

PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Full-sized Project

THE GEF TRUST FUND

Submission Date: November 9, 2007 **Re-submission Date**: February 4, 2008

PART I: PROJECT IDENTIFICATION

GEFSEC PROJECT ID¹: 3548

GEF AGENCY PROJECT ID: EC-X1004

COUNTRY(IES): Ecuador

PROJECT TITLE: Marine and Coastal Biodiversity Conservation in

Ecuador

GEF AGENCY(IES): IADB

OTHER EXECUTING PARTNER(S):

GEF FOCAL AREA (S): Biodiversity, SO-1 GEF-4 STRATEGIC PROGRAM(S): SP2

NAME OF PARENT PROGRAM/UMBRELLA PROJECT:

INDICATIVE CALENDAR			
Milestones	Expected Dates		
Work Program (for FSP)	April, 2008		
CEO Endorsement/Approval	Oct, 2009		
GEF Agency Approval	Dec, 2009		
Implementation Start	Feb, 2010		
Mid-term Review (if planned)	July, 2012		
Implementation Completion	Jan, 2014		

A. PROJECT FRAMEWORK

Project Objective: Improve the conservation of marine and coastal biodiversity through the promotion of a network of representative and well managed marine and coastal protected areas (MPA) and targeted actions for the protection of key threatened marine species in Ecuador.

	Type			Indicative	GEF	Indicative	Co-	
Project	- JPC	Expected	Expected Outputs	Financin		financin		Total (\$)
Components		Outcomes		(\$)	%	(\$)	%	(+)
1. Promotion of a network of representative and well managed marine and coastal protected areas	TA	Sectoral agencies and local organizations and municipalities cooperate in the implementtation of MPA management measures	Legal instruments for MPA management, including regulation of no-take and multiple use areas to protect habitat connectivity adopted at the local level MPA integrated into national fisheries, aquaculture and tourism policies Inter-institutional coordination and planning mechanisms strengthened	2,500,000	38	4,000,000	62	6,500,000
	Investment, TA	Management effectiveness and representation of Ecuador's marine waters in the national system of PA increases from 0. 7% to at least 5.0%.	At least four new and/or expanded MPAs are added to the national system of PA and managed in an effective and participatory manner					

Project ID number will be assigned initially by GEFSEC.

	Investment, TA	25% of local fishing communities (12,000 fishers) shift from unsustainable activities to sustainable livelihoods based on MPA	Demonstration projects in support of sustainable livelihoods and integrated coastal management implemented Economic, social and ecological benefits of MPAs clearly communicated at local and national levels.					
2. Implementation of the National Shark Conservation Action Plan	Investment, TA Investment, TA TA	Average revenues from the shark by-catch are reduced from 20% to 5%. The annual by-catch of rays in the shrimp fishery is reduced from 40% to 10%.	Demonstration projects to promote use of innovative fishing gear to reduce by-catch of sharks and to promote autoregulatory measures implemented Capacity building and awareness materials and activities targeting key stakeholders (fisheries, tourism) implemented	1,100,000	44	1,400,000	56	2,500,000
3. Project management				400,000	40	600,000	60	1,000,000
Total project costs	, TI		COPE 10 C	4,000,000	40	6,000,000	60	10,000,00

^{*} List the \$ by project components. The percentage is the share of GEF and Co-financing respectively to the total amount for the component. ** TA = Technical Assistance; STA = Scientific & technical analysis.

B. INDICATIVE FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	Project Preparation	Project	Agency Fee	Total
GEF	270,000*	4,000,000	424,500	4,694,500
Co-financing	100,000	6,000,000		6,100,000
Total	370,000	10,000,000	424,500	10,794,500

^{*} Including a PDF-A grant of US\$25,000 approved under GEF3.

C. INDICATIVE <u>CO-FINANCING</u> FOR THE PROJECT (including project preparation amount) **BY SOURCE and BY NAME** (in parenthesis) if available, (\$)

Sources of Co-financing	Type of Co-financing	Amount
Project Government Contribution*	In-kind	
GEF Agency (IADB)**	Hard Loan	6,000,000
Bilateral Aid Agency(ies)	(select)	
Multilateral Agency(ies)	(select)	
Private Sector	(select)	
NGO	(select)	
Others	(select)	
Total co-financing		6,000,0000

^{*} To be calculated during project preparation.

PART II: PROJECT JUSTIFICATION

A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:

- 1. Ecuador has significantly high levels of coastal and marine biodiversity due to its location at the confluence of two Large Marine Ecosystems (LME) the warm Pacific Central American LME in the north and the colder Humboldt Current LME in the south, combined with a varied coastal morphology along the 2,859km of coastline and continental freshwater influences. The waters resulting from these circumstances are among the most productive in the world, with annual production levels higher than 300 gC/m², sustaining an important artisanal and industrial fisheries sector (annual average 403,938MT/yr during 1990-1999). In terms of ecosystem diversity, the Ecuadorian coast harbors 10 of the 14 oceanic environments and 13 of the coastal environments described by Salm and Clark (1989), including estuaries/mangroves, islands, reefs and coastal lagoons. According to the Ministry of Environment in Ecuador, there are 56 marine species with priority status for conservation, including sharks and rays.
- 2. Ecuador's coastal and marine areas are under increasing pressure, in part due to the fact that 58% of the country's population lives within 100 km from the coast. Unplanned coastal development for urban expansion, aquaculture, tourism and other purposes, coupled with pollution contribute to habitat fragmentation and degradation. The mangrove coverage, for example, was reduced from approximately 200,000 ha. in 1969 to 149,000 in 1995. Over-exploitation of marine resources is also depleting fisheries stocks and threatening the ecological integrity of the marine and coastal ecosystems. Vulnerable species such as sharks and rays are of particular concern due to the combined pressure from a targeted international fishery for shark products (fins) and by-catch from both the industrial and artisanal fisheries. At least 29 species of sharks have been reported in the by-catch of the international tuna fishery in Ecuadorian waters.
- 3. Marine and coastal ecosystems are highly under-represented in the National System of Protected Areas, with only 0.7% of the marine and coastal waters of Ecuador declared as protected area. Although eight of the 36 protected areas in the National System of Protected Areas contain a marine component, the effective management capacity, as well as inter-institutional coordination mechanisms linking sector agencies (eg. fisheries, tourism, environment) are limited. Marine protected areas as management tools have yet to be integrated into national policies for fisheries, tourism or aquaculture or into municipal development plans. The establishment of marine protected areas has traditionally been met with resistance from the resource users, as the benefits have not been sufficiently demonstrated and perceived. The country has limited experience with regards to participatory management and voluntary compliance approaches for marine resource use. Recognizing that shark conservation represents a viable opportunity for resolving conflicts between marine biodiversity conservation and fisheries, the Government recently adopted a National Action

^{**} From new IDB Loan (EC-L1059) in the pipeline (tentative loan amount US\$50 million)

Plan for the Conservation of Sharks and a decree to regulate the shark fishery, but the enabling environment is not yet in place to ensure effective monitoring, enforcement and surveillance.

- 4. The global benefit of this project is the protection of globally important marine and coastal ecosystems and species in the highly diverse and productive waters off Ecuador. To address the threats to coastal and marine biodiversity from habitat fragmentation, the project will promote: i) the establishment of a network of representative and well managed marine and coastal protected areas (MPA) that strikes a balance between notake and multiple use areas in both nearshore and offshore habitats, selected on the basis of ecological and socio-economic criteria. Although the definitive selection of MPA to be created or expanded will be validated during the preparation of the GEF project, studies to date indicate that conservation efforts should focus on areas such as San Lorenzo (Manglares Cayapas Mataje Ecological Reserve), Galera Point, Rio Muisne, waters surrounding Isla de la Plata, the marine area of Machalilla National Park and Santa Elena. These areas were confirmed as priorities by the Ministry of Environment during an IDB mission conducted in January 2008. This will be complemented by actions to improve the local legal framework for MPA and buffer zone management, inter-institutional coordination and planning, including the integration of MPA into relevant national policies and municipal development plans.
- 5. To mitigate resource user resistance towards the establishment and operation of MPA, the economic, social and ecological benefits of these MPA will be documented. A social communication strategy will ensure the widespread dissemination of the economic importance of habitat conservation, particularly when coupled with opportunities for alternative livelihoods based on sustainable use of marine and coastal resources, and local participation in the management of MPA.
- 6. The threats to coastal and marine biodiversity from over-fishing and the use of unsustainable fishing methods will be addressed through: a) the promotion of sustainable use of coastal and marine biodiversity on the basis of alternative livelihoods in coastal communities to be financed as part of an IDB loan for coastal and marine resources management in the initial stages of identification (see paragraph 8. below); and b) targeted actions for the protection of key threatened marine species, with a particular emphasis on sharks and rays including training and capacity building for the implementation of sustainable fisheries regulations, the promotion and demonstration of fishing gear to reduce by-catch, auto-regulatory measures and habitat conservation.

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL PRIORITIES/PLANS:

- 7. The Government of Ecuador is committed to meet its obligations agreed at the 2002 Summit on Sustainable Development to establish a national representative network of marine protected areas by 2012. The National Biodiversity Strategy of Ecuador provides for expanding the coverage of marine and coastal areas in the National System of Protected Areas. To support this process, a study was carried out in 2004 by the Ministry of Environment, in collaboration with a group of international non-governmental organizations (TNC, CI, Nazca) to analyze and identify the priority areas for marine and coastal conservation along the coast of mainland Ecuador. The Government has also demonstrated a clear interest in improving the protection of shark populations as an opportunity to contribute to coastal and marine biodiversity. In 2002, Ecuador presented a proposal to the Conference of the Parties to the CITES Convention to promote measures for the sustainable management of sharks. As a further commitment, the Government adopted in 2006 a National Action Plan for the Conservation and Management of Sharks (prepared with the support of the GEF PDF-A in collaboration with the IUCN) with habitat conservation and sustainable fisheries management being keystones of the Plan and therefore highly complementary to the goal of expanding the representation of marine areas in the National System of Protected Areas.
- 8. Through the establishment and active implementation of the Coastal Resources Management Program (PMRC) Phase II, Ecuador has also been a pioneer in promoting integrated coastal area management. The general objective of that program is to improve and expand integrate coastal management by supporting the gradual transfer of responsibilities for land-use planning and management of the coastal zone to the local level, thereby contributing to the sustainable use of coastal resources and helping to improve the quality of life of local communities along Ecuador's continental coast. The specific objectives are: (i) to promote the adoption of policies and regulations for coastal management on the national and local levels and to build up the institutional capacity of the system for integrated management of coastal resources, with greater participation by society; (ii) to support the generation, systemization and dissemination of information4

on the status of the coastal resources and trends, to facilitate national and local management and good practices; and (iii) to improve the well-being of communities and individuals through the promotion of community investments, preventive and productive activities that increase participation by society in sustainable use of coastal resources, while improving incomes. Although still in the initial stages of identification, a third loan (EC-L1059) is expected to combine the promotion of policies and institutional strengthening for coastal resources management, including sustainable fisheries, with investments in coastal infrastructure and the promotion of sustainable alternative livelihoods with a focus on artisanal fishing communities with high poverty levels. The proposed GEF intervention would complement these actions by promoting the establishment of an MPA network with the full support of coastal communities and fishers and sustainable fisheries management, with a focus on species considered priorities for conservation. The Government of Ecuador reiterated its interest in this new loan during an IDB mission conducted in January 2008 and the loan has been formally solicited and incorporated as part of the Bank's programming for 2008. The fact that the Government has taken two IDB loans to finance the first and second phases of the PMRC and is currently discussing a third loan, demonstrates its commitment to coastal resources management. Finally, this GEF project would also complement the efforts and gain from the experiences of the Government and multiple stakeholders in the Galapagos Marine Reserve.

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH GEF STRATEGIES AND STRATEGIC PROGRAMS:

This project is consistent with the GEF4 Biodiversity Focal Area Strategy, in particular its strategic long-term objective to catalyze the sustainability of protected area systems (SO-1). Most specifically, it will contribute to the Strategic Program 2 aimed at increasing the representation of effectively managed marine protected areas in protected area systems. In doing so, emphasis will be made on promoting participatory approaches that aim at fulfilling the fundamental conservation objectives while simultaneously promoting incomegenerating opportunities and thus contributing to poverty alleviation in rural coastal areas. Alternative livelihoods based on the sustainable use of marine and coastal resources will be promoted (primarily through the co-financing loan) as part of the development of the selected MPA to ensure local benefits. Sustainable financing mechanisms will also be put in place. Special care will be taken to promote the inclusion of a representative set of coastal environments in the network of marine protected areas. The project recognizes that the effectiveness of the marine protected areas and the connectivity between them will only be ensured if external threats are concomitantly dealt with and the protected areas are managed within a broader land/seascape approach. For that reason, strong links will be established with the PMRC, including the new Specifically, the GEF project is expected to have strong synergies with the policy component of the loan, with complementarity expected on topics such as no-take zones and by-catch as well as with the activities for the promotion of alternative livelihoods based on the sustainable use of coastal and marine biodiversity.

D. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

10. The project will contribute to the objectives of the Eastern Tropical Seascape Initiative (Costa Rica, Panama, Colombia and Ecuador), as it will further expand the coverage of marine protected areas along the mainland Ecuadorian coast and also enhance the protection of shark populations within this seascape. The Permanent Commission for the South Pacific (CPPS) is also promoting the establishment of a regional network of marine and coastal protected areas. Cooperation will also be established with the Interamerican Network of Marine Reserves, promoted within the ARAUCARIA Program funded by the Spanish International Development Agency (AECI). Coordination mechanisms will also be established with the SNAPII Program (GEF/World Bank), which includes actions in the Machalilla National Park, with a view to building on the co-management models and financial sustainability strategies developed for the area.

E. DISCUSS THE VALUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH INCREMENTAL REASONING:

- 11. Without the GEF intervention the marine and coastal environments in Ecuador's highly diverse and productive waters would continue to have a limited representation in the National System of Protected Areas and the effective protection of marine and coastal habitats would be limited. The country would have limited experience in participatory and voluntary compliance ('auto-regulatorio') approaches to marine resource management., further contributing to over exploitation and undermining the livelihoods of coastal communities. Conflicts between the goal of coastal and marine biodiversity conservation and fisheries would persist and possibly become more entrenched. The marine and coastal biodiversity in Ecuador would continue to deteriorate. Vulnerable marine species, including 58 species of sharks and 32 species of rays would continue to suffer from over-exploitation and by-catch due to limited capacities for participatory monitoring, enforcement and surveillance.
- 12. By providing for the expansion and establishment of new MPAs along the Ecuadorian coast with the full participation of key actors, the proposed project will ensure that a strong, viable component of coastal and marine biodiversity conservation is included within a broader program of integrated coastal management (PMRC). MPA management will emerge as an integral part of national sustainable fisheries policies and regulations. MPAs and their biodiversity will become valued assets to be protected and incorporated in local initiatives to promote alternative livelihoods. The viability and benefits of a fully endorsed by-catch reduction program for the conservation of highly vulnerable species such as sharks and rays will be demonstrated and, in time, replicated.

F. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED, AND IF POSSIBLE INCLUDING RISK MEASURES THAT WILL BE TAKEN:

RISK	RISK RATING	MITIGATION MEASURE
Rejection from resource user groups towards the establishment of marine protected areas.	M	Implementation of a social communications strategy, clear demonstration of local economic benefits and the promotion of participatory management schemes and autoregulation.
Degradation of marine and coastal habitats within protected areas supported by the project due to natural disasters (i.e. storms, tsunamis) or climate change (eg. El Niño)	M	Climate change adaptation strategies will be developed as part of the marine protected area management plans. The promotion of a network representative system of marine protected areas will also enhance ecosystem resilience to natural disasters, as the network is expected to include multiple samples of habitats across a wider geographic distribution range.

G. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT:

13. A cost-effectiveness analysis will be carried out as part of the project preparation phase. The project will promote cost-effectiveness by improving inter-institutional coordination, enhancing local stakeholder participation and co-management schemes and cost-effective enforcement mechanisms. The Project will be developed as an integral element of the Coastal Resources Management Program (PMRC), funded by the Government and a loan from the Inter-American Development Bank. The project execution will largely use the existing facilities and personnel of that Program. The staff of the PMRC project are 100% funded with government resources. This will reduce the administrative costs of the GEF project and contribute to the cost-effectiveness and sustainability of the project interventions. Efforts will also be made to involve other interested organizations (eg. TNC, CI, IUCN) as partners and/or associated funding organizations.

H. JUSTIFY THE COMPARATIVE ADVANTAGE OF GEF AGENCY:

14. The IDB is in a position to make a strong contribution to the project both during project preparation and execution. The IDB offers a strong track-record in projects focusing on the integrated management of marine and coastal zones in Latin America and the Caribbean. Specific examples of marine protected area and sustainable fisheries management projects include the environmental management of the Galapagos Marine Reserve in Ecuador, a local coastal management initiative in the Northeast of Brazil and the Environmental Management Program of the Bay Islands in Honduras, the latter also with funding from the GEF for coastal and marine biodiversity conservation. Of particular significance, the IDB has been financing the PMRC in Ecuador over the course of several years and has developed an expertise and solid working relationships with the relevant resource management institutions and marine science and conservation community of that country to ensure effective implementation of the project. The Bank has an in-depth knowledge of the institutional setting and constraints for coastal management in Ecuador and can work productively with the Government in addressing these constraints within the context of the new loan and GEF project.

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 country <u>endorsement letter(s)</u> or <u>regional endorsement letter(s)</u> with this template).

Anita Albán Mara, Minister of Environment Date: November 5th, 2007

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation.

Hector Malarin

Chief, Environment, Rural Development and Disaster Risk Management Division (INE/RND)

GEF Agency Coordinator

Date: November 9, 2007

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