.

4. Component 2 should be reformulated to be more pragmatic and coherent. It is not clear how it is inserted into strategies of sustainable use of fish resources, how the financial sustainability of this activity can be guaranteed, or how this will improve the employability of local communities and / or food sovereignty.

Component 2 focuses on the development of fisheries management models in marine protected areas that can be replicated in the rest of MPAs of continental Ecuador after the end of the project. The experiences and lessons learned will be useful for preparing a regulation of fisheries activities in MPAs (component 3) that could be used as a conceptual and normative foundation for all MPAs. An approach based on access rights management for fisheries activities was chosen because it has proven to be useful and effective to reduce negative pressures resulting from free access in particular while dealing with artisanal fisheries performed by local communities who can be organized around the management of the resources. At the same time, the project will initially focus on strengthening the empirical systems of fisheries management of the more developed mangrove concessions to take advantage of good practices already developed by concessioners and subsequently horizontally transfer these experiences and practices fishermen/women to fishermen/women to the rest of the concessions. Mangrove concessions are management schemes based on territorial access rights, and in the most developed cases they have promoted the fisheries resources empowerment and the implementation of their own regulations to secure the sustainability of benefits over time.

5. Component 3: A broad range of legal measures have been defined already for the conservation of coastal biodiversity in Ecuador. However, experience has shown that the laws alone cannot guarantee sustainability – especially if they are too restrictive and enforcement is weak. The project should therefore look into options for creating positive stimuli, such as new fiscal options, incentives for the sustainable management of fishery resources, or payments for ecosystem services to local communities.

Component 3 was established to support the results from components 1 and 2 through adjustments in the regulatory framework based on project field experiences with local communities. The approach focuses on developing very specific support instruments. For example, for the integration of MPA management with municipal coastal management, municipal regulations will be prepared as proposals that harmonize local government's competences and responsibilities with MPA management. After the end of the project, in order to support mangrove concessions, management regulations will be updated based on lessons learned (at Ministerial Agreement level). This regulation will also improve access to the new incentive (Socio Manglar), which will be applied starting the first year of the project. This incentive mechanism, which will be implemented supported by the project (output 1.2.3) constitutes a stimulus for mangrove concessionaires to invest in the conservation and sustainable use (including sustainable harvesting of fishery resources) of the areas under their custody. Finally, a regulation on fishing activities inside MPAs will be prepared (at Ministerial Agreement level) to guide fisheries management in the context of management based on access rights.

Scientific and Technical Advisory Panel

1. The PIF indicates that the four areas chosen may optionally be declared protected national areas, it is not clear what the risk would be if they were not so declared. The total area suggested of the new conservation areas is 15,000ha, while the existing mangrove area under concession is stated to be 37,000ha, but it is not clear what proportion if any of the mangrove area will be contained in the new conservation area. This might be an important distinction to those with existing concessions that may enter a new protected area.

Based on information and analysis undertaken during project preparation it was decided that all four areas chosen to be declared MPA would be areas of high value for threatened marine turtle nesting sites. The four new protected areas will cover approximately 15,000 ha including the beach (seafront) and one mile offshore. As part of the activities to define the exact locations consultations and awareness raising will be very important to create local understanding of both conservation and local socioeconomic benefits of the MPAs. The national category "área nacional de recreación" (national recreation area) was chosen because it is not restrictive and allows complementation and synergy between conservation and human use of the seafront. After MPA declaration, the management plans will be key elements to integrate the MPA in a broader ICM strategy. None of the areas foreseen to become MPAs include mangrove.

Currently there are 59,000 ha of mangroves under concession managed by 49 user groups. Mangrove concessions are located mostly in the estuarine areas of the Gulf of Guayaquil and the Cayapas – Mataje estuary, some of which are part of existing MPAs.

2. The PIF, in component 1.2.3, states that a financial mechanism will be designed to expedite support for mangrove concessionaires and implies that their conservation services will be rewarded. Would these services include support to marine biodiversity outside the mangroves, i.e. flow of services such as maintenance of aquatic nurseries, or restricted to the reward for maintenance of mangrove per se?

The financial mechanisms will not be designed during the project anymore. The Ministry of Environment decided to accelerate the process and design of the incentive mechanism for mangrove ecosystems and biodiversity conservation, Socio Manglar, is already very advanced at this stage. Therefore the project will provide support to develop capacity and skills of mangrove concessionaires to access the new incentive mechanism (see section 1.1.2 in the FAO project document). Socio Manglar has the following main elements: (i) it will be available only to mangrove concessionaires; (ii) it will be earmarked for investments (e.g., radios, outboard engines) or specific tasks such as patrolling, (iii) it will require that the concession plans include provisions for protection and conservation of biodiversity.

3. The PIF identifies several government bodies which along with local communities are expected to collaborate in a new and integrated land-use planning and management initiative promoted by the project. To some extent Component 3 addresses the next questions, which is how will the various agencies cited sustain a coordinated approach after project closure, even if new regulations are indeed mandated? Unless a single coordinating point is agreed, long term ownership of the initiative will likely fail.

The project has been narrowed in scope concentrating on the development of models (i) to integrate MPA management with municipal management in the context of integrated coastal zone management, and (ii) strengthen the collaboration mechanism among control authorities in support of MPAs and mangrove concessions. In both cases there are mechanisms that need to be further developed, based on experiences of this project outlined in procedures and/or regulations. Regarding protected areas, current regulation indicate the use of "comités de gestión" (management committees) to integrate local authorities and user groups into the decision making process. However, these committees have not been used in MPAs and therefore the project will support their implementation in the four new protected areas. This experience is to be further replicated in other continental MPAs. Regarding cooperation among authorities to protect marine biodiversity, the current regulations assign the coordination role to the Ministry of Environment. However, this faculty has not been fully developed for the protection of coastal and marine biodiversity. Therefore, the project will support the development of capacities and procedures to strengthen inter-institutional coordination.

4. Component 2. STAP especially welcomes this component supporting the development of a fisheries management system (FMS), based on stock assessment, participation and rights-based approaches, especially given the present lack of these systems. However, starting from such a low level, and against such strong challenges from existing unsustainable practices inside and outside the fisheries sector, time will be required to bring in such a major development. Fisheries management plans are often not successful unless this form of governance and its implementation are normal practice which is likely not the case. Further, It is not clear what form of co-management is envisaged and with whom. The experience gained from the start-up of the Marine and Coastal Biodiversity Conservation project (GEF ID 3548) should prove useful, particularly with regard to the study which was carried out to assess attitudes to the establishment of Marine Protected Areas (MPAs). Two communities involved in the study (6 de Julio and San Francisco del Cabo) were considered to have benefited from fisheries co-management schemes. The views of participants from coastal communities (including a control site) were collected through interviews, focal groups and workshops, against eight indicators: a) local ecological knowledge; b) dependence on the use of natural resources; c) poverty; d) occupational diversity; e) occupational mobility; f) community infrastructure; g) social capital; and h) capacity of the communities to anticipate change. A similar protocol could be considered to assess attitudes to the proposed fisheries management system and its linkage to MPAs. The introduction of a FMS implies considerable opportunity costs for those excluded from fishing or subject to reduced quotas. Social science research on cockle concessions have already shown the need to heed the effects of fishing outside the concessions by those who do not have access to the concessions (Bietel 2011). How does the project intend to address these effects and costs?

This comment is very welcomed and will require continuously thinking and attention throughout the life of the project. As part of the full project design fisheries management has been focused on the management of artisanal fisheries within marine protected areas and mangrove concessions. Certainly dealing with the overall fisheries policy is beyond the scope of this project. However, it is positive that the fisheries authority is open and interested in rights based

fisheries management and is currently examining the experience of the mangrove concessions. The regulation of fisheries within MPAs is a matter that is solely within the authority of the Ministry of Environment. The management scheme will be based on territorial use rights with the fishermen that have traditionally fished within the MPA. The fisheries authority will be invited to participate and oversee the process and to facilitate the gaining of practical experience by both the Ministry of Environment and the Undersecretary of Fisheries.

The experience of the above mentioned project, regarding socioeconomic benefits for participating communities and opportunity costs for those excluded or subject to reduced quotas, will be used together with experience gained by mangrove concessions. The project will assist the consolidation of the empiric rights based fisheries management schemes that have been developed in most developed mangrove concessions and, afterwards, the dissemination of the experience from fisherman/woman to fisherman/woman.

The most critical situation that the project will face is in the Cayapas – Mataje estuary, where the cockle stocks have been seriously depleted and the concessionaries did not have sufficiently strong organizations to take control of the areas. During the first part of the project the emphasis will be on providing assistance for the development of organizational skills of existing concessionaries and other local groups with interest and potential for sustainable management of mangrove areas and cockle fisheries. During the second part of the project these groups will be assisted, if they choose so, to upgrade their concessions or to apply for a concession (in the case of new groups). The calamitous situation of the cockle stocks may well imply that the fishing effort would have to be greatly reduced. However, as a complement of the project, the Ministry of Environment will issue a financial incentive (i.e., Socio Manglar) for mangrove concessionaries. During the project, based on actual data, it will be defined if the incentive could be used to compensate the groups for not fishing, in the concessionaries located in the Cayapas – Mataje estuary.

5. Socio-economic benefits (B.3) are reasonably well described although more from the technical perspective. This perception is reinforced in the vague reference to stakeholder groups in the communities, e.g., lacking details on ethnic or social status groups. Given the complex social issues that underlie many of the interventions planned, strong extension and social mobilization field skills will be needed in the project teams.

The comment is welcome and provisions have been taken to include these skills and aspects during project implementation. The project now has an important buy in from local communities holding mangrove concessions also in terms of co-financing which will strengthen their contribution to a better understanding of ethnic, gender and social status dynamics within and among communities dependent on mangrove and other coastal marine resources and how these dynamics shall be considered in the project component's implementation strategy.

6. Finally, similar approaches to the suggested project approach to integrated coastal management have been implemented elsewhere in the GEF portfolio (e.g. GEF IDs: 4810-Philippines; 4637-Brazil) and the proponents would benefit from exchange of information with those projects and also by contributing to the GEF knowledgebase on this topic, for example through the IW:LEARN facility. STAP assumes that, since CI is a leading partner in this project, the policy documents from the CI Marine Management Area Science will also be used for guidance, as well as FAO ICM and Ecosystem Approach to Fisheries guidance.

Indeed, at the beginning of the project it will very beneficial to seek exchange of information with other initiatives. In addition, all the information from the project will be made available on-line through the "Marine and Coastal Information System" of the Ministry of Environment (<http://simce.ambiente.gob.ec/>). FAO will provide guidance on ICM and Ecosystem Approach to Fisheries throughout the project implementation in combination with FAO experiences in rights based management systems.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS⁴⁴

A. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:

PPG Grant Approved at PIF:			
<i>Project Preparation Activities Implemented</i>	<i>GEF/LDCF/SCCF/NPIF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
5011 Salaries Professional (Parent)			
5012 Salaries General Service (Parent)			
5013 Consultants (Parent)	54,000.00	13,466.29	3,481.30
5020 Locally Contracted Labour			1,680.00
5014 Contracts (Parent)	0.00	50,711.00	
5021 Travel (Parent)	103,20.00	195.62	
5023 Training (Parent)	6,000.00	16.50	409.82
5024 EXPENDABLE PROCUREMENT	0.00		
5028 General Operating Expenses (Parent)		359.47	
Total	70,320.00	64,748.88	5,571.12

⁴⁴ If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent funds, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for activities.

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up)

N/A