



**USAID | ECUADOR**

**USAID SUSTAINABLE FORESTS AND COASTS**  
IMPROVING LIVELIHOODS BY CONSERVING BIODIVERSITY

USAID 50 ANNIVERSARY



**Ministerio  
del Ambiente**

# FY 13 DETAILED WORK PLAN

OCTOBER 2012 - SEPTEMBER 2013

**USAID SUSTAINABLE FORESTS AND COASTS**

**September 18, 2012**

This work plan was produced for review by the United States Agency for International Development (USAID) and the Ministry of Environment of Ecuador (MAE). It was prepared by Chemonics International.

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**Contract No. EPP-I-00-06-00013-00 TO #377**

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## ACRONYMS

PA	Protected Area
PF	Protection Forest
C&D	Conservation and Development
DIRNEA	National Bureau of Aquatic Spaces
ECAs	Field Schools
FECCHE	Federación de Centros Cháchis de Ecuador (Ecuadorian Federation of Cháchi Communitites)
FRA	Fichas de Revisión Ambiental (Environmental Review Worksheet)
FY	Fiscal Year
INAR	Instituto Nacional de Riego (National Irrigation Institute)
INP	Instituto Nacional de Pesca (National Institute of Fisheries)
MAE	Ministerio de Ambiente (Ministry of Environment)
MAGAP	Ministerio de Agricultura, Ganadería, Acuacultura y Pesca (Ministry of Agricultural, Livestock, Aquaculture and Fisheries)
MINTUR	Ministerio de Turismo del Ecuador (Ministry of Tourism of Ecuador)
PIR	Project Intermediate Results
PN	Parque Nacional (National Park)
POAM/ELUP	Plan de Ordenamiento Ambiental (Environmental Land Use Plan)
PNM	Parque Nacional Machalilla (Machalilla National Park)
RE	Reserva Ecológica (Ecological Reserve)
RM	Reserva Marina (Marine Reserve)
RVS	Reserva de Vida Silvestre (Wildlife Reserve)
SENAGUA	Secretaría Nacional del Agua (National Secretariat on Water)
SIGA	Sistema de Información de Gestión Ambiental (Environmental Management and Information System)
SNAP	Sistema Nacional de Áreas Protegidas (National System of Protected Areas)
USAID	United States Agency for International Development

## EXECUTIVE SUMMARY

In October 2009, USAID approved a three-year work plan for the USAID Sustainable Forests and Coasts project, which contained a detailed description of the activities and key actions planned for Fiscal Year 2010 (FY10) and a general overview of the activities for FY11 and FY12. Subsequently USAID executed the first option year, which goes through June 15, 2013. The present detailed work plan presents specific strategies, activities and key actions for implementation from October 2012 through September 2013, which corresponds to FY13, assuming that USAID will execute the project's second option year and the project period of performance will extend through June 2014.

In FY13, the Project will continue to consolidate its initiatives from previous years, together with the Ministry of the Environment (MAE) and USAID Ecuador. Project technical assistance will continue to focus on the following four geographic areas from previous years, which were selected based on their importance for biodiversity:

- 1) Gran Reserva Chachi and its buffer zone
- 2) Reserva Marina (RM) Galera San Francisco and related watersheds
- 3) Parque Nacional Machalilla (PNM) and the Ayampe River watershed
- 4) Gulf of Guayaquil (including the Reserva Ecológica Manglares Churute, the Reserva de Producción de Fauna Manglares El Salado and mangrove concessions)

In addition, activities will continue in the following two important areas that were added in FY12:

- 5) Bosque Protector (BP) Chongón Colonche: the mountain range that extends 95km east to west inland from the coast. Chongón Colonche was declared a protection forest in 1994.
- 6) Guayas Province, with a climate change strategy to support the provincial government.

The project developed this work plan using a participatory approach, gathering information on needs and priorities through strategic consultations with a wide range of stakeholders in each geographic area. Stakeholders consulted included local government authorities, MAE and MAGAP authorities, USAID, and NGOs, among others.

Key to developing this work plan was the close partnership the Project has developed with the MAE from the outset. The Project has worked with MAE authorities from the provincial offices for Manabí, Esmeraldas, Guayas, and Santa Elena, as well as from the Sub-secretariats for Coastal and Marine Management and Natural Patrimony, and protected area directors from the Galera San Francisco Marine Reserve, Machalilla National Park, Churute Mangroves Ecological Reserve, and El Salado Mangroves Wildlife Production Reserve. To this end and since the project's inception, the Project has continuously supported the MAE's conservation activities, particularly the

National System of Protected Areas (SNAP for its Spanish acronym) and technical assistance for the government's programs and policies for protected area management.

The Project's implementation strategy is based on providing the **technical assistance** needed to reduce threats to biodiversity conservation in these priority areas, and particularly in protected areas. Just as in past years, in FY13, these threats, and the strategies designed to minimize them, are presented in alignment with the Project's Intermediate Results (PIRs)

In response to PIR 1 (improve biodiversity conservation in critical habitats), in FY13, the Project will implement activities under the strategy for **minimizing the loss and/or alteration of habitats**, including remnants of high biodiversity areas, through improved management and rehabilitation of critical terrestrial and coastal marine areas (especially in habitats located in government protected areas), public policy advocacy, and **climate change** adaptation measures.

In response to PIR 2 (improved local livelihoods), the project's principal mandate is biodiversity conservation in critical coastal marine areas. The ecosystems in these areas are fragile and constantly threatened by expanding agricultural and livestock frontiers. The project is careful not to promote economic activities that, while they might boost incomes in the short term, contribute to the destruction of the resource base in the medium and long terms. From this standpoint, the project will prioritize activities that ensure the sustainable use of the resource base for commodities in the value chain. In FY13 the project aims at consolidating three or four value chains: a) red crabs, whose value chain moves \$64 million a year and involves over 2200 crabbers, by providing mechanisms for sustainable collection and for protecting mangroves; b) improved forestry harvesting, as an alternative for reducing illegal logging in the Ayampe River watershed; c) tagua harvesting and sales, which is the main non-timber forest product and primary source of income in the rainforest section of the Chongón Colonche Protected Forest and the Ayampe River Watershed; and d) cacao production and sales with Ecocacao in Galera San Francisco.

The main strategy in response to PIR 3 (partnerships formed for ongoing support for biodiversity conservation) will center on strengthening the MAE, local governments, grassroots organizations (such as Ecocacao), and other institutions (such as the National Fishery Institute) to play a leadership role in conservation coalitions promoted by the Project, and establishing/improving relations with other donors and USAID projects with a view to ensuring synergies and maximizing impacts.

Lastly, as requested by the MAE, the project will continue providing technical inputs for authorities to develop policies on harvesting, conserving and regulating natural resources, such as tagua, crabs, wood, and others related to climate change.

In FY13, the Project will continue to adhere to USAID's environmental regulations through the procedures set out in the Environmental Review Worksheets.

## 1. INTRODUCTION

The objective of the USAID Sustainable Forests and Coasts Project is to promote biodiversity conservation in critical habitats on the Ecuadoran Coast and at the same time improve the livelihoods of local residents. The project's base period started in June 2009 and ended in June 2012. USAID has executed the first option year through June 2013 and has expressed its intention to continue with the second option year through June 2014. The present work plan is for October 2012 – September 2013.

The present work plan focuses on consolidating activities to date, taking into consideration lessons learned during the first three years.

In regard to communications, the Project will continue to produce products to share progress and results.

This work plan is divided in the following seven (7) sections:

Introduction (1) includes (1.1) the project's goals—achieved and expected—and (1.2) the geographic areas selected by the Project to work in the FY13.

Section 2 presents the Project's implementation strategy, including an explanation of the methodology and the process to design this Work Plan (2.1 Work Plan Process), including the new staffing chart (2.2), which has been adapted to meet the needs of the Project's implementation strategy.

Section 3 presents the implementation framework for FY13 and the Implementation Framework Table (3.1), which summarizes the threats, strategies, and activities by PIR.

Section 4 (Work Plan by Geographic Area) presents the work plan's activities and key actions by geographic area.

Section 5 presents cross-cutting activities and Section 6 explains how in FY13 the Project will continue complying with USAID environmental regulations through Fichas de Revisión Ambiental (FRA) or Environmental Review Worksheets, according to the Environmental Assessment (EA). And lastly section 7 presents project communication materials planned for FY13. Annex 1 presents an illustrative FY13 budget.

### 1.1 Project Goals

A description of each PIR, its goals and a summary of the progress made thus far and goals for FY13 is presented below:

## PIR 1: Biodiversity conservation in critical habitats improved#

PIR 1's overarching objective is biodiversity conservation. All Project activities tie into this PIR and address the need to conserve the last remnants of ecosystems and critical habitats on the Ecuadoran Coast.

Indicators	Cumulative Goals Through FY13
1.1. Number of hectares of terrestrial areas of biological significance a/o natural resources under improved management as a result of USG assistance	427,227
1.2. Number of hectares of coastal marine areas of biological significance a/o natural resources under improved management as a result of USG assistance	291,560
1.3. Number of people receiving USG supported training in natural resources management and/or biodiversity conservation	3,200
1.4. Number of initiatives co-financed	25

## PIR 2: Local livelihoods improved

The overall purpose of the USAID Sustainable Forests and Coasts Project is biodiversity conservation. However, because many of the primary threats stem from human pressures exacerbated by poverty and the lack of economic alternatives, the objective of PIR 2 is to reduce these threats by creating incentives for conservation and improving living conditions for local communities.

Indicators	Cumulative Goals Through FY13
2.1. Number of new commercial linkages derived from sustainable natural resource management and conservation as a result of USG assistance	20
2.2. Number of people with increased economic benefits derived from sustainable natural resource management and conservation as a result of USG assistance	10,000

## PIR 3: Partnerships formed for ongoing support for biodiversity conservation

This third PIR consolidates and promotes partnerships to leverage public and private funding for the sustainability of initiatives once the Project has ended. The project will also collaborate with the MAE to provide technical inputs that help authorities form policies related to natural resource management.

Indicators	Cumulative Goals Through FY13
3.1. Leveraging of public and/or private funds	US\$ 14,600,000
3.2. Number of coalitions and alliances created and/or strengthened with USG assistance	5
3.3. Number of laws, policies, strategies, plans, agreements, or regulations addressing climate change (mitigation or adaptation) and/or biodiversity conservation officially proposed, adopted, or implemented as a result of USG assistance.	5

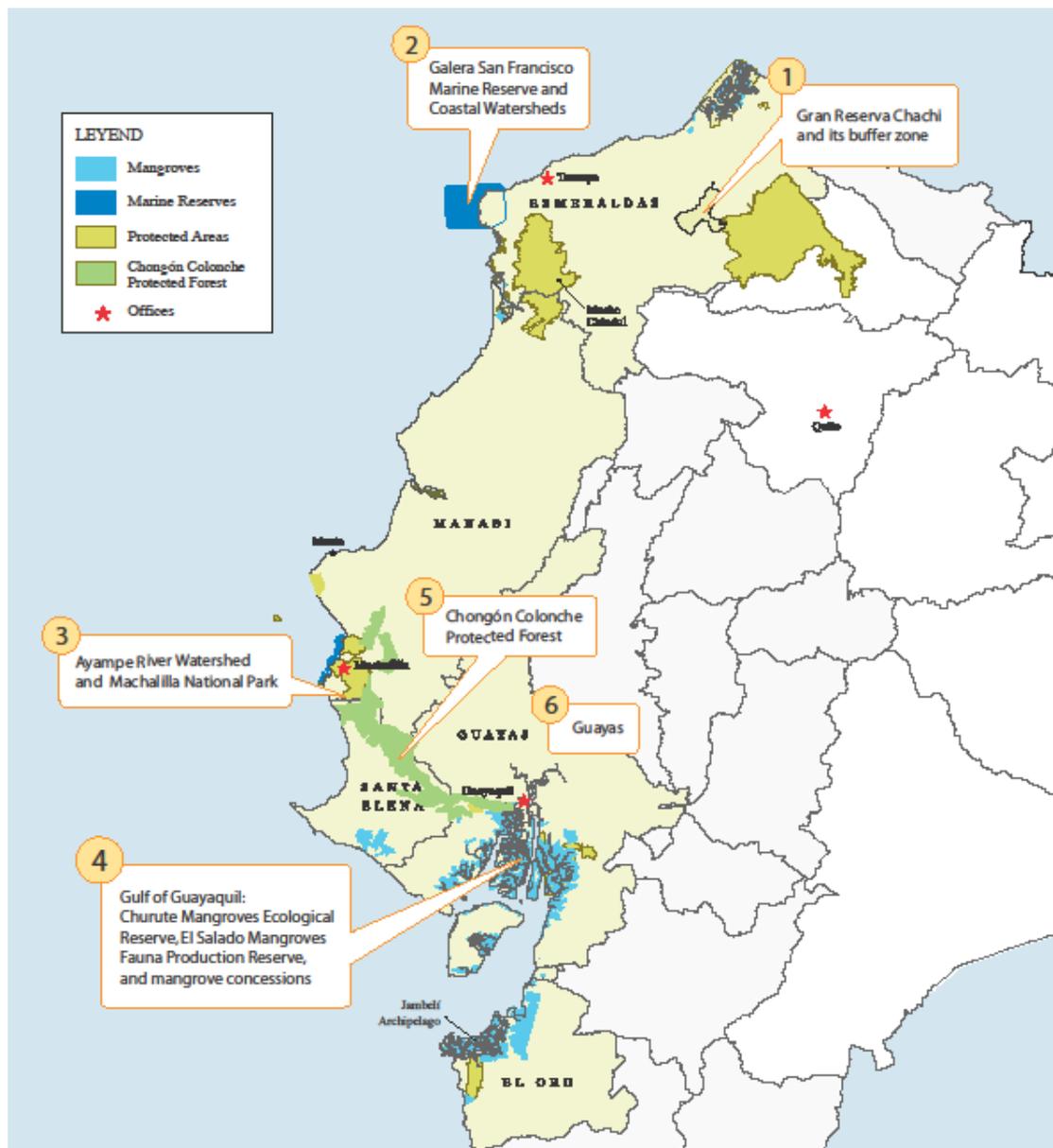
## 1.2 Selected Geographic Work Areas

The Project will continue to consolidate its initiatives in the same areas the Project prioritized together with the MAE and the USAID, which were selected for being critical to biodiversity conservation, as follows (and as pictured in the map on the following page):

1. Gran Reserva Chachi and its buffer zone.
2. Galera San Francisco Marine Reserve and related watersheds.
3. Machalilla National Park and the Ayampe River watershed.
4. Gulf of Guayaquil (which includes the Reserva Ecológica Manglares Churute, the Reserva de Producción de Fauna Manglares El Salado, and mangrove concessions).
5. Chongón Colonche Protected Forest.
6. Guayas province.

## 2. IMPLEMENTATION STRATEGY

The Project's implementation strategy remains focused on providing the **technical assistance (TA)** needed to reduce threats to biodiversity conservation in the six priority areas, and particularly in protected areas. These threats, and the strategies, objectives, and activities designed to minimize them, are presented below in alignment with the PIRs; they are also aligned with objective 4 of Ecuador's Plan for Good Living and especially address the goals for reducing deforestation and the threats generated by climate change. The implementation strategy in FY13, in addition to consolidating successful activities to date, also includes laying the groundwork for the sustainability of those results that should continue after the Project ends.



## 2.1 Work Planning Process

The Project developed this Work Plan using a participatory approach, gathering input on the needs and priorities through strategic consultations with a wide range of stakeholders in each geographic area. The planning process has taken into account the technical assistance needs requested by USAID and the MAE and specifically by the Sub-Secretariats of Coastal and Marine Management and Natural Patrimony. Stakeholders consulted included MAE authorities, protected area managers, community members, local governments, NGOs, MAE authorities, and USAID.

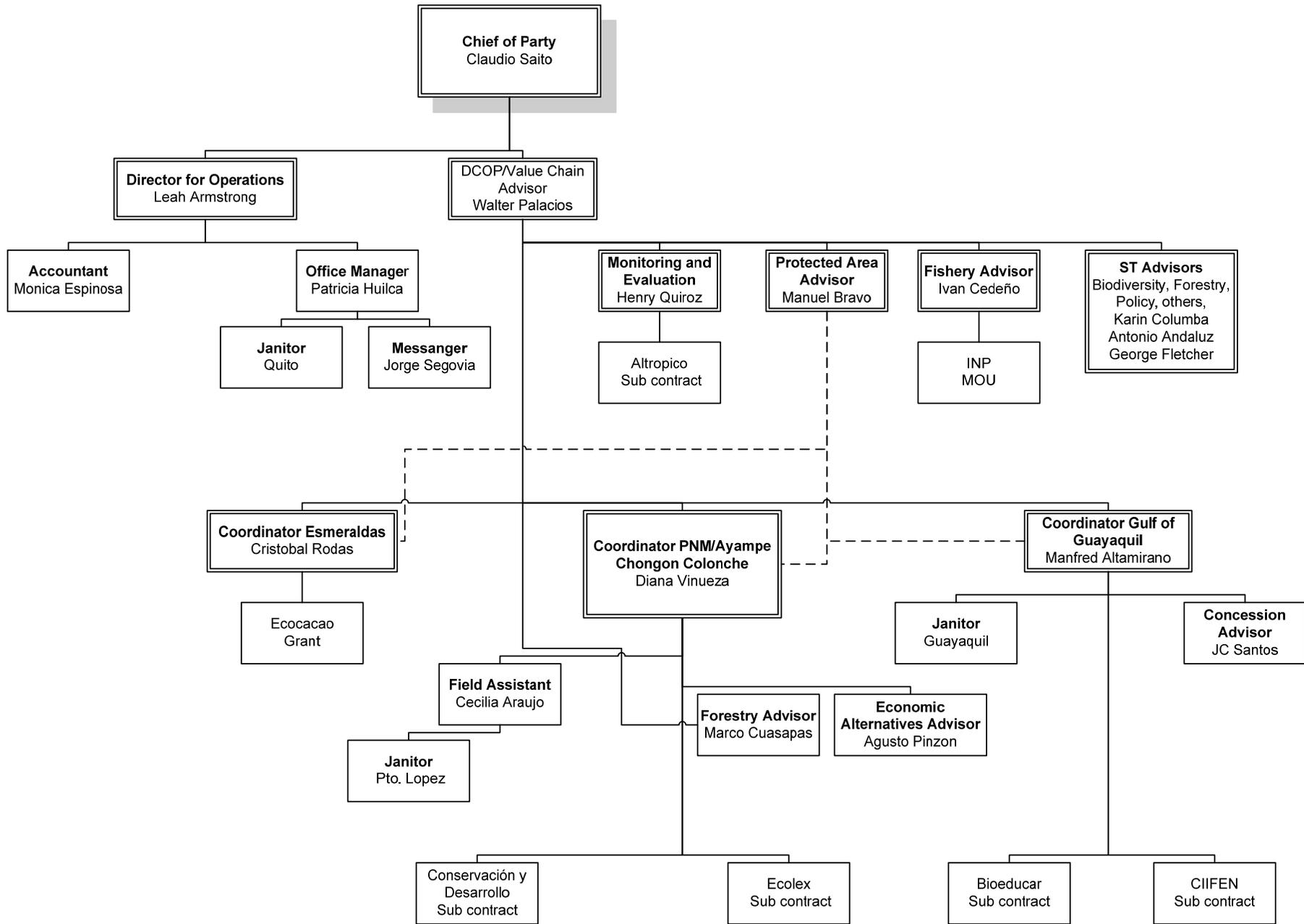
The Project is aligned with the “*Plan Nacional del Buen Vivir*” (National Plan for Good Living) and supports the MAE in developing public policies. In addition, the Project’s close working relationships with parochial, municipal and provincial governments in each of the target areas facilitated work plan development. The main threats to be addressed were identified with the participation of the stakeholders mentioned, but particularly the MAE, and activities will use an **adaptive management** approach, which will continuously facilitate any necessary changes along the way.

In addition, the Project has taken into consideration lessons learned over the first three years of implementation and has taken gender into consideration to assure that men and women have the same opportunities to access project technical assistance.

## 2.2 Staffing Chart

Bearing in mind the experiences gleaned from the first three years of work, the Project kept the same team structure as last year and has made the following staff changes: Leah Armstrong continues as Operations Director for the Project and Walter Palacios is now Deputy Chief of Party/Value Chain Manager. He will manage value chain and forestry activities and support the COP in assuring fulfillment of the project’s indicators and annual work plan.

The project will keep three regional coordinators for the Golf, Ayampe/BPCHC and Esmeraldas as well as the Monitoring and Evaluation Specialists and Forestry consultant to support with forestry harvesting and natural regeneration in Ayampe and surrounding areas. It will also keep a its Protected Area Advisor as well as the Fishery Advisor who works with the National Fishery Institute (INP) to expand field activities and replicate methodology used from the red crab stock analysis. For Ayampe and BPCHC a livelihoods advisor has been hired for Ayampe. Additional short term consultants will be hired as needed.



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### 3. WORK PLAN FRAMEWORK BY PIR, THREATS AND STRATEGIES

This section presents the implementation framework for FY13, which presents the threat, strategy for reducing the threat, and activities for each PIR.

The first part of this section (3.1 Implementation Framework) describes the primary threats and strategies and their respective activities. Section 4 Work Plan by Geographic Area presents the work plan’s activities and actions by geographic target area, and includes the expected results, activities and key actions, implementation timeline, and the responsible staff or implementing partner.

#### 3.1 Implementation Framework Table

This section presents the implementation framework table, which summarizes with the threats, strategies, and activities by PIR.

PIR 1: Biodiversity conservation in critical habitats improved		
Threats	Strategies	Activities
1. Loss and/or alteration of critical habitats	1.1. Improve management of critical terrestrial and coastal marine habitats	1.1.1. Improve management of and information regarding timber and non-timber forest products and coastal marine resources
		1.1.2. Promote conservation of forests and critical habitats
		1.1.3. Strengthen mangrove/concession management
		1.1.4. Promote implementation of critical actions in the environmental management plan for the Ayampe River watershed and selected micro-watersheds of the Galera San Francisco Peninsula.
		1.1.5 Promote protection of water source/riverbank vegetation and integral farms
	1.2. Rehabilitate degraded terrestrial and coastal marine habitats	1.2.1. Promote recovery of mangroves, pastures, and other critical habitats.
		1.2.2 Promote reforestation and regeneration

2. Climate change	2.1. Establish and implement climate change response and adaptation measures	2.1.1 Foment implementation of climate change adaptation measures (and through 1.1.1, 1.1.2, and 1.1.3)
	2.2. Reduction of greenhouse gases caused by deforestation and carbon sink conservation	Through 1.1.2, 1.1.3, 1.2.1 and 1.2.2

PIR 2: Improved local livelihoods		
Threats	Strategies	Activities
3. Lack of economic alternatives	3.1. Development and promotion of market-based economic alternatives and economic incentives for critical habitat conservation	3.1.1. Facilitate access to environmentally responsible markets
		3.1.2. Support accessing and maintaining Socio Bosque incentives
		3.1.3. Strengthen value chains that promote biodiversity conservation (red crab, tagua, wood, and cacao), especially in the natural resource management linkage, which is the basis for the entire value chain.

PIR 3: Partnerships formed for ongoing support for biodiversity conservation		
Threats	Strategies	Activities
4. Insufficient institutional capacity for biodiversity conservation	4.1. Strengthen protected area management	4.1.1. Strengthen institutional capacity
		4.1.2. Design and support implementation of monitoring systems
	4.2. Strengthen local capacity for natural resource management	4.2.1. Strengthen local capacity of communities, local governments, grassroots organizations, etc
		4.3. Improve inter-institutional communication and coordination
	4.3.2. Obtain co-financing and/or leverage funds	
	4.4. Upon MAE request continue providing input for development of public policies	4.4.1. Provide input to the MAE for policy and program development related to conservation and biodiversity management.
		4.4.2. Support sharing and training related to implementing the new Environmental Code regarding forests, biodiversity, and climate change.

## 3.2 Work Plan Activity Narrative Description

The following section describes each of the threats, strategies, and activities presented in the above implementation framework table and presents a detailed description the corresponding activities and key actions planned for FY13. #

### PIR 1: Biodiversity conservation in critical habitats improved

#### Threat 1: Loss or alteration of critical habitats

The Ecuadoran Coast is a mosaic of habitats and ecosystems in a variety of orographic formations. However, only in the Gran Reserva Chachi and the Reserva Ecológica Cotacachi Cayapas does natural forest coverage remain. Most vegetation has been converted to productive activities including African palm, banana, and cacao plantations, short-cycle crops, livestock, or shrimp harvesting. Timber harvesting, which also has had a high impact on vegetation, is frequently the first step in the conversion of forests to agricultural systems. The main causes of unsustainable timber activity are the fragmentation of woodlands that precludes long-term management, the lack of effective enforcement systems and sales to illegal markets, and the lack of clarity over land tenure. According to the MAE's web site the Ecuadoran Coast has lost 13,440 hectares of forest between the years 2000 and 2008. Other threatened habitats and ecosystems include coastal marine systems, wetlands and water sources.

#### Strategy 1.1: Improve management of critical terrestrial and coastal marine habitats

The project has developed important information to improve natural resource management. As part of the process of improving red crab management, the project has created a coalition formed by crab associations, the National Fishery Institute (INP for its Spanish acronym) and the Project (mentioned below in the section for key actions for activity 4.3.1). Additional associations and institutions have expressed interest in forming part of this coalition. In addition, since 2009 the project has provided technical assistance to 12 (of 13) mangrove concessionaires in Guayas and El Oro.

In red crab (*Ucides occidentalis*) value chain assessment completed in January 2012 in the Gulf of Guayaquil demonstrated that the value chain moves around \$64 million from production to consumption and that at least 2,200 families are involved with catching crabs. In addition, the project continued supporting the INP to conduct a red crab stock analysis using a participatory methodology with over 900 crabbers. Results on size, gender, and quantity captured were launched in September 2012. With this new and unique data authorities and associations will be able to improve crabbing regulations and assure the resources' sustainability in the future.

In PNM, the project concluded a fishery sector assessment for the marine portion of the park, which determined the number of boats and fishermen operating in the ports

(Puerto Cayo, Machalilla, Puerto López and Salango), type of species, methods used, and locations of fishing spots.

In the Ayampe River watershed the project provided technical assistance in FY12 to conduct farm level zoning, prepare integrated plans, and develop wood harvesting plans. In addition, upon the MAE's request, field level data was gathered regarding tagua tree populations in 4 communities inside PNM, which showed that there are sufficient tagua palms in the rainforest to allow for harvesting tagua nuts without harming the population of tagua palms. The project has also offered technical assistance with forestry reGENCY to farmers interested in legally harvesting wood.

In FY13, the Project will continue to consolidate conservation and improved management practices for critical habitat remnants in coastal marine areas and will promote the rehabilitation of degraded habitats and engage in public policy advocacy to ensure that this is accomplished or is sustainable in the long term.

#### ***Activity 1.1.1: Improve management of and information regarding timber and non-timber forest products and coastal marine resources***

In FY13 the project will continue supporting the INP to strengthen and complement the red crab research, as follows: a) implement research that will provide more precise data regarding growth and size, which will support determining the health of the stock b) provide technical assistance to design and develop software to support data collection for the Red Crab Program, and c) train crabbers in digital data compilation. It will also help crabbers streamline semiannual reporting to the Sub-Secretary for Coastal and Marine Management.

It will also continue providing support for developing integral plans as a key strategy for natural resource management. As part of these plans, the project will offer support to farmers for legalizing harvesting for wood, tagua, and caña guadua and in assuring sustainability of these products, which are the base of the value chains. The project will also support the MAE in developing a mechanism to regulate tagua harvesting in and around projected areas.

#### ***Key actions for Activity 1.1.1***

PNM, BPCHC, Ayampe River Watershed:

- Provide technical assistance (TA) to design and implement a sustainable tagua management program, assuring linkages between management and conservation.
- Based on the updated management plan, provide TA to PNM to establish legal mechanisms that allows the park to manage fishery activities within the protected area to those using traditional practices, based on the results and recommendations from the fishery assessment conducted in FY12.
- Provide TA for the MAE to structure and implement legal mechanisms that allow extraction of non-timber forest products, with an emphasis on tagua within PNM, based on the technical recommendations from the tagua assessment conducted in FY12.

- Provide TA to communities to meet requirements requested by the MAE in order to sign Cooperation Agreements to manage natural resources within PNM.
- Develop integral management plans for individually or collectively owned property in Vueltas Largas, Olón, La Entrada, Las Núñez, and Dos Mangas.
- Provide TA to develop and implement forestry harvesting programs in accordance with the MAE's regulations.
- Provide TA and training to develop and implement good tagua management practices in Las Maravillas, El Sombrero, La Crucita, Vueltas Largas, Río Balanco, Olón, and La Entrada.

#### Gulf of Guayaquil:

- Increase members for the Gulf of Guayaquil Coalition for Monitoring Red Crab Stocks and support fishery policy development to manage red crab extraction.
- Provide TA to the INP to design, develop, manage, and analyze data collected regarding crabs in captivity in their natural environment.
- Provide TA for designing and developing software for the INP's Red Crab Program to expedite entering, validating, processing, and managing biological and fishery data, which the INP will be producing with the *Facultad de Sistemas de la Universidad de Especialidades Espíritu Santo (UEES)*.
- Provide TA to the INP's Red Crab Program to determine: i) absolute abundance and sizes, ii) average sizes of sexual maturity, periods of spawning and fertility, iii) integrated red crab stock assessment incorporating information on commercial catches (data collected by crabbers) and independent studies (conducted by INP), iv) incorporation of economic data in stock analysis, and v) provision of crabbing policy recommendations.
- Provide TA to the INP's Red Crab Program staff for data analysis (at least 2 per year) on red crab population density.
- Facilitate agreements between crabbers (in the Naranjal sector) and shrimpers regarding access to crabbing areas.

#### ***Activity 1.1.2.: Promote conservation of forests and critical habitats***

Since the project started it has supported the Socio Bosque (SB) Program so that communities located in areas important to biodiversity conservation, such as those in the the project's geographic regions can meet requirements to enter the program.

In addition, in FY12 the project conducted an assessment of PNM to serve as a key input for updating the park's management plan.

In FY13 the Project will provide TA for priority areas that can contribute to the formation of conservation corridors in PNM and BPCHC to be designated for conservation under the SB program. It will also assist work with the MAE to define an unprecedented replicable mechanism to manage the land use within a protected area and with the goal of applying for the SB program.

Upon the MAE's request, the project will support updating the management plan for the Churute Mangrove Ecological Reserve for which the project will provide technical

input to the MAE. The overall objective is to improve fishery, public use, and tourism management.

### *Key actions for Activity 1.1.2*

#### PNM and Ayampe River Watershed

- Together with the MAE, develop a strategy for managing land use for at least one community within PNM and for that community to enter the Socio Bosque Program. Based on the strategy provide TA to develop a cooperation agreement, which could include zoning.
- Provide TA for communities to enter the SB Program and form part of the conservation corridor between PNM and PBCHC.
- Provide TA to form a coalition between the communities that are in the SB Program (in Ayampe and BPCHC) and the MAE to strengthen the oversight, monitoring, and surveillance of Socio Bosque conservation areas (also to be reported under Activity 4.3.1 below).

#### BPCHC:

- Review available information to determine key problems and threats to the BPCHC.
- Hold workshop with MAE authorities to validate key management topics identified.
- Develop strategy proposal for conservation and sustainable management of the BPCHC.
- Share the proposal with key stakeholders and MAE authorities.
- Provide TA to support communities so that they can access the SB program form part of the conservation corridor between PNM and PBCHC (for a total of 2,000 new hectares).
- Provide TA to form a coalition (mentioned above) to strengthen the oversight, monitoring, and surveillance of Socio Bosque conservation areas.

#### Gulf of Guayaquil:

- Provide TA to update the management plan for the Churute Mangrove Ecological Reserve.

#### Gran Reserva Chachi:

- Provide TA for continued conservation of 15,260 hectares of forest under the Socio Bosque Program.

### *Activity 1.1.3: Strengthen mangrove/ concession management*

Mangrove concessions have proven to be an effective strategy and incentive for the conservation of this important resource. Mangrove conservation also plays an important role in regulating the carbon cycle: according to the International Union for Conservation of Nature (IUCN), mangroves have an important role to play in capturing atmospheric carbon and trapping it in sediments. The IUCN has established that mangroves could be more efficient in carbon sequestration than tropical or temperate woodlands. The Project has been supporting critical actions relating to

mangrove concession management, including the design and implementation of a monitoring and oversight system (which currently covers an area of 65,000 ha in the Gulf of Guayaquil) and technical assistance to grant new mangrove concessions and renew existing ones, under Ministerial Agreement 129.

Since 2009, in the Gulf of Guayaquil the project has provided technical assistance to 12 of the 13 concessions in Guayas and El Oro, which is over 66% of the concessions across the country. The TA is focused on: i) implementing activities contemplated in their management plans, ii) establishing a monitoring and oversight system, iii) and helping 5 new groups obtain concessions.

In FY12 the project helped communities of Puerto Roma request approximately 1,400 hectares on Mondragón Island and for another group to apply for 4,400 hectares on the Escalante, Moquiñaña and San Francisco islands. It also helped the Mondragón association expand its concession by applying for 160 new hectares.

In FY13 the project will continue providing TA so that at least one more group applies for a new concession in the Gulf of Guayaquil and to strengthen the monitoring and oversight system's operations (including training in management and maintenance of equipment, following up on complaints filed, implementation of registries and reports, complementing the MAE's provision of equipment, etc).

### ***Key actions for Activity 1.1.3***

- Support process for creating immediate response stations (Puestos de Auxilio Inmediato – PAI) and explore feasibility of installing panic buttons (to ECU 911) in Balao, 6 de Julio, and Mondragón.
- Develop sustainable/financial mechanisms for equipment maintenance (internal financial management) for mangrove concessionaires.
- Provide TA to increase local capacity to manage crab association assembly meetings and to guide implementation of their mangrove concession management plans.
- Provide TA to crabbing organizations for at least one to apply for a new mangrove concession.
- Finish documenting and then share the experiences of mangrove concessions to date.

### ***Activity 1.1.4: Promote implementation of critical actions in the environmental management land use plan for the Ayampe River watershed and selected micro-watersheds of the Galera San Francisco Peninsula Francisco.***

In FY12, the Project supported authorities in implementing the activities in the Environmental Land Use Plan (POAM), to have at least two new municipal ordinances adopted for the Ayampe River watershed and the POAMs included in the

Land Management Plans [Planes de Ordenamiento Territorial - POTs]. In addition the project supported development of environmental education campaigns to raise awareness in communities in the Ayampe river watershed regarding water use and solid waste management, which were key problems identified in the POAM.

In FY13, the project will consolidate activities related to forest protection, reduction of single crop farming, protection of water sources, and zoning integrated farms. It will strengthen coordination with the PROMUNI project and local governments to continue implementation of the POAM and various activities within the Environmental Education Plan prepared in FY12. These activities will be focused on sharing with the local communities of Puerto López and Paján the new water and solid waste management models that the PROMUNI project is promoting, which will help manage water and reduce the environmental impacts created by poor solid waste management in the Ayampe River watershed and PNM.

#### ***Key actions for Activity 1.1.4***

##### **Galera San Francisco**

- Through the grant with Ecocacao, remote implementation of good natural resource management practices (zincification, agro-forestry, etc) and water source management (micro-watersheds) on Ecocacao member farms, using various tools and methodologies: including Environmental Field Schools, implementation of integrated farm management plans, conservation corridors, management and conservation of micro-watersheds and water, among others.

##### **PNM and Ayampe River Watershed**

- Provide TA, together with PRONUMI, to the municipalities of Puerto Lopez and Pajan to implement informational campaigns related to the new water and solid waste management models, as part of the Environmental Education Program developed in FY12. The informational campaigns will be directed at the general population of these local governments through various communication strategies (radio spots, press releases, etc), and education and participation (door to door visits, neighborhood talks, others).
- Promote implementation of best practices for natural resource management (farm designs, agroforestry, planting plans, etc) and TA to strengthen 60 model farms in the upper and mid section of the watershed, which will serve as a platform to train new beneficiaries.

#### ***Activity 1.1.5: Promote protection of water source/riverbank vegetation***

Water is essential for human populations. Water conservation is tied to woodlands in the Project's target watersheds (normal flows affected by deforestation and climate change), and it has therefore been working to protect water sources through critical habitat conservation. In FY13, the Project will continue with this approach, with an emphasis on water management in the Ayampe River watershed in particular as related to climate change. The project will coordinate with PROMUNI, the municipalities of Puerto López, Jipijapa, and Paján to implement key activities from the POAM.

### ***Key actions for activity 1.1.5***

- Strengthen the restoration process in micro watersheds (in Ayampe -Vueltas Largas and La Crucita) by consolidating integrated farm management. Activities include reforestation, prevention and mitigation of erosion, best management practices (like reducing or eliminating pesticides, shifting from monocultures to agroforestry schemes, planting plans etc.).
- Coordinate with the PROMUNI project and the municipalities of Puerto López, Jipijapa, and Paján in regard to their implementation of campaigns to increase awareness regarding the new solid waste and potable water models, which were key topics addressed in the POAM.

### **Strategy 1.2: Rehabilitate degraded habitats**

This strategy focuses on restoring habitats for establishing conservation corridors. The Project will seek out partnerships or incentives to ensure the sustainability of these actions.

#### ***Activity 1.2.1: Promote reforestation/regeneration***

In FY12, the Project supported activities to protect and recover remaining forests on the slopes and upper sections of the Galera San Francisco Peninsula watershed to establish conservation corridors of vegetation. In the Ayampe River watershed the project provided technical assistance to promote recovery and natural regeneration and the strategy focused on consolidating activities within the context of the integrated farm management plans.

In FY13 the project will continue supporting recovering and naturally restoring habitats in Galera San Francisco and Ayampe regions in order to increase the value of the existing forests and expand support to the BPOCH and Golf of Guayaquil.

#### ***Key actions for activity 1.2.1:***

##### **Galera San Francisco**

- Provide TA and training and training on environmental and productive activities to technical representatives and leaders of Ecocacao.
- Under the grant to Ecocacao:
  - Provide TA and training and training on environmental and productive activities to members of Ecocacao and the Caja Campesina Agroecológica Muisne (C-CAM).
  - Strengthen conservation corridors (conservation of water sources, agroforestry, organic agriculture).
  - Support community tree nurseries to provide seedlings for reforestation.
  - Conduct group work sessions (“mingas”) for reforestation and to recovery areas critical to conserving biodiversity.

- Enrich conservation with commercially viable species and to improve farm productivity.

#### Ayampe River Watershed and BPCHC

- Promote natural regeneration in communities.

#### Gulf of Guayaquil

- Design a nursery as a key tool for restoring critical habitats affected for forest fire events in the Churute Mangrove Ecological Reserve.

## **Threat 2: Climate change**

Climate change due to natural and anthropogenic causes can exert pressure on ecosystems, habitats and species, including human populations. The impacts of climate change include changes in run-off water, altered flowering patterns, floods and droughts.

Anthropogenic activities influence climate change through the release of atmospheric carbon: for example, deforestation and slash-and-burn techniques exacerbate the greenhouse effect.

### **Strategy 2.1: Establish and implement climate change response and adaptation measures**

The Project will continue supporting the provincial government of Guayas to prepare a strategy to serve as a tool for decision makers in regard to key activities to implement regarding climate change adaptation.

#### ***Activity 2.1.1: Foment implementation of climate change adaptation measures***

In FY12 under the MOU signed with the provincial government of Guayas the project began developing a strategy for climate change adaptation based on the vulnerability study conducted by CIIFEN with funding from the provincial government of Guayas. In FY13 the strategy will be completed and presented to stakeholders.

In addition, taking into consideration that knowing the effects of climate variation is key to managing red crab stocks, the Project will support the INP in quantifying the effects of environmental variables on red crab stocks.

#### ***Key actions for activity 2.1.1***

Under the MOU signed with the provincial government of Guayas for the Climate Change Adaptation Strategy:

- Together with the provincial government of Guayas conduct workshops with experts as well as civil and productive sectors in order to climate change adaptation activities.
- Provide TA to design the provincial strategy for climate change adaptation based on the vulnerability study and participatory workshops.
- Support sharing the proposed provincial strategy for climate change adaptation with representatives from the province's 25 municipalities.
- Share the action plan through forums, press, networks, and the web.

## **Strategy 2.2: Reduction of greenhouse gases and carbon sink conservation**

This strategy does not include its own activities, but instead ties in to other Project activities that promote best practices (such as changing slash-and-burn practices) and conservation of carbon sinks by preserving forest remnants and promoting restoration and reforestation. The work plan's activities that relate to this strategy are:

- 1.1.2. Promote conservation of forests and critical habitats
- 1.1.3. Strengthen mangrove/concession management
- 1.2.1. Promote recovery of mangroves, pastures, and other critical habitats
- 1.2.2. Promote reforestation and natural regeneration

## **PIR 2: Improved Local livelihoods**

### **Threat 3: Lack of economic alternatives**

The Project's mandate is biodiversity conservation by reducing threats. One of the greatest threats to biodiversity in Project intervention areas is the lack of economic alternatives that leads to the unsustainable use of natural resources. Living in remote areas without access to credit or markets, local residents frequently focus on opportunity costs (particularly illegal logging, farming and livestock) mainly for self-consumption. These activities bring about changes in land usage and residents generally face obstacles in trying to market or sell any of the products not consumed by their family. The Project has not promoted traditional farming activities (such as corn farming or stock-raising) with potential to boost community incomes, because they pose a threat to biodiversity conservation.

### **Strategy 3.1: Development and promotion of market-based economic alternatives and economic incentives for critical habitat conservation**

To reduce this threat, the Project has focused on generating economic initiatives that are based on existing biodiversity and rely on its conservation. One example of a successful link between habitats and ecosystem conservation and economic resource generation that the Project has promoted is support for mangrove concessions, which have generated economic resources through the harvesting of red crab. This in turn creates incentives for conserving its ecosystem. The Project emphasizes the first value chain linkage, which is the managing and protecting red crab stocks and their habitat, which is the base of the entire value chain.

In addition, the Project will analyze the feasibility of incorporating carbon compensation incentives in voluntary carbon markets to support sustainable mangrove management and conservation of biodiversity in the Gulf of Guayaquil. Initially a legal/political feasibility will be done with the MAE on selling carbon credits in

voluntary markets to use the income as a conservation incentive and to reduce the presence of CO<sub>2</sub> in the atmosphere.

### ***Activity 3.1.1 Facilitate access to environmentally responsible markets***

The Project will continue to facilitate market access for products associated with, or that promote, biodiversity conservation. It will approach this from two angles: 1.) by strengthening value chains by connecting responsible markets to producers that apply environmentally friendly practices, and 2.) by providing technical assistance to producers to sustainably managing/harvesting products related to biodiversity conservation, such as red crab, tagua, and organic cacao.

#### ***Key actions for Activity 3.1.1***

##### Galera San Francisco

- Provide TA so that Ecocacao maintains its organic certification.
- Aid EcoCacao in obtaining credit for productive activities, including work infrastructure and capital.

##### Ayampe River Watershed and Surrounding Areas

- Provide TA to local tagua gatherers and collection centers in harvesting and post-harvesting processes as well as in strengthening and expanding community commercial systems developed in FY12. In addition, support maintaining and expanding commercial linkages and helping foment price differentials based on quality to benefit at least 100 new people as well as 400 people that benefited in FY12.

##### Gulf of Guayaquil

- Analyze feasibility of incorporating carbon credits as an additional incentive for sustainable mangrove and biodiversity management.
- Support crabbers associations (with a focus on women-operated initiatives):
  - Training in good manufacturing practices for seafood with the support of other entities, such as the Servicio Ecuatoriano de Capacitación Profesional (SECAP).
  - Maintain and establish new business ties for crab sales
  - Identify and facilitate participation in local promotional events (i.e. crab festival)

### ***Activity 3.1.2: Support accessing and maintaining Socio Bosque incentives***

Since its beginning, the Project has supported individuals and communities access the SB Program. In FY13, the project will work on helping participants improve the quality of their SB incentive investments, emphasizing productive activities that support biodiversity conservation.

#### ***Key actions for Activity 3.1.2***

##### Great Chachi Reserve

- TA so that 15,260 ha meet requirements to continue participating in the Socio Bosque (and for communities to maintain \$193,037 in incentives).
- Hold an in-country study tour with other communities participating in Socio Bosque to exchange experiences on budget management, monitoring conservation areas, and implementation of sustainable productive activities with Socio Bosque incentives.
- Provide TA so that SB incentives generate additional income by implementing productive activities linked to biodiversity conservation that are included in the investment plans or through community banks in at least 5 communities.

PNM, Ayampe River Watershed and BPCHC:

- Provide TA for 2,000 new hectares to enter SB to provide conservation incentives to communities (by developing investment and monitoring plans, measuring properties, preparing maps, and compiling applications) in the BPCHC.
- Provide TA for at 3 communities that participate in the SB program to diversify their production (tagua post-harvesting processes, tourism, etc) in activities that are linked to conservation and included in their SB investment plans.

**Activity 3.1.3: Strengthen value chains that promote biodiversity conservation (red crab, tagua, wood, and cacao), especially in the natural resource management linkage, which is the basis for the entire value chain.**

Since its inception, the Project has been providing technical assistance to stakeholders in regard to key value chain linkages related to biodiversity. In FY12 the project analyzed the red crab value chain in the Gulf of Guayaquil, supported tagua collection centers improve drying methods, and continued supporting Ecocacao in maintaining its organic certification, and in helping farmers in Ayampe access fair prices for timber products that are properly and legally managed. The project's future work will focus on strengthening these value chains, focusing on the production linkage, which sustains the rest of the value chain.

**Key actions for Activity 3.1.3**

Galera San Francisco:

- Continue TA to improve cacao productivity through implementation of good practices for natural resource management.
- Coordinate with the Productive Network project and Cacao Roundtable in Esmeraldas to increase sales options.
- Provide TA to maintain commercial linkages for organic cacao in niche markets that pay higher prices for certified products.

PNM and Ayampe River Watershed

- Provide TA to strengthen tagua harvesting and drying as well as the respective commercial linkages to expand benefits to gatherers and collection centers.
- Provide TA to implement wood harvesting plan and improve incomes for legal timber.

#### Gulf of Guayaquil

- Design low cost cages for red crabs in order to house live crabs to facilitate selling more crabs at higher prices during peak sales days (holidays and weekends).
- Assemble cages to facilitate data collection on survival rates, which will be gathered by crabbers.

### **PIR 3: Partnerships formed for ongoing support for biodiversity conservation**

#### **Threat 4: Insufficient institutional capacity for biodiversity conservation**

The MAE has made significant efforts in the area of biodiversity conservation from the outset; however it faces limitations to being able to reach its goals. The Project has worked with the MAE to improve its capacity to manage protected areas (RM Galera San Francisco, PNM, RE Manglares Churute and RVS Manglares El Salado).

In FY13 the project will continue providing TA to protected area directors in the project's geographic sites. Assistance will respond to the needs of each protected area, will be guided by the protected area's work plan and will be aligned with project goals. In PNM the project will support implementing the Protected Area Operations Management Model for preparation of its annual operational plan.

In FY11 and FY12 the project supported the INP establish a system for monitoring red crab stocks and in FY13 it will focus on building capacity within the INP to maximize their ability to process data and developing technical guidance to establish or revise policies for managing red crabs.

The project will also work with its local partners (subcontractors and grantee) to strengthen local capacity for natural resource management.

#### **Strategy 4.1 Strengthen protected area management**

In FY13, the project will provide TA and training at the national level regarding the use and implementation of the Protected Area Management Manual developed together with the MAE in FY12. It will also provide TA to three pilot protected areas to develop their annual operational plans. The project will also support PNM strengthen management of tourism, fishing, monitoring and oversight, and harvesting of non-timber forest products (tagua, others). To raise awareness of communities in

and around PNM and to support monitoring and oversight activities and Environmental Education and Communications strategy will be prepared.

#### *Activity 4.1.1 Build institutional capacity*

Just as in FY12, in FY13, the Project will continue to provide technical assistance to directors of protected areas and the MAE regional directors, with a focus on planning, optimizing area management procedures, and optimizing budgets and financial resources.

In addition, in order to strengthen the INP's red crab program, the project will train INP staff on population dynamics (selective fishing practices, growth, reproduction, mortality, among others) and fishery evaluation models as well as in the preparation of reports to share results in periodic publications.

#### *Key actions for Activity 4.1.1*

National Level:

- Provide TA and training on use and implementation of the Protected Area Management Manual developed together with the MAE in FY12. It will also provide TA to three pilot protected areas to develop their annual operational plans (PNM, Yasuni National Park, and Antisana Ecological Reserve).

In Project Geographic Areas:

- Complement the MAE's provision of equipment to support protected area and mangroves concession management.
- Provide technical assistance to the MAE's provincial office in Esmeraldas, Guayas and Manabí.

PNM and Ayampe River Watershed:

- Provide TA for the MAE to structure and implement legal mechanisms to allow extracting non-timber forest products, mainly for tagua within PNM, using the technical recommendations from the tagua assessment conducted in FY12.
- Provide TA to communities to sign conservation agreement and fulfill commitments.
- Provide TA to PNM to establish legal mechanisms to regulate fishing within the marine area of the park based on the fishery assessment conducted in FY12. In this regard, provide opportunities for the respective discussions and analysis for the MAE to determine the types and amount of artisan fishing to permit.
- Design and implement an Environmental Education and Communication campaign so that natural resource users in PNM respect the existing policies and regulations and for the adoption of best management practices.

- Provide TA to the MAE for developing and implementing community tourism management schemas for coastal tourism products through awarding patents that will facilitate managing and regulating public access.
- Support PNM in obtaining satellite images to help determine the current land use situation which is needed to manage the Park as well as to help at least set one community access the Socio Bosque program. This activity is related to activity 1.1.2 above.
- In the Ayampe River Watershed the project will promote adoption of various best practices for natural resource management with an emphasis on non-timber forestry products such as tagua, caña guadua and others through flyers, posters, and radio shows.

#### Gulf of Guayaquil

- Analyze possibility of developing and implementing an informational tool that allows managing fishery information (database for fishery registries).
- Provide technical assistance for developing annual operational plans for Protected Areas, prioritizing budget-related activities with strategies for leveraging funds and assistance for budget execution.
- Assist Reserve Directors in developing roadmaps for initiating tourism and fishery management activities, updating management plans, coordinating patrolling to enforce the closed crabbing season, and analyzing usage (shrimpers).
- Work with the Office of Foreign Disaster Assistance (OFDA) to share and provide training on implementing the Plan for Preventing and Controlling Forest Fires in the Churute Reserve.
- Provide training to INP staff working for the Red Crab Program in population dynamics and how to use fishery evaluation tools.
- Develop roles and responsibilities for the INP staff working for the Red Crab Program for information management and data processing for commercial catches and independent research.
- Provide training to INP staff working for the Red Crab Program in various fields (growth, reproduction, mortality, etc) in order to strengthen the program's research and obtain inputs needed to implement fishery evaluation models.
- Guide and instruct INP staff working for the Red Crab Program on how to prepare periodic technical and scientific reports to share results from field research (population dynamics and stock), such as i) commercial catch reports, ii) reports on growth, iii) reports on mortality rates, iv) reports on reproduction, v) integrated stock analysis reports and vi) incorporating economic variable in monitoring.

- Guide and supervise replicating participatory crab monitoring with crabbing organizations in the El Oro province. This includes 1) TA to INP to extend and implement participatory methodology for the monitoring commercial catches in El Oro, ii) supporting the INP in implementing initial training workshops to new fishing organizations that will be collecting data for the crab stock (commercial catch) analysis in El Oro, iii) support the INP in identifying and georeferencing main crabbing spots in El Oro.

#### *Activity 4.1.2 Design and support implementation of monitoring and oversight systems*

Monitoring and oversight systems are a priority for biodiversity conservation and improving public security through their impact on threat reduction, particularly in areas where resource users play an active role in their design and implementation.

In FY13, the Project will continue to support monitoring and oversight systems for mangrove concessions in the Gulf of Guayaquil and RE Manglares Churute, and for Socio Bosque, particularly in the Gran Reserva Chachi. It will also provide technical assistance for surveillance and enforcement systems in the marine area of PN Machalilla, and in RM Galera San Francisco. The Project's role in monitoring and oversight systems is to facilitate and serve as a catalyst for the actions of the responsible institutions and others working in those areas, and provide fundamental equipment for those activities.

#### *Key actions for activity 4.1.2*

In Project Geographic Areas:

- Complement provision of equipment needed to strengthen monitoring and oversight activities.

Galera San Francisco

- Provide technical support for the monitoring and oversight system for the Reserva Marina Galera San Francisco.

Gran Reserva Chachi

- Provide technical assistance for implementation of a unified monitoring system for Socio Bosque in the Gran Reserva Chachi, together with the MAE, FECICHE, Socio Bosque and other donors in the region with an emphasis on training community forest guards, improving processes for reporting violations, and coordinating with authorities.

PNM, BPCHC and Ayampe River Watershed

- Provide TA to strengthen priority activities in the monitoring and oversight system.
- Provide TA to communities participating in Socio Bosque Program to implement a unified system for monitoring and patrolling conservation areas in coordination with the MAE and association of communities in BPCHC. Also, coordinate with

the community presidents to reactivate the radio frequency that they had under the Fundación Natura project with KFW.

- Provide guidance for developing investment plans in order to purchase radio equipment to support forest guard operations to patrol the conservation area in coordination with the MAE as well as helping report illegal timber extraction.

Gulf of Guayaquil

- Provide TA to strengthen the monitoring and oversight system for the Gulf of Guayaquil.

#### **Strategy 4.2: Strengthen Local Capacity**

In FY13 the Project will emphasize building local management capacity by providing technical assistance and training to key stakeholders to strengthen the management of their organizations/institutions and institutionalize processes and procedures that will support natural resource management in years to come. It will also help develop tools and streamline processes for collaborating with the MAE to leave sustainable mechanisms in place for implementing joint conservation initiatives, such as mangrove concessions, monitoring red crab populations, and Socio Bosque.

#### **Activity 4.2.1 Strengthen local capacity of communities, local governments, grassroots organizations, etc**

The project will continue strengthening local capacity for managing natural resources and biodiversity conservation. The project will build on strengths of local implementing partners and continue strengthening administrative and technical capacities of local communities, governments, and organizations.

#### **Key actions for activity 4.2.1**

National Level

- Assure local capacity to provide TA by collaborating with Altrópico, CIIFEN, Ecocacao, Bioeducar, Conservación y Desarrollo, and Ecolex.

Gran Reserva Chachi

- Strengthen community organizational capacity of at least 2 communities to implement procedures required by SB and incorporate them in statutes/policies to that they are not vulnerable to change when leadership changes.

Gulf of Guayaquil

- Strengthen INP's implementation of the Red Crab Program (see activity 4.1.1) that is now financed by the INP and their continued leadership of the coalition for monitoring red crabs in the Gulf of Guayaquil.

- Strengthen the INP in its efforts to replicate and expand the Red Crab Program and continued use of equipment that was donated by the project (see activity 4.1.1).
- Strengthen crab association administrative (accounting, compliance with tax policies, MAE reporting requirements for mangrove concessions) and organizational (assembly meeting management) capacity so that they can fulfill conservation commitments.
- Continue supporting the Provincial Government of Guayas in developing a provincial climate change adaptation strategy (activity 2.1.1).

### **Strategy 4.3: Design and Support Systems for inter-institutional communication and coordination**

This strategy is designed to strengthen existing and promote new conservation coalitions. These coalitions are led by the MAE or local stakeholders and are platforms to coordinate and plan conservation efforts among a wide range of stakeholders within specific Project areas and to complement the activities of USAID and other donors through similar or complementary projects. The Project will also promote direct partnerships with public, private and community stakeholders to leverage funds and to implement Project activities.

#### **Activity 4.3.1: Strengthen coalitions**

The project will continue strengthening the five existing coalitions that are led by local organizations in order to respond to common interests or priorities among its members. It will also strengthen new coalitions that foment biodiversity conservation and assess and document coalition impact on a semi-annual basis. It will also coordinate activities with other relevant donors and institutions.

#### **Key actions for activity 4.3.1**

##### National Level

- Coordinate activities with other projects by USAID and other donors, as well as with government institutions (MAE, PROMUNI, GEF, MAGAP, MINTUR, etc.).
- Assess and document coalition impact on a semi-annual basis.

##### Gran Reserva Chachi

- Support the conservation coalition in the Gran Reserva Chachi in implementing its work plan and coordinating with other institutions with an emphasis on protecting and monitoring Socio Bosque conservation areas and development of productive activities that are linked to biodiversity conservation.

##### PNM, BPCHC and the Ayampe River Watershed

- Promote formation of coalition for monitoring natural resources in the BPCHC with the community association and MAE.

#### Gulf of Guayaquil

- Guide and strengthen the three existing coalitions: i) Coalition for Red Crab Monitoring in the Gulf of Guayaquil ii) Mondragón Island Coalition for Controlling Closed Seasons, and iii) Escalante Island coalition for managing a joint mangrove concession among 4 organizations. The project will support the Coalition for Red Crab Monitoring in the Gulf of Guayaquil in expanding coalition members and fomenting fishery policies related to red crabs (as indicated under activity 1.1.1).

#### *Activity 4.3.2: Obtain co-financing and/or leverage funds*

The Project will continue to offer small grants to local organizations to support actions that contribute to achieving Project objectives, such as supporting mangrove concessionaires. The Project will also continue leveraging funds from other organizations to ensure the sustainability of key actions once the Project has ended and will follow-up on effective partnerships established with other organizations thus far.

#### *Key actions for activity 4.3.2*

- Manage small grants as a means of achieving the Project's objectives such as the grant with Ecocacao (mentioned under activity 1.2.1).
- Continue strengthening local capacity to leverage funds.

#### **Strategy 4.4: Upon MAE request continue providing input for development of public policies**

Upon MAE's request, the Project provides technical and legal input for developing public policies for natural resource management and biodiversity conservation.

#### *Activity 4.4.1: Provide input to the MAE for policy and program development related to conservation and biodiversity management.*

In FY12 the project provided general forestry policy inputs as well as specific inputs in regard to tagua, protected areas, and marine resources. It also supported neighborhood, provincial and provincial governments in environmental topics and especially regarding activities included in the environmental land use plans (POAMs). The project will continue this support in FY13.

#### *Key actions for Activity 4.4.1*

- As indicated above under Activities 4.1.1 and 4.1.2, continue supporting management of PNM (updating the management plan, operational plan development, strengthening monitoring and oversight, forestry control, public use management, and others), Reserva Marina Galera San Francisco (monitoring and oversight), RE Manglares Churute (monitoring and oversight; administration and

management), and RVS Manglares El Salado (monitoring and oversight; administration and management).

MAE:

- Provide TA to the MAE's Sub-Secretariat for Natural Patrimony to provide input for forestry policies and to finalize and share the forestry chapters of the new environmental code once it is approved.
- Provide support to the Biodiversity Division of the Sub-Secretariat for Natural Patrimony to improve protected area management, specifically for implementing the Protected Area Operational Management and implementing the Biodiversity roadmap, depending on inclusion of additional funding.

Autonomous Decentralized Governments:

- Support the design of the Climate Change Strategy for Guayas Province (under activity 2.1.1).
- Continue supporting access to Socio Bosque and promoting the program (under activity 3.1.2).
- Technical assistance for provincial, municipal, and parochial governments for implementing activities set out in the POAMs and activities contemplated in the environmental education programs developed in FY12 (mentioned above under activities 1.1.4 and 4.1.1).

***Activity 4.4.2: Support sharing and training related to implementing the new Environmental Code regarding forests, biodiversity, and climate change.***

Upon the MAE's request, the project will continue supporting the MAE with technical inputs for forestry sector analysis and policies. In addition, once the new environmental code is approved by the Government of Ecuador the project will support presenting the code to stakeholders, developing the regulatory framework, and conducting training.

***Key actions for activity 4.4.2***

- Provide technical inputs for forestry policies.
- Prepare technical inputs for the MAE to develop legal instruments for applying the forestry chapter of the environmental code.
- Support the MAE in sharing and providing training on the legal instruments linked to forestry.

## 4 . WORK PLAN BY GEOGRAPHIC AREA

The tables below summarize the expected results, key actions, location, timelines, and responsible staff/implementing partner in the Project's geographic areas for FY13.

### 1) Gran Reserva Chachi and its buffer zone

During the first three years of implementation the project supported access to the Socio Bosque program to create conservation corridors. It also provided TA to Socio Bosque beneficiaries in order to meet commitments made for reporting and conservation with the MAE. During FY13 it will continue TA particularly to Chachi centers and Afro-Ecuadorian communities for implementing SB investment plan activities, strengthening local organization capacity as well as local capacity for monitoring and protecting natural resources.

Threats	Expected results	Key actions	Geographic area/site	Quarter				Responsible staff/Implementing partner
				1	2	3	4	
<b>Loss and/or alteration of critical habitats</b>	15,260.33 Has remain in the Socio Bosque program	Provide technical assistance to communities to meet the requirements for maintaining Socio Bosque's incentives: i) updating of investment plans, and ii) monitoring forest conservation.	Corriente Grande Guadual, Calle Manza, Sabalito, Tsejpi and Pichiyacu Centers.  Afro descendent communities of Chispero, San Miguel and Playa de Oro	X	X	X	X	Altrópico
	Strengthen community forest guard capacity to monitor conservation areas		Guadual, Calle Manza, Sabalito, Tsejpi	X	X	X	X	Altrópico
<b>Insufficient institutional capacity for biodiversity conservation</b>	Coalition for Gran Reserva Chachi and area of influence led by a coalition member and strengthened	Support implementing work plan and inter-institutional coordination with an emphasis on monitoring forest conservation under Socio Bosque and developing productive activities related to biodiversity conservation. Evaluate activities implemented by the coalition and prepare work plan for the next year.	Chachi territory in Cayapas	X	X	X	X	Altrópico
	At least 2 communities with increased administrative capacity	Strengthen community organizational capacity to implement procedures required by SB and incorporate them in statutes/policies		X	X	X	X	Altrópico
<b>Lack of economic</b>	At least 5	Support for developing	Chachi Capulí,	X	X	X	X	Altrópico

<b>alternatives</b>	communities implement productive activities linked to biodiversity conservation or income generating activities	investment plans (Socio Bosque) and implementing productive activities linked to biodiversity conservation or income generating activities	Guadual, Calle Manza, Sabalito, Gualpí del Onzole and Tsejpi Centers. Afro communities of San Chispero, San Miguel and Playa de Oro					
		Conduct an in-country study tour with other communities that manage budgets, monitor forest conservation, and implement productive activities using Socio Bosque Program Incentives	Chachi Capulí, Guadual, Calle Manza, Sabalito and Tsejpi Centers. Afro communities of San Chispero, San Miguel and Playa de Oro			X		Altrópico

## 2) Reserva Marina Galera San Francisco and watersheds of the Galera San Francisco Peninsula

The TA that the project provided during the first three years included support for: the Reserve's management plan, environmental management and beach management, access to Socio Bosque, environmental field schools, improving integral farms, accessing responsible markets, and reforestation. During FY13 the project will strengthen these activities via TA to strengthen reserve management and local capacity for conservation and organic cacao production and sales via Ecocacao.

Threats	Expected results	Key actions	Geographic area/site	Quarter				Responsible staff/Implementing partner
				1	2	3	4	
<b>Loss and /or alteration of critical habitats</b>	96 properties with conservation areas are implementing farm management plans	Consolidation of conservation corridors through farm plans emphasizing best practices (conservation of water sources/riverbanks/agroforestry, organic farming, etc.)	Chipa, Quingue, Caimito, 7 de Agosto, Tonchigüe, Quitito, El Cabito, El Aguacate, La Tablada, Matambal, Galerita, La Mina	X	X	X	X	EcoCacao
		Training in enriching conservation areas with commercial tree species and in improving farm productivity		X				Walter Palacios and Ecocacao
	330 farmers trained (220 new) and implementing practices that reduce water contamination	Train Ecocacao technical reps and members of Ecocacao and CCAM on protecting water sources, streams, inclines and springs	Chipa, Quingue, Caimito, 7 de Agosto, Tonchigüe, Quitito, El Cabito, El Aguacate, La Tablada, Matambal, Galerita, La Mina. Chamanga, Salima, Boca del S, Tortuga, Bilsa, Bilsa Oñate, Tres Vías, Bolívar Daule, Muisne, La Tola, Conteras, Gudurnal, La Tortuga	X	X	X	X	EcoCacao
		Hold reforestation group work sessions in critical areas such as riverbanks and near streams using materials from community tree nurseries		X	X	X	X	EcoCacao
		Recover cliffs and other areas for water collection		X	X	X	X	EcoCacao
	120 farmers maintain organic certification	Implement internal control systems through inspectors.	Chipa, Quingue, Caimito, 7 de Agosto, Tonchigüe, Quitito, El Cabito, El Aguacate, La Tablada, Matambal, Galerita, La Mina	X	X	X	X	EcoCacao
	<b>Insufficient institutional capacity for biodiversity conservation</b>	The Marine Reserve's operational plan and programs are known and supported by local	Support the MAE and local actors to strengthen local capacity for conservation in the Reserve	Reserva Marina Galera San Francisco	X		X	X
				X		X	X	

	stakeholders and coordinated with the provincial office							
	Marine Reserve's monitoring and oversight system strengthened	Hold workshops with public stakeholders and local authorities to coordinate activities (MAE, SSRP, Navy, GADs, Police)		X	X	X	X	Cristóbal Rodas
		Prepare a Manual regarding procedures and protocol for interactions between authorities and local stakeholders that operate in the Reserve			X			Cristóbal Rodas and Reserve Director
		Hold training workshops with Reserve staff on security, navigation, nautical operations, and protection of marine life		X				Cristóbal Rodas and Reserve Director
		Hold in country observational study tours focused on improving capacity and knowledge of Protected Area management			X			Cristóbal Rodas and Reserve Director
<b>Lack of economic alternatives</b>	220 new families (benefiting 1,100 people) access credit to implement productive activities that use best practices for natural resource management and generate income	TA and support for productive activities that generate additional income to farmers that are accessing credits provided by CCAM	Chipa, Quingue, Caimito, 7 de Agosto, Tonchigüe, Quitito, El Cabito, El Aguacate, La Tablada,	X				EcoCacao
		Maintain commercial linkages for organic cacao and coordinate with the Productive Network Project and Cacao roundtable to promote sales.	Matambal, Galerita, La Mina, Chamanga, Salima, Boca del S, Tortuga, Bilsa, Bilsa Oñate, Tres Vías, Bolívar Daule, Muisne, La Tola, Conteras, Gudurnal, La Tortuga	X	X	X	X	George Fletcher/Cristóbal Rodas

### 3) Parque Nacional Machalilla and Ayampe River Watershed

The activities that the project provided during the first three years included TA to PNM, environmental management and beach management, access to Socio Bosque, environmental field schools, improving integral farms, forestry control and management, accessing responsible markets, and accessing the Socio Bosque Program.

During FY13 the project will provide TA to help define policies for using, monitoring, and managing natural resources, with an emphasis on forestry management, integral farms, developing and strengthening value chains (tagua and timber) and improving productive activities implemented with Socio Bosque incentives.

Threats	Expected results	Key actions	Geographic area/site	Quarter				Responsible staff/Implementing partner
				1	2	3	4	
<b>Loss or alteration of critical habitats</b>	At least 2,000 new hectares of forest are conserved under the Socio Bosque Program, helping strengthen a conservation corridor between PNM and BPCHC	Technical assistance to maintain Socio Bosque incentives: i) measuring conservation area ii) developing investment plans and iii) compile application and attachments (RUC, RUOS , land title, etc).	Río Blanco, Olón, Las Núñez, La Entrada.	X	X	X	X	ECOLEX
	At least five communities strengthen implementing good practices for natural resource management	TA to implement production plans and strengthen model farms in order to increase production and biodiversity conservation	Las Maravillas, El Sombrero, La Crucita, Vueltas Largas, Río Blanco	X	X	X	X	CyD
		TA and training to implement best practices for natural resource management		X	X	X	X	CyD
		Develop Tagua Program		X	X	X		Walter Palacios
		Develop communication tools (flyers, radio show) to promote conservation and/or implementation of best management practices (tagua, forestry, etc) and compliance with regulations		X	X			Ecolex
	Integral Management Plans conducted for 3,000 Has that include improved forestry harvesting, tagua management, and protection/natural regeneration	Support for preparing Integral Management Plans based on the forestry regulations	La Entrada, Las Núñez, Dos Mangas (includes communities in BPCHC)	X	X			Marco Cuasapaz
		TA to implement Integral Management Plans	Vueltas Largas (18 farms), Olón, La Entrada, Las Núñez, Dos		X	X	X	

	management (EA and FRA)		Mangas (includes communities in BPCHC)					
<b>Lack of economic alternatives</b>	At least 45 people have improved income through sustainable forestry products and 400 maintain economic benefits from tagua	TA to strengthen the Tagua value chain including post-harvesting (drying, button production) and price differentials for quality and 400 people maintain economic benefits from tagua that initiated in AF12	Las Maravillas, El Sombrero, La Crucita, Vueltas Largas, Río Blanco	X	X	X	X	CyD
		Provide TA to implement 9 simplified forestry harvesting plans (to benefit 45 people)	Vueltas Largas	X	X	X	X	Marco Cuasapaz
	At least 11 new commercial linkages created and 2 existing linkages strengthened	Promote 2 credit lines (one by C&D another by another institution to 60 farms. Provide TA for at least 30 farmers to apply to credit to strengthen their production. The Project will complement credit obtained by 19 farms with the provision of training/field materials.	Las Maravillas, El Sombrero, La Crucita, Vueltas Largas, Río Blanco	X	X	X	X	CyD
		Create 5 new commercial linkages for agricultural products produces with best practices for NRM		X	X	X	X	CyD
		Create 5 new commercial linkages for tagua and facilitate maintaining 2 linkages created in FY12		X	X	X	X	CyD
		Develop 4 business plans (3 for collectors and 1 for the tagua bead workshop in La Crucita) and provide TA to strengthen operations (accounting, sales, etc)		X	X	X	X	CyD
		Create at least 1 commercial linkage for forestry products	Vueltas Largas	X	X	X	X	Marco Cuasapaz
<b>Insufficient institutional capacity for biodiversity conservation</b>	Local governments implement priority activities from the POAM	Strengthen coordination with PROMUNI and municipal governments to implement the POAM	Puerto Lopez, Jipijapa, Paján	X	X	X	X	Diana Vinuesa/PROMUNI
	At least one community within PNM has negotiated a Cooperative Agreement, based on the strategy agreed on with the MAE, to enter the Socio Bosque	Develop a strategy for at least one community that is located within Machalilla National Park (MNP) to regulate land use and for that same community to enter the Socio Bosque	PNM (Agua Blanca and/or Pital de Río Blanco)	X				Ecolex, Manuel Bravo, PNM Director

	Program	Program and purchase satellite image of PNM.						
		Once the MAE has approved, implement the above mentioned strategy, which could include TA for a community integral management plan, development of conservation criteria, and conservation/cooperation agreements to assure adequate NRM and fulfillment of Socio Bosque prerequisites.			X	X	X	Ecolex, Manuel Bravo, PNM Director
	3 communities or groups inside PNM benefit from manage tagua based on legal mechanisms agreed on with the MAE	Support for developing a legal mechanism for harvesting tagua within PNM (Ministerial Agreement or administrative resolution, etc) based on the tagua assessment conducted in FY12	PNM (Matapalo, Rio Plátano, Manantial, La Colombia)	X	X			Walter Palacios/ M. Cuasapaz
		TA to communities so that they meet the MAEs legal requirements (Integral Management Plans, legal documents, maps, etc) for managing tagua			X	X	X	Diana Vinueza/Walter Palacios
	PNM management strengthened and inputs provided for decision making	Strengthen monitoring and oversight system, including provision of equipment	PNM	X	X	X	X	Manuel Bravo
		Strengthen technical and financial management of PNM by preparing its Annual Operations Plan using the Protected Area Operational Management Manual as a guide		X				Diana Vinueza, Karin Columba, Richard Vaca, Natalia Araujo
		TA to design and implement Environmental Education strategy to raise awareness among PNM visitors and to adapt best practices for NRM (tourism, fishery, forestry, others) as well as complying with park policies and regulations		X	X	X	X	Diana Vinueza
	Coastal tourism management schemes and monitoring and oversight system for NRM strengthened	Support developing and implementing community/alternative management schemes for beach visitors	La Playita	X	X	X	X	Manuel Bravo
		TA to PNM Director	Coastal part of	X	X	X	X	Manuel Bravo

		and Provincial MAE Director to implement coastal tourism routes by awarding patents to operate within part of the park	PNM					
	Legal mechanism to regulate fishery activities within the marine area of PNM developed and presented to MAE	RA in defining mechanisms to regulate fishery activities based on the assessment conducted in FY12	Coastal part of PNM	X	X	X	X	Manuel Bravo

#### 4) Gulf of Guayaquil (including Reserva Ecológica Manglares Churute, la Reserva de Producción de Fauna Manglares El Salado, and mangrove concessions)

During the first three years the project supporting designing a monitoring and oversight system for the mangrove concessions, strengthened local capacity to report on management plan implementation to the MAE, and implemented a participatory red crab stock analysis study with the INP. Incomes were improved for women that process crab pulp by linking them with buyers in Guayaquil. At the same time, the project supported the MAE in improving protected area management (Churute and El Salado). During FY13 the project will continue TA to strengthen local capacity to continue activities supported by the project to date in protected areas as well as mangrove concessions.

Threats	Expected results	Key actions	Geographic area/site	Quarter				Responsible staff/Implementing partner
				1	2	3	4	
Loss and/or alteration of critical habitats	At least one new mangrove concession awarded	TA to crab organization (management plan, identify technical advisor, etc)	Gulf of Guayaquil	X	X	X	X	Manfred Altamirano
	Parameters for red crab growth in captivity developed and shared	TA to INP to design and build cages in natural habitats and collect and analyze data	Mondragón, Churute, and Naranjal	X	X	X	X	Ivan Cedeño/INP
	Mangrove concession experiences documented and presented	Finalize and share report	Gulf of Guayaquil	X				Manuel Bravo
Insufficient institutional capacity for biodiversity conservation	Management Capacity of RE Manglares Churute strengthened in regard to public use, fishing, and resource management	Analyze possibility of developing and implementing an informational management tool to manage fishery data	RE Manglares Churute	X	X	X	X	Manfred Altamirano
		TA in: 1) developing POA and oversight activities during closed crabbing season 2) defining priority activities for managing the reserve (education, public use, resource management), 3) input for new management plan		X	X	X	X	
		Work with OFDA to share the Plan for Forest Fire Prevention and Control and provide training for its implementation		X	X	X	X	
	Planning and Management of RPFM El Salado	TA for: i) developing POA activities during closed	RPFM El Salado	X	X	X	X	Manfred Altamirano

	strengthened	crabbing season; ii) planning meetings with fishermen farmers and tourism operators iii) gathering key data on shrimping and fishing						
	Mangrove Concessionaires continue and strengthen implementation of the monitoring and oversight system	Assist groups in exploring feasibility of obtaining panic buttons for ECU911	Balao, 6 de Julio and Mondragón	X	X	X		Consultant Patricio Goyes
		Develop local capacity to repair boat motors (such as through internships with SECAP in mechanics) and to prepare semi-annual reports on management plan implementation	Naranjal, Mondragón, Isla Escalante	X	X	X		Manfred Altamirano
		Develop sustainable mechanisms for equipment maintenance equipment (internal financial management)		X	X	X	X	Bioeducar y Juan Carlos
		Reach agreements with shrimpers regarding access to crabbing spots		Naranjal	X	X		Juan Carlos
		TA to strengthen organizational management (general assembly) and implementation of concession management plans	Naranjal, Mondragón, Isla Escalante	X	X	X	X	Bioeducar, Juan Carlos, Manuel Bravo
		Mangrove Concession Coalition strengthened in mangrove and resource management	Support the 2 coalitions of mangrove concessionaires in: i) planning activities to enforce closed season ii) establishing mechanisms for financial sustainability, and iii) obtaining support from the Navy, Police, and Fishery authorities	(1) Isla Escalante, Moquiñaña and San Francisco, and (2) Isla Mondragón	X	X	X	X
Coalition for Monitoring Red Crab Stock in the Gulf of Guayaquil strengthened	Guide and supervise replicating participatory crab monitoring with crabbing organizations in the El Oro province. This includes 1) TA to INP to extend and implement participatory methodology for the monitoring commercial catches in El Oro, ii) supporting the INP in implementing initial training workshops to new fishing organizations that will be collecting data for the crab stock (commercial catch)	El Oro	X	X	X	X	INP, Ivan Cedeño	

		analysis in El Oro, iii) support the INP in identifying and georeferencing main crabbing spots in El Oro.						
	Strengthen INP's Red Crab Program	Support developing software to manage research data for the Red Crab Program (with the UESS)	Gulf of Guayaquil			X	X	
		Guide and instruct INP staff working for the Red Crab Program on how to prepare periodic technical and scientific reports to share results from field research (population dynamics and stock), such as i) commercial catch reports, ii) reports on growth, iii) reports on mortality rates, iv) reports on reproduction, v) integrated stock analysis reports , vi) incorporating economic variable in monitoring, vii) submitting fishery management recommendations.	Gulf of Guayaquil	X	X	X	X	
		Provide training to INP staff working for the Red Crab Program in various fields (growth, reproduction, mortality, etc) in order to strengthen the program's research and obtain inputs needed to implement fishery evaluation models.			X	X	X	
<b>Climate Change</b>	Effects of climate variability on red crabs documented	Quantify effects of environmental/climate variables on red crab stocks	Gulf of Guayaquil			X	X	INP, Ivan Cedeño
<b>Lack of economic alternatives</b>	At least one new commercial linkage created for crabs and previous commercial linkages continue	Provide training on good manufacturing practices for seafood (crab pulp) with the support of organizations such as SECAP	Mondragón, Naranjal	X	X	X	X	Juan Carlos Santos, Manfred Altamirano
		TA in designing and building temporary cages and analyzing mortality of crabs in order to increase sales during peak days when prices are higher	Mondragón, Churute, Naranjal	X	X	X	X	INP, Ivan Cedeño
		Support accessing new commercial linkages and maintaining current linkages	Naranjal	X	X	X	X	Juan Carlos Santos
		Explore alternative markets for live crabs	Gulf of Guayaquil	X	X	X	X	To be Determined
	Pre-Legal/Political	Analyze with the		X	X			Ivo Kraljevic,

	Feasibility Study on Voluntary Blue Carbon Credits as an incentive for concessionaires	MAE the a legal/political feasibility designing a strategy to sell carbon credits in voluntary markets.						Manuel Bravo and consultant
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## 5) Chongón Colonche Mountain Range

In FY12 upon MAE request the project included the BPCHC as one of the project's priority geographic regions. During FY13 the project will continue supporting development of a management strategy for BPCHC and implementation of productive activities included in Socio Bosque investment plans as well as facilitating new communities in joining the Socio Bosque Program.

Threats	Expected results	Key actions	Geographic area/site	Quarter				Responsible staff/Implementing partner
				1	2	3	4	
<b>Lack of economic alternatives</b>	At least 3 communities diversity productive activities that favor conservation that are implemented as part of activities included in Socio Bosque investment plans	TA for implementation of best management practices (tagua, ecotourism, paja toquilla) to diversify production.	Dos Mangas, Loma Alta, Olón	X	X	X	X	Augusto Pinzón
	At least 4 new commercial linkages created	TA to develop commercial linkages for productive activities implemented with SB incentives	Dos Mangas	X	X	X	X	Augusto Pinzón
	At least 200 people have improved income through sustainable tagua management	TA to strengthen the Tagua value chain including post-harvesting (drying, button production) and price differentials for quality.  Develop 2 business plans for new collectors and provide  Support tagua drying techniques (by using drying racks) and in obtaining credit to stock-pile tagua.	Olón, La Entrada	X	X	X	X	CyD
	At least 40 people have improved income through implementation of best practices for NRM	Provide technical assistance to 8 new model farms (benefiting 40 people) to implement best practices for NRM and improve production.	Olón, La Entrada	X	X	X	X	CyD

<b>Insufficient institutional capacity for biodiversity conservation</b>	Management Strategy for Bosque Protector Chongón Colonche developed and presented to MAE	TA to design a management/conservation strategy	Bosque Protector Chongón Colonche	X	X			Walter Palacios and Diana Vinueza
		Develop and share strategy with key stakeholders and MAE authorities			X	X		
		Foment MAE's implementation/adoption of strategy				X	X	
	Coalition for monitoring and oversight of natural resources in the Chongón-Colonche mountain range created and strengthened	Promote creation of coalition with participates of the community association in BPCHC and the MAE. Provide TA to strengthen	Bosque Protector Chongón Colonche	X	X	X	X	Diana Vinueza/A. Pinzón

## 6) Guayas Province

Threats	Expected results	Key actions	Geographic area/site	Quarter				Responsible staff/Implementing partner
				1	2	3	4	
<b>Climate change</b>	Climate change strategy for Guayas province developed and shared with stakeholders	Support for developing and sharing climate change adaptation strategy for Guayas	Guayas Province	X	X			CIIFEN

## 5. NATIONAL ACTIVITIES

In addition to its local interventions, the Project has been working at the national level on a number of issues with potential relevance beyond the target geographic areas. The following are among the activities that the Project supported to date and will continue to support in FY13:

1. Upon the MAE's request, the project will provide inputs for forestry policies and once the Environmental Code is approved, support development of regulations, and sharing with/provide training to stakeholders..
2. Work the MAE to implement the Protected Area Operational Management Manual in three pilot areas, including PNM.

Threats	Expected results	Key actions	Geographic area/site	Quarter				Responsible staff/Implementing partner
				1	2	3	4	
<b>Insufficient institutional capacity for biodiversity conservation</b>	Management of Sistema Nacional de Áreas Protegidas (SNAP) strengthened	Provide TA to strengthen operational and financial management of PAs by implementing 3 pilot projects to develop annual operational plans (PNM, PN Yasuni, and RE Antisana)	National level	X	X			Karin Columba -- Consultora
		Support designing and implementing a new Protected Area Management Model (subject to additional funding)	National level	X	X	X	X	
	Input for forestry policies provided. Forestry regulations developed and shared with stakeholders	Upon the MAE's request, the project will provide inputs for forestry regulations and present them to stakeholders once the Environmental Code is approved	National level	X	X	X	X	Walter Palacios/Consultants

## 6. ENVIRONMENTAL COMPLIANCE

In FY13, the Project will continue complying with USAID environmental regulations through the procedures established in the Environmental Assessment (EA) for forest management and in the following Environmental Review Worksheets (FRA): 1.) Agroforestry and reforestation, 2.) Mangrove management and red crab harvesting, 3.) Integral farms 4) Improved forest extraction methods, 5) Tagua management, harvesting and processing; and 6) Mechanical control of African snail.

Activities will be updated in the Environmental Management and Information System (Sistema de Información y Gestión Ambiental or SIGA) in coordination with implementing partners, and reported in semiannual reports.

## 7. COMMUNICATIONS

In FY13 the Project will: (1) analyze the possibility of producing a third video on the impact of Project activities if the 2<sup>nd</sup> option year is executed, (2) document and publish case studies, (3) verify steps and feasibility of updating the Project's webpage on the MAE website, which is now managed by the President's office (4) prepare press releases, (5) produce informational materials (such as brochures, "one pagers," articles, etc.) as needed, (6) distribute monthly newsletters in Spanish, and (7) distribute select key weekly bullets in English to the COR to serve as inputs to report to USAID/Washington.