

INTERNATIONAL TROPICAL TIMBER ORGANIZATION

ITTO

PROJECT PROPOSAL

TITLE:	STRENGTHENING MANGROVE ECOSYSTEM CONSERVATION IN THE BIOSPHERE RESERVE OF NORTHWESTERN PERU
SERIAL NUMBER:	PD 601/11 Rev.3 (F)
COMMITTEE:	REFORESTATION AND FOREST MANAGEMENT
SUBMITTED BY:	GOVERNMENT OF PERU
ORIGINAL LANGUAGE:	SPANISH

SUMMARY

The key problem to be addressed is the "insufficient number of participatory mechanisms for the conservation of mangrove forest ecosystems in the Piura and Tumbes regions (northern Peru)". Its main causes are: (i) Limited use of legal powers by regional and local governments for the conservation of mangrove ecosystems; ii) low level of forest management and administration for the conservation of mangrove ecosystems; and (iii) limited development of financial sustainability strategies for mangrove forests. These problems in turn lead to low living standards for the communities living in mangrove ecosystem areas and to the loss of biodiversity.

In order to address this situation, the specific objective of this project is to "increase the number of participatory mechanisms for mangrove forest protection and conservation in the regions of Tumbes and Piura" with the development objective of "contributing to improving the standard of living of the population in mangrove ecosystem areas in the regions of Tumbes and Piura, Northwest Peru". In order to achieve these objectives, the following outputs are proposed: 1) Adequate use of legal powers by regional and local governments for the conservation of mangrove forests; 2) Improved level of forest administration and management so as to preserve mangrove ecosystems; 3) Financial sustainability strategies for mangrove forests developed and under implementation.

The main activities to be implemented in this project are: training of regional and local government officers in environmental standards and regulations; legal recognition of new protected areas in mangrove ecosystems; strengthening of the management of the natural protected area of Tumbes Mangroves; implementation of participatory management mechanisms; training of local communities in resource management and environmental education campaigns; studies for the establishment of revenue-raising mechanisms to ensure mangrove forest sustainability; promotion and support of business plans for the use of resources so as to contribute to the mitigation of threats to mangrove ecosystems.

EXECUTING AGENCY:	MDA
COOPERATING GOVERNMENTS:	---
DURATION:	24 MONTHS
APPROXIMATE STARTING DATE:	UPON APPROVAL

BUDGET AND PROPOSED SOURCES OF FINANCE:	Source	Contribution in US\$
	ITTO	<u>496,289.60</u>
	MDA	<u>75,630.00</u>
	Regional Governments of Tumbes and Piura	<u>386,300.00</u>
	TOTAL	<u>958,219.60</u>

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PROJECT BRIEF

The Biosphere Reserve in Northwestern Peru covers an area of 231,402 ha, of which 91,300 ha comprise the core zone (**Cerros de Amotape National Park**) and 140,102 ha constitute the tampon zone (**El Angolo Game Reserve, National Reserve of Tumbes, National Sanctuary of Tumbes Mangroves**). The Biosphere Reserve is located in the northernmost end of the Peruvian coast and includes the ecosystems of the Peruvian Coastal Range or Amotapes Range and the foothills and spurs of the Andes Mountain Range, spreading along the shoreline of the Pacific Ocean.

The Northwestern Biosphere Reserve is situated in the heart of the Tumbes Endemism Region proposed by *Cracraft* (1985). This region includes a narrow strip of dry forests extending from the Gulf of Guayaquil to the north, along the Pacific coast, to the Department of La Libertad and the mangrove ecosystem between the departments of Tumbes and Piura.

Mangrove forests constitute one of the most vulnerable ecosystems to climate change, while at the same time they are one of the ecosystems that can sequester and store the highest volumes of carbon. The National System for Natural Protected Areas (SINANPE) has contributed to the sustainability of this ecosystem by establishing the National Sanctuary of Tumbes Mangroves (*Santuario Nacional de los Manglares de Tumbes – SNLMT*), although other forest relics identified in the area of the Northwestern Biosphere Reserve are yet to be preserved. The restoration and conservation of mangrove forests is highly significant because it will contribute to the preservation of three ecosystems as a whole: Equatorial Dry Forests, Mangrove Forests and Coastal Marine Ecosystem. These three ecosystems are expected to be impacted by climate change and increased sea levels, which would affect the life systems associated to them.

The mangrove ecosystem in the Biosphere Reserve of Northwestern Peru includes major landmarks such as the National Sanctuary of Tumbes Mangroves (SNLMT), the Mangrove Forest of San Pedro Vice and the Mangrove Forest of Nueva Bocana de Vichayal, which are located in the regions of Tumbes and Piura.

The problem to be addressed is the “insufficient number of participatory mechanisms for the conservation of mangrove forest ecosystems in the Piura and Tumbes regions”. Its main causes are:

- (a) Limited use of legal powers by regional and local governments for the conservation of mangrove ecosystems;
- (b) Low level of forest management and administration for the conservation of mangrove ecosystems; and
- (c) Limited development of financial sustainability strategies for mangrove forests.

In view of this problem, the objective of this project is to “increase the number of participatory mechanisms for mangrove forest protection and conservation in the regions of Tumbes and Piura”. In order to achieve this objective, the following outputs are proposed: **Output 1** - Adequate use of legal powers by regional and local governments for the conservation of mangrove forests; **Output 2** - Improved level of forest administration and management so as to preserve mangrove ecosystems; **Output 3** - Financial sustainability strategies for mangrove forests developed and under implementation.

The target beneficiaries of the project will be 1,500 families, including local sea farmers, aquaculture producers and agricultural farmers, who will use sustainable practices in the management and harvesting of natural resources in these mangrove ecosystems.

There will be two types of project beneficiaries: 1. The agencies responsible for the management of NPAs, to wit, SERNANP, regional governments and local municipalities. These organizations will improve their NPA management capacity with special emphasis on the conservation of mangrove forests; and 2. The local population comprising organized groups of mangrove hydrobiological resource users (sea farmers, aquaculture producers, agricultural farmers and forest extractors). These groups will improve their income levels through the sustainable use of mangrove resources.

The project will be implemented under the guidance of a Steering Committee, which will be chaired by ITTO and will comprise five (5) members representing the local communities, regional governments (Tumbes and Piura), PROFONANPE and the National Service for Natural Protected Areas (SERNANP).

Upon project completion, the agencies responsible for mangrove forest management – SERNANP and regional governments – will assume responsibility for the continuity of actions with the participation of the local communities, as the sustainable economic activities established will be profitable in the short, medium and long terms. SERNANP is the agency responsible for the management of NPAs at the national level and will continue with the management of the SNLMT, which will be under the direct administration of SNLMT

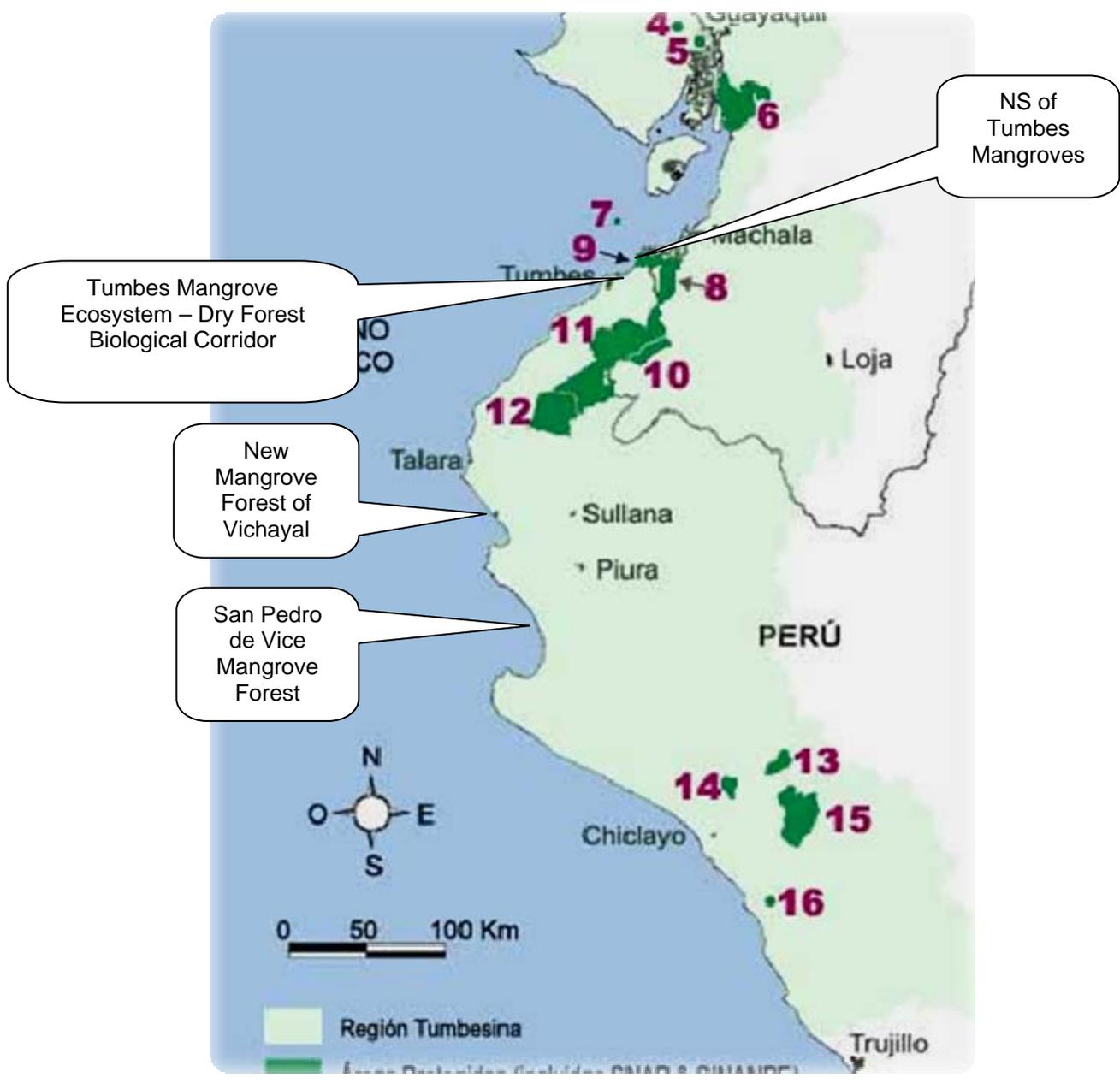
Management and SERNANP's Northern Lands Unit. The regional governments will be responsible for the management of the regional conservation areas to be established and will therefore be required to carry out, through their regional conservation services, the operation and maintenance of the three new regional conservation areas, which will be under the responsibility of the Natural Resource and Environmental Management Departments of the Regional Governments of Tumbes and Piura through the establishment of a regional conservation areas system.

The main project-related assumptions and risks include: development of new mechanisms to mitigate climate change effects to adapt to new emerging conditions; willingness of local stakeholders to improve the management of NPAs; use of a participatory approach and promotion of complementary communication and environmental education activities; and enabling policies at the regional and municipal levels to allow for the project to be jointly implemented with the participation of strategic partners.

ACRONYMS AND ABBREVIATIONS

AIDER	Asociación para la Investigación y Desarrollo Integral (<i>Association for Integrated Research and Development</i>)
CEPAN	Centro Nacional de Planeamiento Estratégico (<i>National Center for Strategic Planning</i>)
CGANP	Comité de Gestión del Área Natural Protegida (<i>Natural Protected Area Management Committee</i>)
CDC – UNALM	Centro de Datos de la Conservación, Universidad Nacional Agraria La Molina (<i>Conservation Data Center, National Agrarian University of La Molina</i>)
COMNACMANs	Comités Nacionales de Manglares (<i>National Mangrove Forest Committees</i>)
EDUVIDA	Educación y Vida (<i>Education and Life</i>)
FAO	Food and Agriculture Organization of the United Nations
GLOMIS	Global Mangrove Database and Information System
GPAN	Gestión Participativa de Áreas Naturales Protegidas (<i>Participatory Management of Natural Protected Areas</i>)
ITTA, 2006	International Tropical Timber Agreement, 2006.
ITTO	International Tropical Timber Organization
MDA	Mecanismos de Desarrollo Alternativo (<i>Alternative Development Mechanisms</i>)
MEDA	Mennonite Economic Development Associates
NPA	Natural Protected Area
PROFONANPE	Fondo Nacional para Áreas Naturales Protegidas por el Estado (<i>National State Fund for Natural Protected Areas</i>)
RCA	Regional Conservation Areas
SEA	Sustainable Economic Activities
SERNANP	Servicio Nacional de Áreas Naturales Protegidas (<i>National Service for Natural Protected Areas</i>)
SINANPE	Sistema Nacional de Áreas Naturales Protegidas (<i>National System of Natural Protected Areas</i>)
SNLMT	Santuario Nacional de los Manglares de Tumbes (<i>Natural Sanctuary of Tumbes Mangroves</i>)
SRAC	Sistema Regional de Áreas de Conservación (<i>Regional System of Conservation Areas</i>)
UNDP	United Nations Development Programme
WHSRN	Western Hemisphere Shorebird Reserve Network

MAP OF PROJECT AREA



Map of endemism areas in the Tumbes Region

PART 1. PROJECT CONTEXT

1.1 Origin

This project proposal stems from the final evaluation of the Project on Participatory Management of Natural Protected Areas (GPAN Project), which was implemented between 2004 and 2009 by the National State Fund for Natural Protected Areas (PROFONANPE) and the Peruvian Administration for Protected Areas (now SERNANP, an agency attached to the Ministry for the Environment) with the financial support of the Global Environment Facility (GEF) of the World Bank as the executing agency. Within the framework of the GPAN project, a new protected area management mechanism was developed and implemented. Through this mechanism, known as “Administration Contract”, the Peruvian State assigns a civil society organization to be responsible for the total or partial administration of a protected area on the basis of a participatory methodology and an outcome-based management approach.

Based on this approach, the GPAN Project worked in the National Sanctuary of Tumbes Mangroves to develop a participatory management model, which included a sustainable economic activities program, a communication and environmental education strategy, the implementation of management agreements with local communities for the management of hydrobiological resources, dry forest reforestation and agroforestry development. All of these interventions were initially implemented directly by the project and then continued under the supervision of the Administration Contract Executor – MDA/MEDA – which will be responsible for the administration of this protected area for the next 20 years and is now proposing the implementation of this new initiative.

The GPAN Project was a breakthrough in the management of natural protected areas as it was the first project to promote “participatory management” in protected areas through various mechanisms that were already provided for in the Law for the National System of Natural Protected Areas (SINANPE) but had not yet been implemented due to a lack of resources. These mechanisms include NPA Administration Contracts, NPA Management Committees, and Sustainable Economic Activity Programmes, among others. Prior to the GPAN Project’s intervention, protected areas were managed in an isolated manner, and local and regional authorities and, in particular, local communities were not at all involved in the management process and were indeed a threat to their conservation.

After the GPAN Project’s intervention in five prioritized sites, local stakeholders (communities and authorities) started to value the resources and services provided by protected areas and ecosystems in general and for that reason, they became more actively involved in biodiversity conservation actions. As a result, direct and indirect benefits have been accrued to the local population.

However, we believe that the actions implemented by the GPAN Project in the National Sanctuary of Tumbes Mangroves, one of GPAN Project’s priority areas, are not enough to ensure the conservation of the Mangrove Ecosystem in the Biosphere Reserve of Northwestern Peru, as its actions were limited to the conservation of biodiversity in the Natural Sanctuary as a protected area. It is considered that participatory mechanisms should continue to be promoted so as to enable the local population, local and regional authorities and the private sector to become involved in mangrove ecosystem conservation actions. These stakeholders should actively participate in the management of mangrove ecosystems as these constitute a significant natural asset to support local development and are a source of resources to improve the living conditions of local communities. This will also ensure efficiency, transparency and improved decision-making in the management of prioritized natural areas.

The mangrove ecosystem of the Northwestern Biosphere Reserve comprises the following natural protected areas:

- (i) the **National Sanctuary of Tumbes Mangroves**, established in the delta of the Zarumilla river area in 1988, which was declared a Ramsar Site in 1997;
- (ii) the **Mangrove /Dry Forest Biological Corridor**¹, which covers a large area and has sections with relatively low risk of environmental degradation;
- (iii) the **San Pedro de Vice-Sechura Mangrove Forest**², a forest ecosystem that needs a combination of freshwater and seawater to grow; and
- (iv) the **New Mangrove Forest of La Nueva Bocana de Vichayal-Paita-Piura**³, which is located in the region of Piura, province of Paita, District of Vichayal, Miramar hamlet, near the mouth of the Chira River.

¹ Third progress report. Connectivity map and proposed strategy for Tumbes and Lambayeque. CDC-UNALM.

² Eco. Jorge Gonzales. *Valoración económica y medición de beneficios y costos de áreas naturales: caso de creación de un área natural protegida en los Manglares de San Pedro Sechura-Piura* (September 2001).

The aim of this project is to “contribute to improving the standard of living of the local population in mangrove ecosystem areas in the regions of Tumbes and Piura, Northwest Peru”. The proposed actions are aimed at contributing to long-term ecological sustainability of the country’s mangrove ecosystem and at implementing conservation activities in ecological corridors⁴ at the regional and local levels based on a mosaic pattern⁵ with the involvement of local stakeholders.

The project will focus on the mangrove and equatorial dry forest ecosystems covered by the Biosphere Reserve of Northwestern Peru, as one of the eco-regions that are under-represented in SINANPE. The project area extends through two regions of the country⁶: Tumbes and Piura.

The strategy of MDA/MEDA as the administrator of the National Sanctuary of Tumbes Mangroves is based on the principle that it is not feasible to maintain a protected area without linking it to the entire mangrove ecosystem in the country and without the active participation of the local communities, local and/or regional authorities and private institutions in ecosystem protection and conservation activities.

In practice, the project seeks *inter alia* to coordinate with regional authorities so as to ensure the complementarity of biodiversity conservation strategies; to help identify the role of protected areas in regional biodiversity conservation strategy development and updating processes; to promote macro-regional coordination mechanisms so as to facilitate the sharing of experiences and generate feedback and opinion platforms related to biodiversity conservation; and to monitor and follow-up institutional agreements between SERNANP and the relevant Regional Governments regarding integrated conservation management.

The project will promote the establishment, effective administration and operation, and integrated and participatory management of protected areas at various levels (national, regional and private) as well as *in situ* conservation modalities⁷ in these corridors based on a mosaic pattern approach as a strategy to harmonize different land uses, address biodiversity threats more effectively and improve ecosystem connectivity. In addition, the project, together with regional and local governments, will promote incentive mechanisms for the adjustment of local production activities to ensure the sustainable use of natural resources.

It is with this strategic vision in mind that MDA/MEDA has secured the commitment of the regional governments of Piura and Tumbes, as well as of the local communities, as it has been working with these stakeholders in the establishment of regional conservation areas that make up the Regional System of Conservation Areas (already established in the two regions), and this proposal is an integral part of this strategy.

1.2 Relevance

1.2.1 Conformity with ITTO’s objectives and priorities

The project will contribute to ITTO’s objective of “promoting the sustainable management of timber producing tropical forests” by strengthening the instruments for the conservation of mangrove ecosystems so that regional governments can assume responsibility for the management of mangrove forests within the framework of the transfer of national government responsibilities to the regional governments of Tumbes and Piura. The project will promote a participatory management approach with the involvement of local communities, civil society organizations (NGOs) and local authorities, with the aim of ensuring sustainable conservation through innovative mechanisms. The proposed project outputs will contribute to sustainable forest management (SFM), the conservation on non-timber forest resources, poverty alleviation and maintenance of environmental services.

The outcomes and outputs of the project will contribute to the attainment of the following ITTO objectives as stipulated in the ITTA, 2006:

³ EDUVIDA – Piura <http://eduvidapiura.blogspot.com/2009/05/nuevo-manglar-al-noroeste-del-peru.html>

⁴ Corridor: an area within a landscape connecting natural ecosystem patches so as to maintain the ecological processes that link them.

⁵ Mosaic pattern: An approach where biodiversity conservation is addressed through different landscape management strategies.

⁶ Peru is politically divided into 26 regions. Each region is under the jurisdiction of a Regional Government that is democratically elected every five years.

⁷ Conservation modalities other than protected areas may include conservation concessions, reforestation concessions, tourism concessions, ecological easements, intangible value areas as established by the Water Resources Act, etc. The power to establish many of these mechanisms have either already been transferred to the GOREs (Regional Governments) or are in the process of being transferred. In other cases, such mechanisms have been established under agreement between private parties.

- Contributing to sustainable development and to poverty alleviation.
- Promoting better understanding of the contribution of non-timber forest products and environmental services to the sustainable management of tropical forests with the aim of enhancing the capacity of members to develop strategies to strengthen such contributions in the context of sustainable forest management, and cooperating with relevant institutions and processes to this end.
- Strengthening the capacity of members to improve forest law enforcement and governance, and address illegal logging and related trade in tropical timber.

1.2.2 Relevance to Peruvian policies

The proposed project will contribute to the achievement of objectives and priorities established in the following national plans and policies:

- National Forest Strategy (2002-2021)
- National Environmental Policy (2009)
- SINANPE's Guiding Plan (2009-2021)
- SINANPE's Financial Plan (2009-2021)

The national forest policy is integrated into the national environmental policy and is consistent with the development policies established at the national and sectoral levels, as well as with other ongoing policy programs such as the National Development Plan (coordinated by CEPLAN). The National Plan for Environmental Action (Plan Nacional de Acción Ambiental – PLANAA), coordinated by the Ministry for the Environment, also incorporates the provisions of the National Agreement, the National Forest Strategy, the National Biodiversity Strategy, the National Climate Change Strategy, the National Rural Development Strategy and the National Food Security Strategy (providing for food security based on forest products), among others. In this context, the national policy framework also includes the National Reforestation Plan and the Strategic Action Plan for Mahogany.

Thus, from an environmental perspective, it is extremely important to consider the diversity of regions in the country (coast, highlands and forest) because forest policies have so far been highly focused on the Amazon region. It is equally important to consider all types of forests, including tropical and subtropical forests, moist forests, cloud forests, dry forests, mangrove forests, primary forests, residual or remaining primary forests, secondary forests and degraded forests.

On the other hand, the establishment and management of marine and coastal protected natural areas is becoming a growing priority throughout the world. The Jakarta Mandate on Marine and Coastal Biological Diversity was adopted by the Parties in 1995 within the framework of the Convention on Biological Diversity, a convention which Peru has ratified. In accordance with the said mandate, the Parties to the Convention reaffirmed the importance of marine and coastal biodiversity, and made a commitment to include these issues in their conservation agendas.

Protected natural areas are an essential part of any conservation and sustainable development strategy, as they contribute to maintaining ecological processes and vital systems, in addition to maintaining genetic diversity and ensuring the sustainable utilization of species and ecosystems. The Peruvian Constitution clearly captures these principles and stipulates that it is the responsibility of the State to ensure the conservation of biological diversity and natural protected areas. SINANPE's Master Plan stipulates that the conservation of biodiversity can be achieved through the establishment of Regional Conservation Areas. The Financial Plan, which includes the strategies for ensuring the sustainability of the NPAs, is based on deriving income from tourism activities and concessions for the sustainable management of natural resources.

1.3 Target area

1.3.1 Geographic location

The project area is located in the regions of Tumbes and Piura, where the Northwestern Biosphere Reserve is situated. It is home to the mangrove ecosystem represented by the following formations:

- National Sanctuary of Tumbes Mangroves
- Dry Forest Biological Corridor in the Tumbes Mangrove Ecosystem
- San Pedro de Vice Mangrove forest
- New Mangrove Forest of Vichayal

The **National Sanctuary of Tumbes Mangroves** (*Santuario Nacional de los Manglares de Tumbes – SNLMT*) is located in the northernmost tip of the country, in the Tumbes region, province of Zarumilla, districts of Zarumilla and Aguas Verdes. The Sanctuary is the only representative sample of mangrove forests in the area. These mangrove forests are characterized by having four mangrove species and are home to a large number of bird species, crustaceans, mollusks and fish. The main threats to this ecosystem are contamination from industrial activities and sewage, unsustainable traditional fishing practices, conflicts related to land use and tenure, illegal mollusk gathering and fishing, shrimp (prawn) farming and mangrove tree harvesting. The SNLMT was declared a Ramsar site in 1997.

Dry Forest Biological Corridor in the Tumbes Mangrove Ecosystem

The biological corridor, which is located in the buffer zone of the National Sanctuary of Tumbes Mangroves, was established as a conservation strategy to mitigate threats and extend the conservation area of the mangrove forests, as it is a transitional ecosystem to the mangrove forest. This mangrove area is located in the Tumbes region, in the province of Tumbes, district of Zarumilla.

San Pedro de Vice Mangrove Forest

This mangrove forest is located in the Piura region, in the province of Sechura, district of San Pedro de Vice. It is a key ecosystem for migratory birds and was recognized as an internationally significant wetland area by Ramsar in July 2008 and has recently been recognized as part of the Western Hemisphere Shorebird Reserve Network (WHSRN) based on research carried out by local authorities, the NGO “Neotropical Center for Training on Wetlands” and the Ministry for the Environment.

New Vichayal Mangrove Forest

This mangrove forest is located in the Piura region, in the province of Paita, district of Vichayal. According to the NGO “EDUVIDA”, this is a new mangrove forest formation of approximately 500 hectares, which comprises red mangrove (*Rizophora mangle*) formations. Its importance lies in fact that it is a resting and nesting ground for neotropical birds from distant places.

1.3.2 Social, cultural, economic and environmental aspects

The project area is located in two regions of the country: Tumbes and Piura. The Northwestern Biosphere Reserve was established in this area and it comprises several eco-regions, such as the Dry Forests of Tumbes – Piura, the Gulf of Guayaquil Mangrove Forest – Tumbes, and the Montane Forest of the Eastern Mountain Range (*Cordillera Real Oriental*). Within the framework of the current decentralization process that is taking place in the country, the regions are undertaking environmental conservation actions at the regional level.

The natural landscape of the Northwestern Biosphere Reserve is quite complex. Despite the limited area it covers, there are a diversity of ecological zones and microclimates in the reserve that enable the distribution of multiple flora and fauna species. These characteristics, in turn, have encouraged the development of human groups who have specialized in one way or another in taking advantage of the unique opportunities that this area offers in both space and time.

Human activities related to the direct utilization of the resources found in the areas neighboring the biosphere reserve (the provinces of Zarumilla, Tumbes, Contralmirante Villar, part of the province of Talara and part of the province of Sullana) vary according to the availability of water resources, the physiographic characteristics of the areas, the climate, the concentration of species and other variables. Thus, in places where water is available all year round (valleys of Zarumilla, Tumbes and Chira) there are larger population settlements and greater economic activity levels than in places where water resources are scarce. Similarly, production levels increase during the rainy season as compared to the dry season. Other natural elements such as soil, vegetation communities, water sources and landscapes, also influence the development of human activities (rainfed agriculture, forest harvesting, cattle ranching, fishing and tourism). The table below describes the socio-economic characteristics of each mangrove area and the main threats perceived.

Socio-economic characteristics in the mangrove forest areas

Mangroves	(1) NS of Tumbes Mangroves (2) Dry Forest Biological Corridor in the Tumbes Mangrove Ecosystem	(3) San Pedro de Vice Mangrove Forest	(4) New Vichayal Mangrove Forest
Area	(1) 2,972 ha (2) 1,500 ha Aprox.	(3) 3,013 ha Aprox.	(4) 150 ha Aprox.
Population (INEI)	109,571 inhabitants in the districts of Tumbes and Zarumilla	11,793 inhabitants in the district of Vice	5,222 inhabitants dedicated to subsistence fishing in the district of Vichayal
Poverty index (1 poorest and 5 less poor) FONCODES - 2006	Poverty score: 3	Poverty score: 2	Poverty score: 2
Main economic activities	Extraction of hydrobiological resources (shrimp, clams, and crabs). Tourism.	Agriculture, cattle ranching, fishing and tourism	Subsistence fishing

In the different events organized by the Regional Governments of Tumbes and Piura, the local municipalities, the NGOs and the University, the local population identified the following potential threats:

Main threats to Mangrove Forests

(1) NS of Tumbes Mangroves (2) Dry Forest Biological Corridor in the Tumbes Mangrove Ecosystem	(3) San Pedro de Vice Mangrove Forest	(4) New Vichayal Mangrove Forest
<ul style="list-style-type: none"> • Extraction of hydrobiological resources. • Pollution by solid waste. • Pollution by black waters. • Effluents from shrimp farming. • Effluents from mining activities in Ecuador. • Mining pollution (Ecuador). • Deforestation of Dry Forests. 	<ul style="list-style-type: none"> • Pollution by the Piure River. • Tailing from mining activities. • Invasive cattle ranching. • Bird poaching. • Fishing by inexperienced people. 	<ul style="list-style-type: none"> • Rubbish dumped near the mangrove forest by the river and the neighboring settlements. • Oil drilling right next to the mangrove forest. • The rains of 2008 deposited a great deal of silt and waste near the mangrove forest.

1.4 Expected outcomes at project completion

Each of the expected outcomes at project completion is detailed below:

- The capacity of the regional and local governments of the Tumbes and Piura regions to efficiently coordinate and manage regional conservation systems, within the framework of the regionalization of the country, will have been strengthened.
- Partnerships will have been established, incentive systems and coordination mechanisms will have been implemented and an integrated strategy to facilitate the participatory management of national, sub-national and local protected areas in Tumbes and Piura regions with the support and active participation of the private sector, civil society and local communities, will have been developed.
- Mutually beneficial relations will have been established between national authorities and local communities for the management of protected areas.
- The protected areas system will have a clearly defined financial sustainability strategy that will be gradually implemented by regional and local governments.
- A shift in attitude of the local population that uses mangrove ecosystem resources (sea-farmers, fishermen and farmers) will have been achieved as they will have recognized the value of the services provided by these forests and will be cooperating with actions aimed at the protection of this ecosystem.
- Awareness will have been raised among public officials of the regional and local governments about the importance of preserving the mangrove forest ecosystem as a source of environmental and social benefits for the population and as an important asset for local development.

The expected outputs will also contribute to national and sectoral policies aimed at improving the conservation of biodiversity in Peru by increasing the area of the main ecosystems based on an efficient, sustainable and decentralized biodiversity protection scheme. This will be achieved by providing support for the establishment and management structures of regional and local bodies, as well as protected private areas near or adjacent to SINANPE areas of vital significance, thus facilitating the creation of conservation mosaics and/or corridors linked to the Regional Conservation Systems.

PART 2. PROJECT RATIONALE AND OBJECTIVES

2.1 Rationale

2.1.1 Institutional set-up and organizational issues

The project implementing agency will be MDA, whose team is currently the executor of the Total Administration Contract for the National Sanctuary of Tumbes Mangroves. Over the last three years, it has gained significant experience in the management of mangrove forests and has developed management instruments, including for the implementation of administration contracts. It has also promoted the conclusion of a management agreement with the local population for the management of hydrobiological resources, has strengthened tourism activities in the area and is designing a financial sustainability strategy for the National Sanctuary of Tumbes Mangroves (SNLMT) with the incorporation of new mechanisms such as solidarity payments for environmental services by private companies.

The National Service for Natural Protected Areas is the authority in charge of the management of the National System of Natural Areas in Peru. In the regions of Tumbes and Piura, the system is managed through the decentralized Northwestern Lands Unit, whose administrative headquarters are located in the Piura Region.

The Protected Area Management Committees cover the NPAs located in the project's area of influence. They are made up of public and private institutions operating in the NPAs and Buffer Zones. The management committee will be a project beneficiary and will assist in the organization of the management committee for the mangrove forests of San Pedro de Vice and the new mangrove forest of Vichayal.

MDA will implement project activities, manage research activities, train the personnel of regional governments and municipalities and award scholarships for environmental management studies. Furthermore, through the Regional Conservation Systems, MDA, together with the regional governments, will promote the conservation of mangrove ecosystems, managing all aspects of this process, from the preparation of studies to identify conservation objectives to raising awareness among the local population, until the regional governments assume responsibility within the framework of their powers for the management of mangrove forests.

2.1.2 Stakeholder analysis

This project brings together a number of organizations at three different levels: institutions, local organizations and the population.

- **Beneficiary institutions:** These include SERNANP, Regional Governments and Municipalities.
- **Local organizations:** include farmer associations, hydrobiological resource extractors organizations, hydrobiological production companies and local trade associations.
- **Local population:** hydrobiological resource extractors, farmers and local communities.

Stakeholder Analysis

Stakeholder group	Characteristics	Problems, needs interests	Potential	Involvement in project
Primary stakeholders				
Sea-farmers	Harvesters of hydrobiological resources	Hydrobiological resource degradation	Experience in the management of hydrobiological resources	Primary project beneficiaries
Associations of local organizations	Responsible for the formulation and implementation of community development plans	Lack of capacity and resources for the implementation of sustainable activities	Influence with the local population	Beneficiary organizations and main stakeholders in the Mangrove Forest Management Committees.
Secondary stakeholders				
Development NGOs (EDUVIDA)	An organization that contributes to environmental education with special emphasis on the conservation of the San Pedro de Vice mangrove forest	A need to formalize the conservation of the San Pedro de Vice mangrove ecosystem	Good relations with the local population and the students from the local population.	They will be the local partners for the implementation of the environmental education strategy.
Development NGOs (MDA)	Implementation team for the SNLMT management contract.	Limited resources for the implementation of management tools in the SNLMT	Implementation of participatory management strategies, communication, environmental education and management agreements in the mangrove forests	The project's executing agency responsible for coordinating the implementation of project activities with the local population
Regional Government of Tumbes Regional Government of Piura	Through the management of natural resources they have assumed the responsibility for conservation in the region	Limited management capacities to contribute to the conservation of mangrove ecosystems	Identification of conservation priorities in the Tumbes and Piura regions	Joint implementation of project activities and will contribute with counterpart contributions for the project
Tertiary stakeholders				
Piura National University	Contributes with mangrove research activities in the Piura Region	Potential threats from agricultural and oil drilling activities	Studies have been undertaken in the Piura region to identify the conservation potential of mangrove forests in the Piura Region	They will participate in the identification of conservation objectives and the formulation of the plans for the RCAs
Tumbes National University	Carries out research on the sustainable use of mangrove forests in the Tumbes Region	There is a need to ensure the conservation of the SNLMT buffer zone, so as to mitigate the threats to the conservation of the RCA	Capacity to contribute to the conservation of mangrove forests in relation to their flora and fauna resources	They will contribute to the biological studies on flora and fauna species for the establishment of the conservation corridor

PARTICIPATORY MECHANISMS

With regard to participatory mechanisms and stakeholder involvement in project implementation, the following should be pointed out:

- MDA will be responsible for the overall implementation of the project.
- SERNANP, as SINANPE's governing body, will be responsible for the implementation, supervision and monitoring of project activities in the National Protected Areas within the ecosystem (e.g. National Sanctuary of Tumbes Mangroves).
- The Regional and Municipal Governments and private sector organizations involved in the project will be responsible for the implementation, monitoring and evaluation of project activities in regional and private protected areas.
- MDA will conclude agreements with SERNANP and the regional governments regarding scheduled activities, financing schedules and roles and responsibilities of each party. Furthermore, similar agreements will also be concluded with the relevant parties to regulate the operation of private protected areas.
- Field activities under SERNANP's responsibility will be implemented by the Heads of National Protected Areas (PAs) and Land Unit Coordinators, while those under the responsibility of the regional governments will be carried out through their Regional Environmental Units.
- The project will have a Technical Team to be responsible for the implementation of activities in coordination with SERNANP, the Regional and Municipal Governments, and private sector organizations. Furthermore, the project will hire three protected area management specialists to support SERNANP's Land Units in the implementation of project activities.
- The project will have a Steering Committee made up of a representative each of SERNANP, the Regional Governments concerned and MDA Executive Director. This Committee will approve all project's administrative documents, technical reports and financial reports.
- The project will have a Consultative Committee to provide technical assistance for the implementation of activities. This Committee will be made up of a representative of SERNANP, the Head of the Project's Management Team, a representative of the Regional Governments, a representative of the municipal governments, a representative of the Protected Areas Management Committees, a MINAG representative and the project coordinator.
- Given that project interventions will be basically implemented at the regional level (using the development of regional conservation systems as reference), it will be essential to ensure an agreement, planning, monitoring and project progress assessment mechanism at that level. To avoid creating an ad-hoc mechanism, the project will work on a case-specific basis with the relevant technical group or platform of the Regional Environmental Commissions involved in biodiversity conservation (members of these commissions include the local governments, NGOs and the private business sector, among others). It would be in the project's interest to become integrated into the planning, monitoring and evaluation processes structured by these commissions for the Regional Conservation System.

It is expected that all of these platforms will meet on a six-monthly basis to help perform, within a broader framework of action, the following project tasks: a) approval of administrative documents based on agreed guidelines; b) review of six-monthly project progress in the region by intervention action; c) formulation of recommendations on project implementation.

2.1.3 Problem analysis

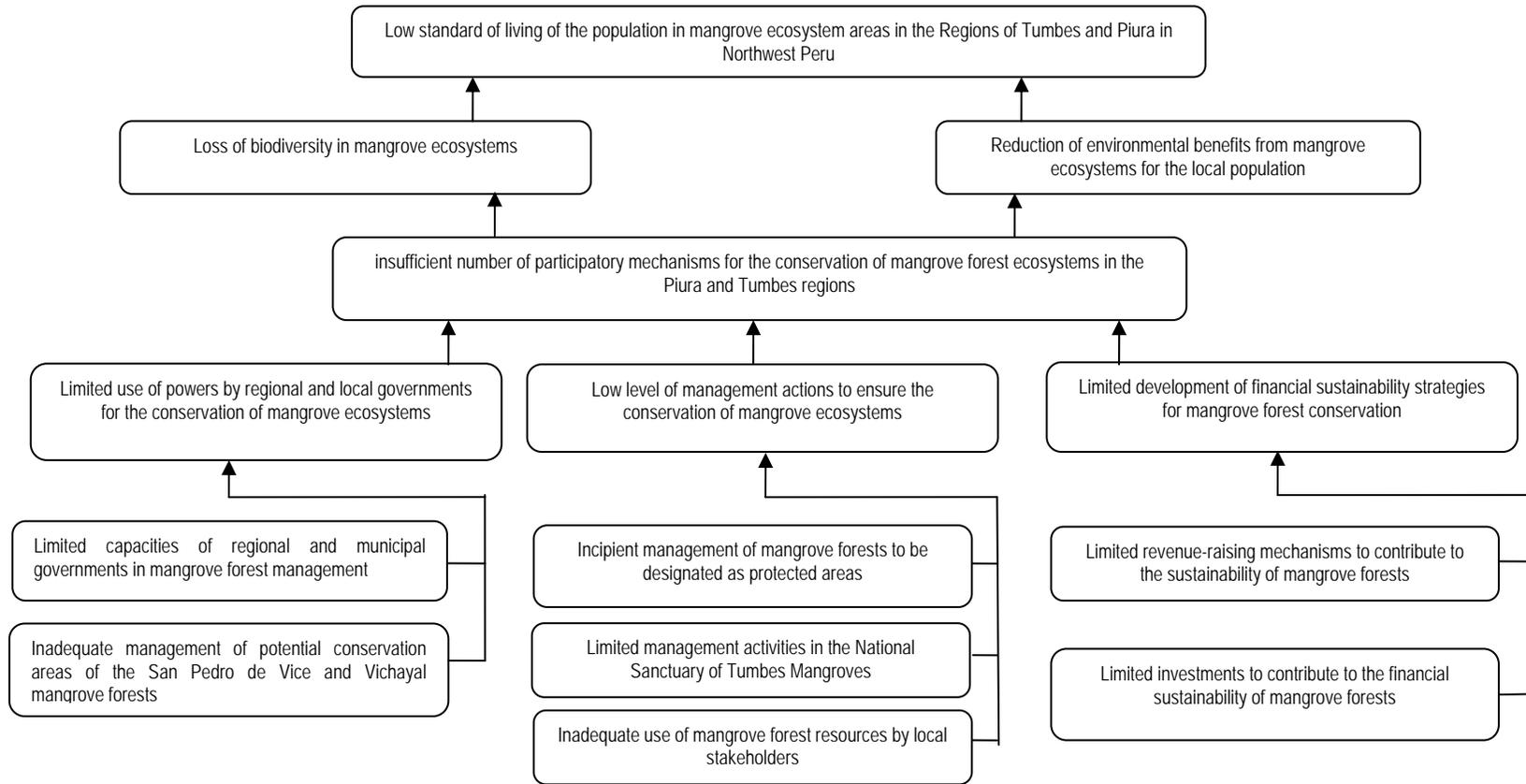
The key problem identified is the “insufficient number of participatory mechanisms for the conservation of mangrove forest ecosystems in the Piura and Tumbes regions”, with the primary and secondary causes being as follows:

- i) Limited use of legal powers by regional and local governments for the conservation of mangrove ecosystems.
 - a. Limited capacities of regional and municipal governments in mangrove forest management.
 - b. Inadequate management of potential conservation areas of the San Pedro de Vice and Vichayal mangrove forests.

- ii) Low level of management actions to ensure the conservation of mangrove ecosystems.
 - a. Incipient management of mangrove forests to be designated as protected areas.
 - b. Limited management activities in the National Sanctuary of Tumbes Mangroves.
 - c. Inadequate use of mangrove forest resources by local stakeholders.

- iii) Limited development of financial sustainability strategies for mangrove forests.
 - a. Limited revenue-raising mechanisms to contribute to the sustainability of mangrove forests.
 - b. Limited investments to contribute to the financial sustainability of mangrove forests.

Problem Tree



2.1.4 Logical Framework Matrix

STRATEGY OF INTERVENTION	MEASURABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>DEVELOPMENT OBJECTIVE: Contribute to improving the standard of living of the local population in mangrove ecosystem areas in the regions of Tumbes and Piura, Northwest Peru</p>	<ul style="list-style-type: none"> • Upon project completion, 80% of the local population recognizes and values the benefits of mangrove ecosystems and participates in conservation activities. • Upon project completion, 80% of locals that use mangrove resources apply sustainable practices. 	<ul style="list-style-type: none"> • Project impact assessment • Annual Report on Biodiversity Status in NPAs - SERNANP 	<ul style="list-style-type: none"> • National/regional social development policies are implemented. • Climate change mitigation mechanisms are implemented.
<p>Specific objective: Increase the number of participatory mechanisms for mangrove ecosystem protection and conservation in the Tumbes and Piura regions</p>	<ul style="list-style-type: none"> • Upon project completion, at least 02 regional governments and 02 local governments channel investments towards conservation and local development activities. • Upon project completion, at least 02 private institutions and 02 users' organizations cooperate with SERNANP and/or regional governments in mangrove ecosystem conservation activities. 	<ul style="list-style-type: none"> • Agreements and/or MOU signed with financing sources. • Management reports by SERNANP and regional governments. • Documents and/agreements with mangrove users' organizations. 	<ul style="list-style-type: none"> • Civil society and the population in general recognize that mangrove ecosystems and other natural areas are valuable assets for local development.
<p>Output 1: Adequate use of legal powers by regional and local governments for the conservation of mangrove forests</p>	<ul style="list-style-type: none"> • At least 50% of public officers from the regional governments of Tumbes and Piura have been trained and are enforcing environmental regulations in their areas of jurisdiction. • Upon project completion, at least 02 mangrove conservation programs and/or projects are being managed by the regional governments. 	<ul style="list-style-type: none"> • Records of training activities. • Technical reports on the implementation of regulations by officers. • Project documents and/or financial proposals approved. 	<ul style="list-style-type: none"> • The local population is interested in the establishment of new protected areas in their regions. • The highest regional authorities prioritize environmental issues.
<p>Output 2: Improved level of forest administration and management so as to preserve mangrove ecosystems.</p>	<ul style="list-style-type: none"> • 650 ha of mangrove ecosystems have been established as protected areas. • 03 mangrove ecosystems in the regions of Tumbes and Piura are legally recognized and managed as conservation areas. 	<ul style="list-style-type: none"> • Legal provisions on the status of 650 ha of mangrove forests. • Legal document designating 03 regional conservation areas. 	<ul style="list-style-type: none"> • All local and provincial authorities in the regions support the mangrove conservation strategy.

STRATEGY OF INTERVENTION	MEASURABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>Output 3: Financial sustainability strategies for mangrove forests developed and under implementation.</p>	<ul style="list-style-type: none"> • Upon project completion, 01 financial sustainability plan for mangrove forests has been approved and is being implemented by the regional governments of Tumbes and Piura. • Upon project completion, at least 01 fee schedule is being used for the harvesting of resources in the mangrove ecosystem. • Upon project completion, at least 10 business plans for the use of natural resources and mitigation of threats to mangrove forests are being implemented by the local population. 	<ul style="list-style-type: none"> • Document on financial sustainability plan for mangrove forests approved. • Legal provision approving the use of the Fee Schedule. • Report on the implementation of business plans. 	<ul style="list-style-type: none"> • Companies agree to pay established fees. • Increased tourist flow to ensure higher levels of income generated by the tourism industry.
<p>Output 4: Project management.</p>	<ul style="list-style-type: none"> • By the end of the project, 100% of the financial administration of project resources has been completed. • By the end of the project, 100% of expected project outputs have been produced. 	<ul style="list-style-type: none"> • Annual and final project reports. • Minutes/reports. • Committee reports. 	<ul style="list-style-type: none"> • Availability of financial resources.

2.2 Objectives

2.2.1 Development objective and impact indicators

Contribute to improving the standard of living of the local population in mangrove ecosystem areas in the regions of Tumbes and Piura, Northwest Peru.

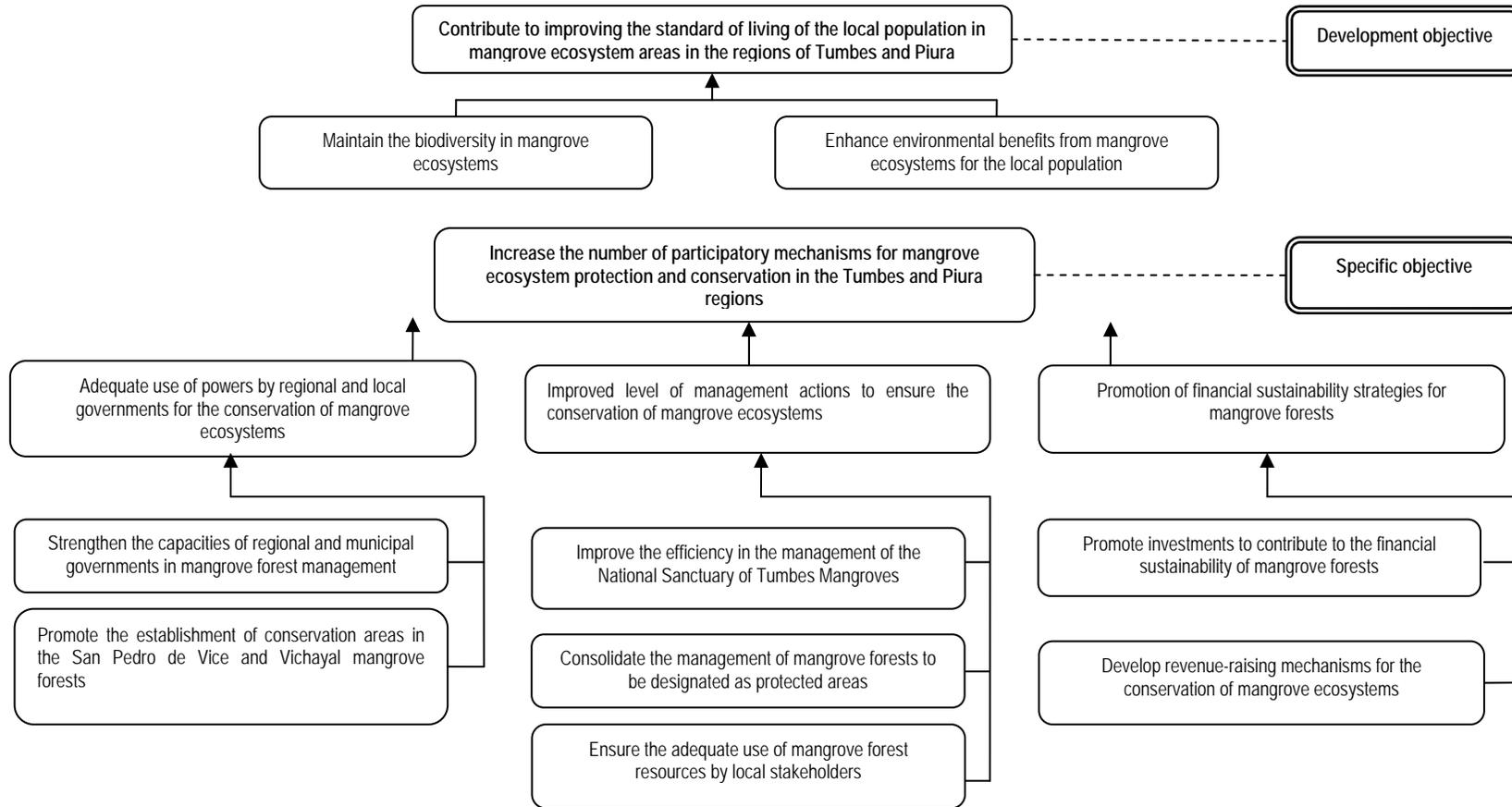
- Upon project completion, 80% of the local population recognizes and values the benefits of mangrove ecosystems and participates in conservation activities.
- Upon project completion, 80% of locals that use mangrove resources apply sustainable practices.

2.2.2 Specific objective and outcome indicators

Increase the number of participatory mechanisms for mangrove ecosystem protection and conservation in the Tumbes and Piura regions.

- Upon project completion, at least 02 regional governments and 02 local governments channel investments towards conservation and local development activities.
- Upon project completion, at least 02 private institutions and 02 users' organizations cooperate with SERNANP and/or regional governments in mangrove ecosystem conservation activities.

Objectives Tree



PART 3. DESCRIPTION OF PROJECT INTERVENTIONS

3.1 Outputs and activities

3.1.1 Outputs

Output 1: Adequate use of legal powers by regional and local governments for the conservation of mangrove forests

Output 2: Improved level of forest administration and management so as to preserve mangrove ecosystems.

Output 3: Financial sustainability strategies for mangrove forests developed and under implementation.

Output 4: Project management.

3.1.2 Activities

Related to Output 1:

1. Training of regional and local government officers in environmental standards and regulations.
2. Coordination with competent authorities for the legal recognition of 3 new protected areas in mangrove ecosystems: Tumbes Mangrove Ecosystem – Dry Forest Biological Corridor, San Pedro de Vice Mangrove Forest and Mangrove Forest of Vichayal.

Related to Output 2:

1. Strengthening of the management of the National Sanctuary of Tumbes Mangroves through participatory management, communication and environmental education.
2. Implementation of participatory management mechanisms in the new protected areas – management, communication and environmental education committees.
3. Training of local communities in sustainable management and utilization techniques for the natural resources of mangrove ecosystems.

Related to Output 3:

1. Development of revenue-raising mechanisms to contribute to mangrove forest sustainability.
2. Identification and promotion of business plans for the economically and environmentally sustainable use of natural resources by local communities.

Related to Output 4:

1. Project management and administration activities.
2. Project monitoring and follow-up.

3.2 Implementation approaches and methods

Natural protected areas are no longer considered to be isolated entities in a dynamic social and economic environment where only certain aspects of biodiversity conservation used to be relevant for the design of intervention strategies and where the pressure exerted by local communities for the use of natural resources, in and around the NPAs, resulted in ongoing conflicts among these communities and the NPA administration authorities. In this context, we have now learned from many significant experiences of biodiversity conservation projects in natural protected areas that fall within the framework of the new protected area management trends. In other words, current approaches are based on the participation of civil society in the administration of the areas; the incorporation of these areas into the social, economic and ecological context of their locality, region or country; the equitable distribution of conservation benefits; and the implementation of the required aspects of good governance in these protected areas, including those stipulated by the international commitments undertaken by the nation for the conservation of biodiversity (Convention on Biological Diversity, poverty alleviation commitments, sustainable development targets). It is in this context that the MDA team is currently responsible for the Total Administration Contract of the SNLMT, where it plans to implement a mangrove ecosystem stabilization and rehabilitation strategy, which will be primarily based on the participation of local stakeholders in the management of protected areas.

3.3 Work plan

Outputs & Activities	Responsible Party	Schedule (in months)																							
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
<u>Output 1: Adequate use of legal powers by regional and local governments for the conservation of mangrove forests</u>																									
1.1. Training of regional and local government officers in environmental standards and regulations.	Coordinator		■		■		■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
1.2. Coordination with competent authorities for the legal recognition of 3 new protected areas in mangrove ecosystems: Tumbes Mangrove Ecosystem – Dry Forest Biological Corridor, San Pedro de Vice Mangrove Forest and Mangrove Forest of Vichayal.	Coordinator			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
<u>Output 2: Improved level of forest administration and management so as to preserve mangrove ecosystems.</u>	Coordinator																								
2.1. Strengthening of the management of the National Sanctuary of Tumbes Mangroves through participatory management, communication and environmental education.	Coordinator	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2.2. Implementation of participatory management mechanisms in the new protected areas – management, communication and environmental education committees.	Coordinator		■	■										■	■	■	■	■	■	■	■	■	■	■	■
2.3. Training of local communities in sustainable management and utilization techniques for the natural resources of mangrove ecosystems.	Coordinator			■	■			■	■			■	■			■	■			■	■			■	■
<u>Output 3: Financial sustainability strategies for mangrove forests developed and under implementation.</u>																									
3.1. Development of revenue-raising mechanisms to contribute to mangrove forest sustainability.	Consultant		■	■														■	■	■	■	■	■	■	■
3.2. Identification and promotion of business plans for the economically and environmentally sustainable use of natural resources by local communities.	Consultant	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
<u>Project management.</u>																									
4.1. Project management and administration activities.		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
4.2. Project monitoring and follow-up.		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

3.4 Budget

3.4.1 Consolidated budget by component

Consolidated yearly project budget (including inputs and unit costs)

Budget components		TOTAL	YEAR 1	YEAR 2
10	Project personnel			
	11. National experts			
	11,1. Project coordinator	\$ 60,000.00	\$ 30,000.00	\$ 30,000.00
	11,2. Administrator	\$ 36,000.00	\$ 18,000.00	\$ 18,000.00
	11,3. Local development & institutional strengthening expert	\$ 36,000.00	\$ 18,000.00	\$ 18,000.00
	11,4. Environmental management and biodiversity expert	\$ 36,000.00	\$ 18,000.00	\$ 18,000.00
	119. Component Total	\$ 168,000.00	\$ 84,000.00	\$ 84,000.00
	12. Other personnel			
	12,1. Rangers – monitoring and control	\$ 33,600.00	\$ 16,800.00	\$ 16,800.00
	129. Component Total	\$ 33,600.00	\$ 16,800.00	\$ 16,800.00
	13. National consultants (long-term)			
	13,1. Project monitoring consultant	\$ 45,000.00	\$ 22,500.00	\$ 22,500.00
	13,2. Promoters /resource management	\$ 24,000.00	\$ 12,000.00	\$ 12,000.00
	13,3. Promoters /environmental education	\$ 24,000.00	\$ 12,000.00	\$ 12,000.00
	13,4. Communications consultant	\$ 32,400.00	\$ 9,000.00	\$ 23,400.00
	13,5. Protected areas consultant	\$ 28,800.00	\$ 14,400.00	\$ 14,400.00
	13,6. Tourism consultant	\$ 28,800.00	\$ 14,400.00	\$ 14,400.00
	13,7. Mangrove restoration and rehabilitation consultant	\$ 21,600.00	\$ 14,400.00	\$ 7,200.00
	13,8. Biological monitoring consultant	\$ 14,400.00	\$ 14,400.00	
	13,9. Participatory management consultant	\$ 14,400.00	\$ 14,400.00	
	139. Component Total	\$ 233,400.00	\$ 127,500.00	\$ 105,900.00
	15,1. Fellowships on environmental management /regional government officers	\$ 20,000.00	\$ 10,000.00	\$ 10,000.00
	159. Component Total	\$ 20,000.00	\$ 10,000.00	\$ 10,000.00
20	Sub-contracts			
	21. Monitoring and planning consultancy	\$ 58,000.00	\$ 41,000.00	\$ 17,000.00
	22. Sustainable development consultancy	\$ 21,000.00	\$ 3,000.00	\$ 18,000.00
	23. Tourism consultancy	\$ 13,500.00	\$ 4,500.00	\$ 9,000.00
	24. Sustainable economic activities sub-projects	\$ 132,000.00	\$ 66,000.00	\$ 66,000.00
	25. Bio-business and biodiversity consultancy	\$ 23,000.00	\$ 23,000.00	
	26. Environmental economics consultancy (revenue-raising & fees)	\$ 7,000.00	\$ 7,000.00	
	27. Environmental education and resource management consultancy	\$ 12,000.00	\$ 12,000.00	
	28. Communications consultancy	\$ 8,000.00	\$ 8,000.00	
	29. Component Total	\$ 274,500.00	\$ 164,500.00	\$ 110,000.00
30	Travel			
	31,1. Officers, local population and others	\$ 33,300.00	\$ 19,400.00	\$ 13,900.00
	31,2. Consultants (long-term)			
	319. Component Total	\$ 33,300.00	\$ 19,400.00	\$ 13,900.00
	33,1. National experts and consultants	\$ 3,750.00	\$ 1,950.00	\$ 1,800.00
	339. Component Total	\$ 3,750.00	\$ 1,950.00	\$ 1,800.00
40	Capital items			
	43. Vehicles	\$ 13,200.00	\$ 13,200.00	
	49. Component Total	\$ 13,200.00	\$ 13,200.00	\$ -
	44,2. GPS	\$ 4,800.00		\$ 4,800.00
	44,3. Binoculars	\$ 1,000.00		\$ 1,000.00
	449. Component Total	\$ 5,800.00	\$ -	\$ 5,800.00
50	Consumable items			
	54,1. Refreshments	\$ 400.00	\$ 400.00	
	54,2. Stationery	\$ 5,400.00	\$ 2,700.00	\$ 2,700.00
	54,3. Ranger uniforms	\$ 1,200.00		\$ 1,200.00
	549. Component Total	\$ 7,000.00	\$ 3,100.00	\$ 3,900.00

Budget components		TOTAL	YEAR 1	YEAR 2
60	Miscellaneous			
	61,1. Work meetings	\$ 11,600.00	\$ 7,600.00	\$ 4,000.00
	61,2. Workshops	\$ 35,000.00	\$ 23,000.00	\$ 12,000.00
	61,3. Printed guides	\$ 20,320.00	\$ 20,000.00	\$ 320.00
	61,5. Radio spots	\$ 12,000.00	\$ 6,000.00	\$ 6,000.00
	61,6. RCA operation	\$ 4,800.00	\$ 2,400.00	\$ 2,400.00
	61,7. Patrolling	\$ 2,880.00	\$ 1,440.00	\$ 1,440.00
	61,8. Outreach campaigns	\$ 7,500.00	\$ 2,500.00	\$ 5,000.00
	619. Component Total	\$ 94,100.00	\$ 62,940.00	\$ 31,160.00
	63. Contingencies	\$ 2,400.00	\$ 1,200.00	\$ 1,200.00
	69. Component Total	\$ 2,400.00	\$ 1,200.00	\$ 1,200.00
70	National management costs			
	79. Component Total	\$ -		
	SUB-TOTAL	\$ 889,050.00	\$ 504,590.00	\$ 384,460.00
80	Project monitoring and administration			
	81. ITTO monitoring and review	<u>\$ 15,000.00</u>		
	82. ITTO mid-term, final, ex-post evaluation	<u>\$ 20,000.00</u>		
	83. ITTO programme support costs (8% of items 10 - 82 above)	\$ 34,169.60	\$ 18,104.00	\$ 16,065.60
	84. Donor monitoring costs			
	89. Component Total	\$ 69,169.60		
90	Refund of pre-project costs (pre-project budget)			
100	GRAND TOTAL	\$ 958,219.60		

3.4.2 ITTO budget by component

3.4.2 Yearly project budget by source – ITTO

Annual disbursements	Total	Year 1	Year 2	Year 3	Year 4	Year 5
Budget components						
10. Project personnel	\$ 350,600.00	\$ 186,100.00	\$164,500.00	\$ -	\$ -	\$ -
11.1. Project coordinator	\$ 60,000.00	\$ 30,000.00	\$ 30,000.00			
11.2. Administrator	\$ 36,000.00	\$ 18,000.00	\$ 18,000.00			
11.3. Local development & institutional strengthening expert	\$ 36,000.00	\$ 18,000.00	\$ 18,000.00			
11.4. Environmental management and biodiversity expert	\$ 36,000.00	\$ 18,000.00	\$ 18,000.00			
13.1. Project monitoring consultant	\$ 45,000.00	\$ 22,500.00	\$ 22,500.00			
13.2. Promoters /resource management	\$ 24,000.00	\$ 12,000.00	\$ 12,000.00			
13.4. Communications consultant	\$ 14,400.00		\$ 14,400.00			
13.5. Protected areas consultant	\$ 28,800.00	\$ 14,400.00	\$ 14,400.00			
13.7. Mangrove restoration and rehabilitation consultant	\$ 21,600.00	\$ 14,400.00	\$ 7,200.00			
13.8. Biological monitoring consultant	\$ 14,400.00	\$ 14,400.00				
13.9. Participatory management consultant	\$ 14,400.00	\$ 14,400.00				
15.1. Fellowships on environmental management /regional gov't officers	\$ 20,000.00	\$ 10,000.00	\$ 10,000.00			
20. Subcontracts	\$ 47,000.00	\$ 21,000.00	\$ 26,000.00	\$ -	\$ -	\$ -
21. Monitoring and planning consultancy	\$ 17,000.00	\$ 5,000.00	\$ 12,000.00			
22. Sustainable development consultancy	\$ 14,000.00		\$ 14,000.00			
25. Bio-business and biodiversity consultancy	\$ 12,000.00	\$ 12,000.00				
28. Communications consultancy	\$ 4,000.00	\$ 4,000.00				
30. Duty travel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
40. Capital items	\$ 19,000.00	\$ 13,200.00	\$ 5,800.00	\$ -	\$ -	\$ -
43. Vehicles	\$ 13,200.00	\$ 13,200.00				
44.2. GPS	\$ 4,800.00		\$ 4,800.00			
44.3. Binoculars	\$ 1,000.00		\$ 1,000.00			
50. Consumable items	\$ 1,200.00	\$ -	\$ 1,200.00	\$ -	\$ -	\$ -
54.3. Ranger uniforms	\$ 1,200.00		\$ 1,200.00			
60. Miscellaneous	\$ 9,320.00	\$ 6,000.00	\$ 3,320.00	\$ -	\$ -	\$ -
61.2. Workshops	\$ 3,000.00	\$ 3,000.00				
61.3. Printed guides	\$ 320.00		\$ 320.00			
61.5. Radio spots	\$ 6,000.00	\$ 3,000.00	\$ 3,000.00			
Sub-total 1	\$ 427,120.00	\$ 226,300.00	\$ 200,820.00	\$ -	\$ -	\$ -
80. Project monitoring & administration						
81. Monitoring and review (effective estimation)	\$ 15,000.00					
82. Evaluation costs (effective estimation)	\$ 20,000.00					
Sub-total 2	\$ 462,120.00					
83. Program support costs (8% of total budget)	\$ 34,169.60					
84. Donor monitoring costs	\$ -					
90. Refund of pre-project costs	\$ -					
ITTO TOTAL	\$ 496,289.60					

3.4.3 Executing agency budget by component (MDA)

3.4.3 Yearly project budget by source – Executing agency /Host government

Annual disbursements	Total	Year 1	Year 2	Year 3	Year 4	Year 5
Budget components						
10. Project personnel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20. Sub-contracts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
30. Viajes de servicio	\$ 20,250.00	\$ 13,850.00	\$ 6,400.00	\$ -	\$ -	\$ -
<u>31. DSA</u>	<u>\$ 5,150.00</u>	<u>\$ 5,150.00</u>				
<u>31.1. Officers, local population and others</u>	<u>\$ 13,150.00</u>	<u>\$ 6,750.00</u>	<u>\$ 6,400.00</u>			
<u>33.1. National experts and consultants</u>	<u>\$ 1,950.00</u>	<u>\$ 1,950.00</u>				
40. Capital items	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
50. Consumable items	\$ 5,800.00	\$ 3,100.00	\$ 2,700.00	\$ -	\$ -	\$ -
<u>54.1. Refreshments</u>	<u>\$ 400.00</u>	<u>\$ 400.00</u>				
<u>54.2. Office supplies</u>	<u>\$ 5,400.00</u>	<u>\$ 2,700.00</u>	<u>\$ 2,700.00</u>			
60. Miscellaneous	\$ 49,580.00	\$ 28,940.00	\$ 20,640.00	\$ -	\$ -	\$ -
<u>61.1. Work meetings</u>	<u>\$ 10,800.00</u>	<u>\$ 6,800.00</u>	<u>\$ 4,000.00</u>			
<u>61.2. Workshops</u>	<u>\$ 26,000.00</u>	<u>\$ 17,000.00</u>	<u>\$ 9,000.00</u>			
<u>61.7. Patrolling</u>	<u>\$ 2,880.00</u>	<u>\$ 1,440.00</u>	<u>\$ 1,440.00</u>			
<u>61.8. Communication campaigns</u>	<u>\$ 7,500.00</u>	<u>\$ 2,500.00</u>	<u>\$ 5,000.00</u>			
<u>63. Contingencies</u>	<u>\$ 2,400.00</u>	<u>\$ 1,200.00</u>	<u>\$ 1,200.00</u>			
70. Executing agency management costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EXECUTING AGENCY /HOST GOV'T TOTAL	\$ 75,630.00	\$ 45,890.00	\$ 29,740.00	\$ -	\$ -	\$ -

3.4.4 Other sources' budget by component (Regional Governments)

3.4.4 Yearly project budget by source – Other sources

Annual disbursements	Total	Year 1	Year 2	Year 3	Year 4	Year 5
Budget components						
10. Project personnel	\$ 104,400.00	\$ 52,200.00	\$ 52,200.00	\$ -	\$ -	\$ -
<u>12.1. Rangers: monitoring and control</u>	<u>\$ 33,600.00</u>	<u>\$ 16,800.00</u>	<u>\$ 16,800.00</u>			
<u>13.3. Promoters /environmental education</u>	<u>\$ 24,000.00</u>	<u>\$ 12,000.00</u>	<u>\$ 12,000.00</u>			
<u>13.4. Communications consultant</u>	<u>\$ 18,000.00</u>	<u>\$ 9,000.00</u>	<u>\$ 9,000.00</u>			
<u>13.6. Tourism consultant</u>	<u>\$ 28,800.00</u>	<u>\$ 14,400.00</u>	<u>\$ 14,400.00</u>			
20. Sub-contracts	\$ 227,500.00	\$ 143,500.00	\$ 84,000.00	\$ -	\$ -	\$ -
<u>21. Monitoring and planning consultancy</u>	<u>\$ 41,000.00</u>	<u>\$ 36,000.00</u>	<u>\$ 5,000.00</u>			
<u>22. Sustainable development consultancy</u>	<u>\$ 7,000.00</u>	<u>\$ 3,000.00</u>	<u>\$ 4,000.00</u>			
<u>23. Tourism consultancy</u>	<u>\$ 13,500.00</u>	<u>\$ 4,500.00</u>	<u>\$ 9,000.00</u>			
<u>24. Sustainable economic activities sub-projects</u>	<u>\$ 132,000.00</u>	<u>\$ 66,000.00</u>	<u>\$ 66,000.00</u>			
<u>25. Bio-business and biodiversity consultancy</u>	<u>\$ 11,000.00</u>	<u>\$ 11,000.00</u>				
<u>26. Environmental economics consultancy (revenue raising & fees)</u>	<u>\$ 7,000.00</u>	<u>\$ 7,000.00</u>				
<u>27. Environmental education and resource management consultancy</u>	<u>\$ 12,000.00</u>	<u>\$ 12,000.00</u>				
<u>28. Communications consultancy</u>	<u>\$ 4,000.00</u>	<u>\$ 4,000.00</u>				
30. Duty travel	\$ 16,800.00	\$ 7,500.00	\$ 9,300.00	\$ -	\$ -	\$ -
<u>31.1. Officers, local population and others</u>	<u>\$ 15,000.00</u>	<u>\$ 7,500.00</u>	<u>\$ 7,500.00</u>			
<u>33.1. National experts and consultants</u>	<u>\$ 1,800.00</u>		<u>\$ 1,800.00</u>			
40. Capital items	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
50. Consumable items	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
60. Miscellaneous	\$ 37,600.00	\$ 29,200.00	\$ 8,400.00	\$ -	\$ -	\$ -
<u>61.1. Work meetings</u>	<u>\$ 800.00</u>	<u>\$ 800.00</u>				
<u>61.2. Workshops</u>	<u>\$ 6,000.00</u>	<u>\$ 3,000.00</u>	<u>\$ 3,000.00</u>			
<u>61.3. Printed guides</u>	<u>\$ 20,000.00</u>	<u>\$ 20,000.00</u>				
<u>61.5. Radio spots</u>	<u>\$ 6,000.00</u>	<u>\$ 3,000.00</u>	<u>\$ 3,000.00</u>			
<u>61.6. RCA operation</u>	<u>\$ 4,800.00</u>	<u>\$ 2,400.00</u>	<u>\$ 2,400.00</u>			
TOTAL – OTHER SOURCES	\$ 386,300.00	\$ 232,400.00	\$ 153,900.00	\$ -	\$ -	\$ -

3.4.5 Project budget by activity and by component

OUTPUTS / ACTIVITIES + Gastos no basados en actividades	BUDGET COMPONENTS												GRAND TOTAL	
	10. Project personnel	20. Sub-contracts	30. Duty travel	40. Capital items	50. Consumable items	60. Miscellaneous	Year							
Output 1: Adequate use of legal powers by regional and local governments for the conservation of mangrove forests														
1.1. Training of regional and local government officers in environmental standards and regulations.	20,000.00	I	14,000.00	I	3,300.00	E	-	600.00	E	3,600.00	IE	Y1, Y2	41,500.00	
1.2. Coordination with competent authorities for the legal recognition of 3 new protected areas in mangrove ecosystems: Tumbes Mangrove Ecosystem – Dry Forest Biological Corridor, San Pedro de Vice Mangrove Forest and Mangrove Forest of Vichayal.	14,400.00	I	28,000.00	I	2,000.00	E	-	600.00	E	17,300.00	IEO	Y1, Y2	62,300.00	
Sub-total 1	34,400.00	I	42,000.00	I	5,300.00	E	-	1,200.00	E	20,900.00	IEO		103,800.00	
Output 2: Improved level of forest administration and management so as to preserve mangrove ecosystems.														
2.1. Strengthening of the management of the National Sanctuary of Tumbes Mangroves through participatory management, communication and environmental education.	112,800.00	IO	4,000.00	O	6,600.00	EO	5,800.00	I	2,400.00	IE	9,880.00	E	Y1, Y2	141,480.00
2.2. Implementation of participatory management mechanisms in the new protected areas – management, communication and environmental education committees.	46,800.00	IO	36,000.00	O	15,000.00	O	-	-	-	17,800.00	EO	Y1, Y2	115,600.00	
2.3. Training of local communities in sustainable management and utilization techniques for the natural resources of mangrove ecosystems.	48,000.00	IO	12,000.00	O	2,650.00	E	-	2,400.00	E	34,000.00	EO	Y1, Y2	99,050.00	
Sub-total 2	207,600.00	IO	52,000.00	O	24,250.00	EO	5,800.00	I	4,800.00	IE	61,680.00	EO		356,130.00
Output 3: Financial sustainability strategies for mangrove forests developed and under implementation.														
3.1. Development of revenue-raising mechanisms to contribute to mangrove forest sustainability.	-		31,500.00	O	7,500.00	E	-	600.00	E	4,200.00	E	Y1, Y2	43,800.00	
3.2. Identification and promotion of business plans for the economically and environmentally sustainable use of natural resources by local communities.	-		144,000.00	O	-	-	-	400.00	E	3,320.00	IE	Y1, Y2	147,720.00	
Sub-total 3	-		175,500.00	O	7,500.00	E	-	1,000.00	E	7,520.00	IE		191,520.00	
Output 4: Project management.														
4.1. Project management and administration activities.	168,000.00	I	-	-	-	-	13,200.00	I	-	2,400.00	E	Y1, Y2	183,600.00	
4.2. Project monitoring and follow-up.	45,000.00	I	5,000.00	I	-	-	-	-	-	4,000.00	E	Y1, Y2	54,000.00	
Sub-total 4	213,000.00	I	5,000.00	I	-	-	13,200.00	I	-	6,400.00	E		237,600.00	
Sub-total (ITTO)	350,600.00		47,000.00		-		19,000.00		1,200.00	9,320.00			427,120.00	
Sub-total (Ex. agency)	-		-		20,250.00		-		5,800.00	49,580.00			75,630.00	
Sub-total (Other sources)	104,400.00		227,500.00		16,800.00		-		-	37,600.00			386,300.00	
TOTAL	455,000.00		274,500.00		37,050.00		19,000.00		7,000.00	96,500.00			889,050.00	

(I) – ITTO Contribution

(E) – Executing agency/Host gov't contribution

(O) – Other sources contribution

3.5 Assumptions, risks, sustainability

3.5.1 Assumptions and risks

The main assumptions of the project are:

- National/regional social development policies are implemented.
- Climate change mitigation mechanisms are implemented.
- Civil society and the population in general recognize that mangrove ecosystems and other natural areas are valuable assets for local development.
- The local population is interested in the establishment of new protected areas in the regions.
- The highest regional authorities give priority to environmental issues.
- All local and provincial authorities in the regions support the mangrove forest conservation strategy.
- Companies agree to pay established fees and tariffs.
- Increased tourist flow to ensure higher levels of income generated by the tourism industry.
- Availability of financial resources.

3.5.2 Sustainability

Financial sustainability: The National Service for Natural Protected Areas (SERNANP) will be responsible for project follow-up activities through the Directorate for Natural Protected Area Management, which will have access to more diversified financing sources through the contribution of the public sector (at the national, regional and local levels) and the private sector (companies and organizations currently involved or interested in participating in the conservation of NPAs and their buffer zones). Regional Conservation Systems (RCS) have been established in cooperation with the Regional Governments of Tumbes and Piura and public investment projects are being formulated to ensure the financial sustainability of the mangrove ecosystem.

Institutional sustainability: The Management of target existing and new NPAs (and, in the medium term, SINANPE) will have a outcome-based management system that will allow them to continue with project activities after project completion. Adequately trained human resources will be available and management agreements will have been established with local stakeholders so as to ensure the continuity and strengthening of the cooperation processes launched by the project.

Political sustainability: The project will have shown that conservation actions can go hand in hand with local and regional development and can be implemented in perfect harmony with existing legal frameworks (participatory budget, National Public Investment System, public-private partnerships and ongoing decentralization and regionalization processes), whose implementation methods (regulations and administrative procedures) will have to be improved on the basis of the lessons learned during the project implementation period.

The promotion of financial sustainability within the framework of the Project must be achieved in accordance with the provisions of SINANPE's Master Plan and Financial Plan, the two guiding documents that constitute the project's framework of action.

SINANPE's Master Plan defines financial sustainability as the ability to secure long-term, stable and sufficient financial resources. The Plan makes it clear that sustainability can only be achieved through an adequate valuation of the contribution of NPAs to human and environmental well-being. Furthermore, it stipulates that the sources of financing for NPA activities shall be the revenues obtained from the payment of fees for use of resources; tourism surcharges; payment for environmental services based on equitable cost-benefit sharing; government budget and external funding; donations, contracts, agreements, concessions, direct revenue collection, bequests, franchises, special funds, debt swaps, and sanctions imposed for infringements in NPAs, among others.

The Master Plan's policy guidelines that should direct the financial management of the System are based on the following principles:

- Equitable distribution of costs and benefits in the establishment and implementation of NPAs.
- Participation in the identification and valuation of NPAs, dissemination of outputs, formulation of needs and identification of financing sources.
- Transparent, reliable and predictable management of finances within the System, at all levels of administration (including NPA fund management bodies).
- Decentralization, de-concentration and diversification of financial management practices.
- Establishment of partnerships with regional and local governments so as to promote decentralized participation and channel additional resources to the NPAs.
- Channeling and distribution of funding from all sources to priority areas, programs and activities as determined by the governing body and the administrative bodies, with special emphasis on all aspects related to conservation and threat control, while strengthening staff performance and participation mechanisms.

On the other hand, the Financial Plan is based on the recognition of the fact that SERNANP and the NPAs have not achieved, and are probably quite far from achieving, a situation of financial sustainability. This implies two additional dimensions: (1) their budget is currently insufficient to even carry out their basic responsibilities; and (2) the current financing structure for the management of the System's areas includes a disproportionate foreign funding component in the form of projects and a very limited contribution by local stakeholders and the national society as a whole.

SINANPE's financing sources include: (i) the resources allocated in the Public Budget through SERNANP for the implementation of its mandate; (ii) the sustainable harvesting of resources in the target areas, including payments for environmental services through an equitable distribution of costs and benefits; (iii) payments made by third parties for the right to visit the NPAs and use the services offered by NPA Management to visitors; (iv) the contribution of the local communities to management, monitoring and control activities; (v) donations, contracts, agreements and specific concessions in the NPAs; (vi) overall payments not related to specific services from different national and international sources; and (vii) sanctions imposed for infringements committed in the NPAs.

The economic potential of State-protected natural areas can be classified into two categories, depending on the risks they are exposed to: one category represents a neutral risk and includes payments for environmental services, for avoided deforestation or biodiversity conservation, and for the use of distinctive signs and images. However, the second category represents some level of controlled environmental disturbance, such as tourist visits and recreational activities, as well as the harvesting of some natural resources.

Taking these criteria into account, for the management of a natural protected area to be effective it should maximize the well-being of the groups that benefit from the existence of the NPA, must be cost effective reducing monitoring and control costs to a minimum, and must guarantee the financial sustainability of its administration. Therefore, the secret behind the management of natural protected areas is to turn stakeholders posing a threat into allies. From this perspective, the generation of benefits associated with these areas cannot just be seen as a means of providing the administration bodies of these areas with more resources, but rather as a means to encourage and ensure the commitment of the communities to act as allies or partners in these endeavors.

Under this approach, the Financial Plan must consider the following criteria:

- (1) State-owned natural protected areas have the potential to generate their own financial resources, which will differ according to their category, extent, natural characteristics and the links established with the local communities.
- (2) The capacity to generate financial resources should be extended to the communities living in the buffer zones who have had close and long links with these areas. This would represent an inclusive development concept, which would respect the culture and will of the people and thus ensure that the communities involved become conservation partners and part of a balanced ecosystem.
- (3) The ideal management model is one that is based on consensus and commitments with local stakeholders and thus involves less monitoring and control costs.

In order to implement the Project's financial sustainability component, the project will hire a consultant to support the work to be carried out by the Natural Resources Directorates of the Tumbes and Piura Regions in developing these mechanisms.

PART 4. IMPLEMENTATION ARRANGEMENTS

4.1 Organization structure and stakeholder involvement mechanisms

4.1.1 Executing agency and partners

Executing agency: MDA

MDA is a non-profit civil society organization promoted by a group of Peruvians who have worked for over 20 years in the economic development and environmental sectors and the Canadian NGO Mennonite Economic Development Associates (MEDA). The aim of MDA is to find holistic business and environmental solutions to address the problem of poverty. Its mission is to support the implementation of sustainable and environmentally-friendly economic activities so as to improve the quality of life of poor communities while encouraging their organized participation in different public and private institutions.

MDA's vision and mission are closely related to the purpose and objectives of the proposed project:

- Institutional vision: MDA's vision is to achieve the sustainable development of small and micro rural and urban producers to improve their standard of living and the conservation of their natural resources.
- Institutional mission: Promote economic growth and employment generation for the benefit of the poorest communities, while taking into account the conservation of the environment, through the design and implementation of projects to provide small producers with technological and business solutions that will ensure financial and environmental sustainability.

The **National Service for Natural Protected Areas (SERNANP)** is a specialized public technical agency attached to the Ministry for the Environment. It is the agency responsible for the National State System for Natural Protected Areas (SINANPE) and as such, it approves and establishes technical and administrative criteria as well as procedures for the establishment and management of natural protected areas.

The Service will be a project beneficiary and will actively participate in the implementation of project activities in addition to ensuring the continuity of activities after project completion.

Regional Governments of Tumbes and Piura:

Regional governments are decentralized public agencies. Both of these governments have a Regional Directorate for Natural Resources and Environmental Management. Their responsibilities include: formulating, proposing, coordinating, monitoring and administering regional plans and policies in the fields of protected areas, environment and civil defense in accordance with regional, national and sectoral plans. They also have regulatory, supervisory, evaluation and monitoring functions.

Other institutional stakeholders: This project proposal has been developed and agreed on in consultation with several public and private institutions, which will play a substantial role in its implementation through various mechanisms. In this context, the involvement of local governments, in particular, province and district municipalities, will be especially significant. The management committees of target NPAs and relevant NGOs will be directly involved in the implementation of the project. The private sector will also actively participate in the project, particularly through producers involved in the harvesting of natural forest resources (fuelwood collectors for charcoal production, carob pod collectors and beekeepers) as well as sea-farmers (shrimp farmers and collectors of *conchas negras* (*Anadara* spp.) and other bivalve mollusks).

4.1.2 Project management team

The core Project Management Team (PMT) will be made up of a Project Manager, an environmental management expert and a local development and institutional strengthening expert. In addition, the project will have an administrative-accounting expert and an administrative assistant.

Their mission will be to ensure adequate compliance with all scheduled activities and tasks to achieve project objectives. Their duties will include:

- a) Liaise with the institutions involved in the implementation of the project;
- b) Supervise the actions carried out by participating institutions;
- c) Coordinate with MDA for the acquisition of goods and services and recruitment of consultants following the procedures established in the relevant manuals;
- d) Coordinate and supervise the implementation of activities, achievement of targets and compliance with schedules by all project participants, ensuring a consistent and uniform strategic and operational vision throughout the intervention;
- e) Prepare six-monthly reports in cooperation with the institutions participating in the project in accordance with established indicators, and on that basis, request corresponding disbursements;
- f) Prepare reports as stipulated by the financing organization and other donors.

4.1.3 Project steering committee

The implementation of this project is an opportunity to strengthen and consolidate the cooperation between the national environmental authority and local and regional authorities; to this end, an ongoing dialogue mechanism will be institutionalized through a Project Steering Committee (PSC).

This Committee will be made up of an ITTO representative, a representative of the regional governments, a representative of the Northern Lands Unit of SERNANP, two representatives of the regional governments of Tumbes and Piura, and a PROFONANPE representative. The Project Manager will act as secretary of the Committee. The PSC will approve management documents as well as project technical and financial reports, will promote the effective participation of all stakeholders involved and will contribute to the dissemination of project activities and results.

4.1.4 Stakeholder involvement mechanisms

Project stakeholders will actively participate in the project as recipients of project training, services and benefits, mainly through the participatory management of NPAs.

4.2 Reporting, review, monitoring and evaluation

The project will establish a system for the generation of practical, simple information to ensure effective implementation and evaluation of project progress. The project staff and consultants will submit relevant reports. A person will be assigned to the monitoring and review of project activities and the steering committee will approve the implementation of this process in accordance with the schedule established by ITTO.

4.3 Dissemination and mainstreaming of project learning

4.3.1 Dissemination of project results

Two events will be organized for the dissemination of project results among stakeholders interested in replicating project achievements. Project results and documents will also be disseminated through MDA's institutional webpage.

4.3.2 Mainstreaming of project learning

Outreach activities will be carried out during the implementation of the project so as to communicate project achievements to all beneficiaries and relevant public and private institutions. The NPA management committee will schedule the implementation of these activities and will assess project outcomes.

ANNEXES

ANNEX 1. Profile of the executing agency

I. BACKGROUND

Mennonite Economic Development Associates (MEDA) is a non-profit private organization which began operations in Peru in 1999 as a private company registered under the name of MEDA Consulting Group Peru S.A.C. (MCGP), having MEDA as its main shareholder with 99.9% of shares. MCGP has been instrumental in the implementation of different projects, including the Poverty Reduction and Alleviation Project in 2 Economic Service Centers (ESC) in Tarapoto and Pucallpa.

In 2005, MEDA decided to register as MEDA Subsidiary Peru in order to take advantage of tax benefits offered by ENIEX. The projects under implementation were then transferred from MCGP to MEDA Subsidiary Peru, which to date has implemented several projects financed by the Inter-American Development Bank, the World Bank, Novib, ICCO and COFIDE, in addition to the implementation of the Poverty Reduction and Alleviation Project in the Economic Service Centers (ESC) of Tarapoto and Pucallpa. Furthermore, it was decided to maintain MCGP operational but inactive.

As part of its strategy in Peru, MEDA is currently converting MEDA Consulting Group Peru S.A.C. into a Peruvian non-government organization (NGO) under the name of Alternative Development Mechanisms (Mecanismos de Desarrollo Alternos – MDA). The objective of this move is to have greater local autonomy to facilitate the implementation of the decisions made by in the Peruvian office and improve access to national financial resources. After the legal establishment of MDA, MEDA Subsidiary Peru is transferring the responsibility for the implementation of its projects in progress to this NGO.

In view of the above, MDA will be the executing agency of the project hereby submitted to the ITTO.

Institutional details:

Activities:	To encourage, develop and promote small and micro businesses at the urban and rural levels and to ensure the conservation and/or rehabilitation of the environment and biodiversity through the implementation of projects and the provision of consultancy, training and direct technical assistance services in areas such as rural, forest and community development, agronomy, agricultural development, rules of association, agricultural marketing, agro-businesses, micro-business development, microfinance, agricultural credit, environment, financial administration, foreign trade and ethical leadership.
Date of establishment:	14/04/2005
Address:	Miguel Dasso 134 Of. 402 San Isidro
Telephone / Fax:	422 2114 / 422 2075
Email:	sdominguez@mdaperu.com
Web Page:	http://www.medaperu.org/
Executive Staff:	<p><u>MEDA</u> Allan Sauder - President Kimberley an Pityn - Vice-President Gerhard Pries - Finance Manager Geral Morrison - Accounting Director Jerry Quigley - Production Director Julie Redfern - Microfinance Director</p> <p><u>MDA</u> Sonia Domínguez: President Javier Guzmán: Vice-president Fernando Olivera: Secretary</p>
Name of Legal Representative:	Sonia Rosa Dominguez Ortega
Work philosophy:	Promote the conservation of natural resources, the development of SMEs in urban and rural sectors and responsible agricultural practices in the national territory with the active participation of poor communities.

The work areas covered include:

- Developing services for small producers and micro, small and medium enterprises in rural and urban areas so as to ensure their financial and environmental sustainability.
- Implementing projects aimed at the conservation of natural resources.
- Promoting economic growth and employment generation for the benefit of the poorest communities, while taking into account the conservation of the environment.
- Supporting the development of good field practices in the areas of production, the environment and microfinance.
- Contributing to the implementation of programs, training of personnel and technical assistance in relation to the analysis of the sub-sector and value chains, the competitiveness of the industry, the development of services required by the industry, market links, the environment, conservation and economic development in protected areas, and rural microfinance.
- Providing consultancy services to NGOs and multilateral organizations.

MEDA/MDA has implemented projects in the provinces of San Martin, Puno, Arequipa, Madre de Dios, Tumbes, Piura, Junin, Ica, Ucayali, Lima and La Libertad. Over the past few years, the MEDA/MDA team has implemented the following projects in Peru:

<p>a) Project Title: PRA - CSE Tarapoto (<i>Tarapoto ESC</i>) PRA - CSE Pucallpa (<i>Pucallpa ESC</i>)</p>	<p>Beneficiaries: Economic activities in the Tarapoto and Pucallpa economic corridors Date and location: 2003 - 2008 Economic corridors of Tarapoto – San Martin and Pucallpa - Ucayali</p>
<p>Financing Source: USAID – Chemonics</p>	<p>Funding Amount: Tarapoto: S/4,835,820 Pucallpa S/5,983,000</p>
<p>Project Brief: USAID poverty reduction and alleviation program implemented by MEDA. The project was aimed at increasing sales, generating employment and boosting investment levels, through the promotion of environmentally friendly businesses in the target area. The MEDA/MDA team took over operational responsibilities for the Entrepreneurial Service Centers (ESCs) of Pucallpa and Tarapoto in October and November 2003 respectively.</p> <p>Project objectives: To increase the sales of the businesses being supported, generate employment and promote investments in the Pucallpa and Tarapoto economic corridors.</p> <p>Project activities: To develop activities aimed at reaching the goals established by the project in terms of sales figures, investments and employment creation. To promote businesses with growth potential in the economic corridors.</p> <p>Project achievements: Pucallpa ESC Project:</p> <ul style="list-style-type: none"> -The project has benefitted 5,500 small farmers by linking and coordinating them with export and local companies in agricultural and forestry businesses, among others. -The project has arranged for 7 export and local companies to buy the production of small farmers: SEM Peru (Corn), Olansa (Palm Oil), Campo Verde (Cotton), Alpirosa, Mapesa, Amazon Forestry Consortium and NCS American Forestal (Timber). <p>Tarapoto ESC Project:</p> <ul style="list-style-type: none"> -The project has benefitted 5,054 small farmers by linking and coordinating them with agricultural export and local companies that buy products such as rice, musk, cotton and peanuts. -The project has benefitted 238 farmers through the cadastral maps produced by the Transcontinental company. -The project has arranged for 7 export and local companies to buy the production of farmers: Red Bellavista (Rice), Victoriano Panduro (Musk), Carlos Gonzales (Peanuts), Alselva, Romero Trading, Amazon Cotton and Algodonera Juanjui (Cotton). -A total of 46,085 ha. are under production. 	

b) Project Title: The Power of Participation: Bringing Environmentally-Friendly Electricity to Remote River Basins in the Peruvian Amazon	Beneficiaries: The population of 2 small communities (hamlets) in the San Martin region Date and location: 2006 - 2007 Moyobamba – San Martin
Financing Source: TOYOTA - JAPAN	Funding amount: \$151,250.00
Project Brief: The project was aimed at reducing pollution and deforestation in the high-lying sections of two micro-watershed areas of the Peruvian Amazon region (Buffer Zone – Park) by creating public awareness among the communities settled in those areas on matters related to environmental conservation, integrated watershed management and development of economic activities. The community awareness raising process was implemented in two ways: 1) through the establishment of a social network of 750 members who will be trained in areas of integrated watershed conservation and management practices, integrating them with other key stakeholders of the watershed for the participatory management of these areas; 2) through the construction of two micro hydro-electric power plants that will provide them with electricity. The project seeks to improve the living standards of the communities and provide them with a concrete example of the sustainable utilization of a natural resource (water). It is expected that upon project completion, the beneficiary communities will understand the importance of conserving and protecting the environment and, particularly, given their location, that they will understand and implement integrated watershed management actions. Project objectives: To reduce deforestation and pollution in the project's area of influence through the participatory management of these areas by the local communities settled around the headwaters of these micro watersheds as well as the conservation and sustainable utilization of natural resources (water) so as to promote the development of their economic activities. Project activities: <ul style="list-style-type: none"> - Installation of 2 Micro Hydro-Electric Power Plants - To organize a social structure that is aware of all issues related to watershed conservation and management. 	

c) Project Title: Fortalecimiento en gestión, mercado y desarrollo de las instalaciones de cultivos tropicales en la asociación de productores frutales exóticos de la Selva Central - "Pro-Frutex" (<i>Strengthening tropical crop management, marketing and development by the association of exotic fruit producers of the Central Forest Region of Peru - "Pro-Frutex"</i>).	Beneficiaries: PROFRUTEX Date and Location: July 2008 - July 2012 Mazamari- Satipo-Junín
Financing Source: Inter Church Organization for Development Cooperation (ICCO)	Funding Amount: \$ 250,000
Project Brief: This project seeks to strengthen the management practices of the PROFRUTEX association, promote the participation of women and increase their earnings, through the development of alternative crops such as organic pineapple and passionfruit. These crops have international potential and therefore, the main components of this project are: to provide specialized technical assistance for the cultivation of MD2 crops and specialized technical assistance in certification schemes. It is envisaged that these crops will have access to international markets in the medium term. Project Objectives: To improve the living standards of the members of the association and their families by providing them with technical consultancy services on production systems and technologically advanced plantation management systems. To strengthen the management practices of the PROFRUTEX Association in the Mazamari District by demonstrating the sustainability of the business through the marketing of tropical fruits first at the local level and then on the international market in the medium term. Project activities: <ul style="list-style-type: none"> - To provide consultancy services for the cultivation of MD2 crops, through monthly visits and training workshops. - To develop a detailed management manual, exclusively developed for the cultivation of MD2 crops, with Mazamari as the production area. - To promote the importance of team work, including the significance of gender equity. - To implement and obtain EUREPGAP certification through internal audits, training workshops and the provision of ongoing support throughout the whole crop development process. - To implement a SWOT analysis of the PROFRUTEX Association so as to develop appropriate production and marketing strategies. - To identify partners for the local marketing of MD2 pineapple. - To establish a 2-hectare pilot plantation for the growing of organic passion fruit. Project achievements: <ul style="list-style-type: none"> - Access to higher-value markets, with a market share of 4.76%. - Increased levels of income for farmers, due to better products and better market placement for these products. - A 10% increase in the number of female members of the association. - Strengthening of the administrative management capacity of the association. - Increased productivity due to improved technical assistance throughout the whole crop production process (reduction of waste). 	

d) Project Title: Agroexportación (<i>Agro-exports</i>)	Beneficiaries: Small farmers in Cañete, Lima, Ica and La Libertad Date and Location: July 2006 – October 2016 Northern and Southern Areas of Peru
Financing Sources: MEDA Canada and COFIDE	Funding Amount: \$450,007.00 (US\$ 400,000 directed to small farmers)
<p>Project Brief: The project seeks to develop the capacity of small farmers, suppliers, agroforestry companies and financial institutions to work together in a collaborative manner. Through the adequate coordination of all stakeholders in the production chain, MEDA plans to provide benefits for all the participants and ensure access to better markets, access to financing sources and better prices for the inputs required by small producers.</p> <p>Project objectives: To improve the living standards of small farmers and their families through the establishment of production chains for non-traditional crops that will have more cost-effective distribution channels.</p> <p>Project activities:</p> <ul style="list-style-type: none"> - Develop business plans, demonstrating the profitability of non-traditional crops. - Train groups of farmers according to production areas and the different crops selected. - Implement training workshops on crop management and quality control systems. - Establish strategic partnerships among all production chain participants to ensure a win-win relationship between all stakeholders. - Develop the capacity of farmers to work with export crops. - Promote coordination for the structuring, supervision and implementation of production chains. - Enable the transfer of appropriate technologies from the export company to the small farmers. <p>Project achievements to date:</p> <ul style="list-style-type: none"> - The project managed to secure a line of financing for small farmers of up to US\$ 400,000. - Strategic partnerships were established with 3 agro-export companies (Camposol, Blue Hill and Proagro) and 1 marketing company (Emapaq). - The project achieved the incorporation of small farmers into the value chain. <p>Expected achievements:</p> <ul style="list-style-type: none"> - To increase farmers' income levels by more than 30%. - To encourage the participation of other farmers in production chains. - To generate employment in the project's area of influence. - To ensure the transfer of technology required for the management of agro-export crops. 	

f) Project Title: Sistema de interrelación solidaria y competitiva para pequeños productores (<i>Supportive and competitive interrelationship system for small producers</i>)	Beneficiaries: 4 coffee-growers associations. Peruvian Association of Mango exporters (Asociación Peruana de Exportadores de Mango – APEM), Association of Small Producers of Organic Bananas of Saman and Annexes (Asociación de Pequeños Productores de Banano Orgánico Samán y Anexos – APPBOSA), Organic Producers Association of Querecotillo (Asociación de Productores Orgánicos de Querecotillo – APOQ) and Cepibo – APBOS Association, Producers of Organic Bananas and Saman Organic Bananas (Asociación Cepibo – APBOS Productores de Banano Orgánico y Banano Orgánico Samán BOS). Date and Location: 2006 – 2010, Piura
Financing Source: Oxfam Novib	Funding Amount: \$395,300
<p>Project Brief: The projects seeks to develop and implement a Management Information System (Sistema Gerencial de Información – SGI), “Agromonitor”, to provide solutions for the management and integrated monitoring of production processes, through a system that will provide information on production requirement forecasts, technical assistance required and production volumes and dates, in addition to agricultural certification and product traceability.</p> <p>Project objectives: The objective of the project is to develop, test and validate the SGI Agromonitor, so as to ensure that Associations of Small Agricultural Producers can carry out the integrated management of production processes and have the capacity to participate in value chains that require the implementation of traceability and certification systems.</p> <p>Project activities:</p> <ul style="list-style-type: none"> - To develop the monitoring and control technology required to adapt the Agromonitor system to the information requirements of specialized international markets. - To establish Internal Control Units (Unidades de Control Interno – UCI) in the field so as to validate the Agromonitor system, through their implementation in associations of small producers of organic bananas and mangoes in the departments of Piura. The Internal Control Units will be equipped with the Agromonitor system. - To establish Agromonitor's marketing branch and develop the necessary tools for the branch to become operational. <p>Project achievements to date:</p> <ul style="list-style-type: none"> - The AGROMONITOR system was established in 4 associations of coffee-growers who were duly trained in the use of this system. - The certification and traceability modules were adapted to the reality and requirements of the coffee production chain. - A baseline survey was implemented in three coffee-growers associations that were part of the group of project beneficiaries 	

<p>(1,050 producers) so as to collect socio-economic information and technical data on their crops as well as data about the producers and their families.</p> <ul style="list-style-type: none"> - As a result of the use of the system, there are currently 660 small coffee-producers who have received dual certification (organic/fair-trade) and 250 who have received fair-trade certification and are well on the way to obtaining organic certification. <p>Expected achievements:</p> <ul style="list-style-type: none"> - Agromonitor's certification module adapted to organic mango and banana crops. - Agromonitor's traceability module adapted to organic mango and banana crops. - Agromonitor's monitoring and control module adapted to organic mango and banana crops. - 2 cost structures identified and included in the system. - Agromonitor's use manual finalized.
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<p>g) Project Title: Encadenamiento productivo sostenible en áreas naturales protegidas en el Perú (<i>Sustainable production chains in Natural Protected Areas of Peru</i>)</p>	<p>Beneficiaries: Small producers and/or associations located in the following Protected Natural Areas and/or their buffer zones: National Sanctuary of Tumbes Mangroves (Santuario Nacional de los Manglares de Tumbes – SNLMT), Bahuaja Sonene National Park (Parque Nacional Bahuaja Sonene – PNBS), Tambopata National Reserve (Reserva Nacional Tambopata – RNT) and Salinas and Aguada Blanca National Reserve (Reserva Nacional Salinas y Aguada Blanca – RNSAB). Date: 2007 - 2010 Location: Arequipa, Puno, Madre de Dios.</p>
<p>Cooperating Institutions: IDB - PROFONANPE</p>	<p>Funding Amount: US\$ 1,500,000</p>
<p>Project Brief: The objective of the project is to contribute to the economic and business development of the communities located in 4 NPAs and their respective buffer zones. In order to achieve this objective, the project will implement and consolidate production chains for coffee, shrimp, Brazil nut and vicunas, after firstly carrying out the environmental assessments and regulatory development actions required for these production activities.</p> <p>Project activities:</p> <ul style="list-style-type: none"> ➤ To develop and implement at least 4 production chains for coffee, shrimp, Brazil nut and vicunas. ➤ To carry out the environmental assessments and regulatory development for these production activities. ➤ To increase the income levels of at least 1000 small producers by 30%. ➤ To increase the productivity of at least 1000 small producers by 35%. ➤ To secure the interest and participation of 10 private companies in the Production Chains. 	

<p>h) Project Title: Contrato de Administración Total de operaciones en el Santuario Nacional de los Manglares de Tumbes (<i>Total Administration Contract for operations in the National Sanctuary of Tumbes Mangroves</i>).</p>	<p>Beneficiaries: Small producers and/or associations located in the Natural Protected Areas and/or buffer zones of the National Sanctuary of Tumbes Mangroves (Santuario Nacional de los Manglares de Tumbes – SNLMT). Location: Tumbes. Date: 2008 - 2012</p>
<p>Cooperating Institutions: World Bank - PROFONANPE</p>	<p>Funding Amount: US\$ 1,714,884</p>
<p>Project Brief: To implement all technical and administrative operations required in the National Sanctuary of Tumbes Mangroves so as to improve the management of this Natural Protected Area (NPA) and ensure its financial sustainability.</p> <p>Project activities:</p> <ul style="list-style-type: none"> ➤ To rehabilitate at least 50 hectares of mangrove forests in the NPA with the local associations as part of the management agreements. ➤ To rehabilitate 200 hectares of dry forest through the implementation of fruit tree value chains with local associations in order to generate a sustainable economic activity. ➤ To increase the stocks of the main hydrobiological resources of economic importance by establishing management agreements with the users of these resources, so as to ensure sustainable and environmentally-friendly economic activities. ➤ To ensure the ongoing reduction of water pollution levels in the SNLMT. ➤ To develop tourism activities, so as to generate employment and secure a sustainable source of income for the local associations, without causing negative impacts on the NPA. ➤ To generate resources from sustainable sources, so as to ensure the sustainability of the management of the NPA. 	

II. INFRASTRUCTURE

MEDA/MDA's headquarters are currently located in Lima. This office has a room available for the staff of the proposed project during their stay in Lima. The office has internet access, fax machine and the necessary equipment to hold work meetings. In addition, MEDA/MDA has offices in Tumbes (where the project will be implemented) and San Martin, where non-financial services are provided.

III. BUDGET (US\$)

FINANCING SOURCE	PROJECT	TOTAL PROJECT BUDGET (US\$)	2008	2009	2010
USAID-CHEMONICS	PRA - CSE Project Tarapoto	341,871.08	341,871.08		
	PRA – CSE Project Pucallpa	542,218.45	542,218.45		
TOYOTA - JAPAN	"The Power of Participation: Bringing Environmentally-Friendly Electricity to Remote River Basins in the Peruvian Amazon"	69,533.64	69,533.64		
Inter Church Cooperation (ICCO)	"Fortalecimiento en gestión, mercado y desarrollo de las instalaciones de cultivos tropicales en la asociación de productores de frutas exóticas de la selva central "Pro-Frutex".	18,389.06	18,389.06		
	"PROFRUTEX" Strengthening	169,133.67		94,835.67	74,298.00
COFIDE	Agroexport	251,757.00	75,000.00	92,457.00	84,300.00
Oxfam Novib	"Sistema de Interrelación Solidaria y Competitiva para Pequeños Productores"	308,984.97	120,770.17	82,742.80	105,472.00
IDB	"Encadenamiento Productivo Sostenible en Áreas Protegidas"	802,705.00	157,832.00	274,852.00	370,021.00
PROFONANPE	Administration Contract for the National Sanctuary of Tumbes Mangroves	1,068,092.04	413,000.88	304,662.16	350,429.00
Mannitoba Council International Cooperative		144,413.57	28,025.76	61,215.81	55,172.00
TOTAL		3,717,098.48	1,766,641.05	910,765.44	1,039,692.00

IV. PERSONNEL

Education Level	No.
Officers with post-graduate studies	3
Offices with university degrees	8
Technical staff	3
Administrative staff	3
Total	17

ANNEX 2. Terms of reference of key staff

KEY STAFF

I. PROJECT MANAGER

Duties to be carried out:

- Coordinate the implementation of project activities.
- Coordinate the implementation of the Master Plan with the NPA Management.
- Coordinate the project implementation team.

Duration of assignment: 24 months

Mode of employment: Full-time

Description of main responsibilities:

- Manage the operational and administrative activities of the project.
- Responsible for the implementation of all project activities.
- Liaise with public authorities at the national, regional and local levels; with business leaders from the private sector; and with local community heads and leaders.
- Consolidate a sound inter-institutional work relationship with organizations identified as technology and service providers as required in the technical proposal.

Qualifications of the personnel to be hired to carry out these duties:

- Professional training: University degree in economics, administration, engineering and/or related disciplines.
- Further studies and/or specialization: A master's degree or specialization in areas related to project objectives are desirable qualifications.
- Overall experience: At least 5 years experience in the management of development projects, preferably in the field of conservation and/or management of natural resources.
- Specific experience: At least 2 years experience in the coordination of strategic planning and participatory management projects, preferably in natural protected areas.
- Personal and professional details: Immediate full-time availability; to be permanently based in Tumbes.

II. ENVIRONMENTAL MANAGEMENT AND BIODIVERSITY EXPERT

Duties to be carried out:

- Develop and implement an ecosystem management strategy consistent with sustainable development strategies.
- Responsible for the biological monitoring system and the local environmental monitoring system.

Duration of assignment: 24 months

Mode of employment: Full-time

Description of main activities:

- Management of renewable resources as assets supporting sustainable development.
- Design and participatory monitoring of plans for the management, restocking, restoration and expansion of identified resources.
- Directly responsible for the implementation of outputs 2, 5 and 6.
- Coordination of the team of park rangers.

Qualifications:

- Professional training: Academic degree in biology, fishing engineering, agricultural engineering, environmental science or related disciplines; preferably with a master's degree.
- Further studies and/or specialization: Specialized studies in areas related to project objectives are desirable qualifications.
- Overall experience: At least 3 years experience in activities related to project objectives, preferably in mangrove and/or dry forest ecosystems. Experience in the SNLMT is desirable.
- Specific experience: At least 2 years experience in biodiversity monitoring activities. Also desirable: experience in the facilitation of group processes in rural areas.

- Personal and professional details: Immediate full-time availability; with long-term working stays in target areas.

III. LOCAL DEVELOPMENT AND INSTITUTIONAL STRENGTHENING EXPERT

Duties:

- Coordinate the process of community empowerment to allow the communities to assume a central role in the implementation of their own sustainable development strategies.
- This expert's key role will be to strengthen the capacity of local communities and their organizations.

Duration of assignment: 24 months

Mode of employment: Full-time

Description of main activities:

- Responsible for the implementation of outputs 1, 3 and 4.
- Development of community participation plans.
- Design of outreach strategies for development and environmental awareness raising through formal and informal education activities.
- Design and implementation of local development strategies and relevant mechanisms established to that effect, including municipal and regional management, participatory budgets and community mobilization strategies for sustainable development.

Qualifications:

- Professional training: Academic degree in social science – communicator, educator, sociologist – or related disciplines.
- Further studies and/or specialization: Specialized studies or master's degree in areas related to participatory management and social development are desirable qualifications.
- Overall experience: At least 3 years experience in social promotion/community work with poor rural and/or urban communities. Also desirable, work experience in the SNLMT.
- Specific experience: At least 01 year experience in adult education methodologies. At least 01 year experience in the facilitation of group processes in rural areas.
- Personal and professional details: Immediate full-time availability; to be permanently based in Tumbes.

ANNEX 3. Curricula vitae of key staff provided by the executing agency

I. PROJECT MANAGER

EFRAÍN HIPÓLITO ARANA SALINAS
Urb. Ceres. Calle Francisco de Zela Mz. B Lote 18. Vitarte-Lima.
Tel: 013-518204 (home in Lima)
01-988582160 (cell phone).
e-mail: efraranas366@hotmail.com
efraranas666@yahoo.es

Agricultural Engineer, National Agrarian University of “La Molina” with 25 years professional experience in Rural Development Programmes in Watershed and Upper Andean Areas. Consultancies in issues such as Economic and Ecological Zoning, Land Use Management, Food Security, Water Resource Management and Agro-Ecological Farming. Guest Professor, National University of Santa-Chimbote, Post-Graduate School, Master’s Program in Environmental Management. Member of the Regional Technical Commission of the EEZ of Ancash. Representative of the Northern Zone Executive Council of Peru at the “Ciudades para la Vida” Forum. Member of the Regional Executive Committee of the Ancash Consensus-Building Roundtable on Poverty Alleviation. Member of the Regional Commission for the Ancash Food Security Strategy. Executive Secretary of the National Environmental Society.



1. PERSONAL DETAILS

- 1.1. **Place of birth:** AREQUIPA
- 1.2. **Date of birth:** 13/08/51
- 1.3. **Personal documents:** DNI: 08042786
L.M.: 2139415 -51
RUC : 10080427862
ESSALUD: 5108131ANSIE005
CIP : 60042
Passport No.: 0891920
- 1.5. **Academic degrees:**
- Agricultural Engineer: Specialization: Agro-Ecological Farming.
 - Magister Scientiae: Specialization: Agricultural Production - Extension.
- 1.6. **Other studies (main relevant studies over the last few years):**
- International Master’s Degree in “Local Development and Sustainable Agriculture Management”. Catholic University of Temuco-Chile. 1999-2000.
 - Training Course on Economic-Ecological Zoning. Organized by the Regional Government of Ucayali. 2006.
 - International Post-Graduate Course: Land Use Management, Landscape and Nature (in progress). Organized by the “Ciudades para la Vida” Forum and NUFICC Netherlands. 2008.
- 1.7. **Others**
- Languages: English: fair
French: fair
 - Driver of large/small vehicles (185 cc-200cc motorcycles).

2. EDUCATION

2.1. HIGHER EDUCATION

- National Agrarian University of La Molina. 1975 -1980
- Post-Graduate School. National Agrarian University of La Molina.1983-1985.
- Catholic University of Temuco-Chile.1999 - 2 000 (in process)

2.2. COMMENDATIONS AND ACHIEVEMENTS

- Top position in admission course. Specialization: Meteorology. 1975.
- Grade of Agricultural Eng. Thesis: Excellent
- Grade of Post-graduate Thesis: Outstanding
- Guest Professor: University of Technology of the Andes. Apurimac. 1992-94.
- Guest teacher, Research Methodology Course, Post-graduate School of the University of Santa-Chimbote. Master's Program in Environmental Management. 2008
- Best NGO Officer. IDMA. Abancay. 1993.
- Elected representative of DIACONIA contributors at the Executive Council.

3. TRAINING AND SHORT-TERM ASSIGNMENTS ABROAD

- **COLOMBIA. CALI (One month). 1991.**
Development of projects on conservation areas.
- **COLOMBIA. BUGA (Two weeks). 1993.**
Development of organic product standards and certification criteria.
- **ECUADOR, QUITO (Two weeks). 1994.**
Studies and legislation on environmental impact in watershed areas.
- **BOLIVIA. CARAVANI. 1995.**
Implementation of course on organic coffee for small landholders.
- **EL SALVADOR. 1998.**
Meeting of Evangelical Churches and NGOs. Evaluation of Development Projects.
- **CHILE '99-2,000.**
Post-graduate studies. International Master's Degree in Rural Development and Sustainable Agriculture Management, Catholic University of Temuco.
- **ARGENTINA, 2003.**
Meeting of Lutheran Churches and Counterparts. Sustainable Development Proposals.
- **COLOMBIA, 2008.**
Post-graduate course in land-use management, risk management and landscape management. Organized by FCPV-NUFICC (Netherlands).

4. PROFESSIONAL WORK EXPERIENCE

- 4.1. **MEDA (MENNONITE ECONOMIC DEVELOPMENT ASSOCIATES).** Operations manager of the Total Administration Contract for the National Sanctuary of Tumbes Mangroves, MEDA and SERNANP – Ministry of the Environment. Projects are currently being implemented for the conservation of the SNMT and its Buffer Zone, in coordination with the relevant organizations and authorities. Furthermore, the implementation of eco-businesses is being promoted in the Sanctuary and its Buffer Zone. In charge of a multidisciplinary team of 8 colleagues. **February 2010 – to date.**
- 4.2. **CITIES FOR LIFE FORUM – ANDEAN COMMUNITY OF NATIONS - CIVIL SOCIETY (SOCICAN).** Lecturer of virtual course on “Cities and Climate Change in Andean Countries: Adaptation and risk management strategies”. Developed texts and PPTs for courses and selected reading and audio-visual materials. Subsequently, provided guidance on the development of modules for virtual courses for students from Peru and other Andean countries. **October 2009 – to date.**

4.3. NATIONAL UNIVERSITY OF SANTA-CHIMBOTE. Post Graduate School – Environmental Management Major. Part-time lecturer of Seminar Thesis. The course consists in giving lectures to post-graduate students on Research Methodology so that they can then prepare their thesis projects. The students' research is then discussed and assessed. **May 2008-March 2009.**

4.4. DIACONIA - Evangelical Lutheran Association in Support of Community Development. Regional Coordinator. Responsible for the work program of three projects: political impact in three watershed areas in the Ancash region; agro-ecological farming and community participation in the Casma river watershed area. **October 1995 – May 2008.**

The Sustainable Rural Development program in the Casma river basin involved the supervision and monitoring of three projects. The main objective was to achieve a political impact with local stakeholders in: Human Resources Management; Food Security and Land-use Planning; Economic and Ecological Zoning, and biodiversity and environmental monitoring. The second project dealt with the implementation and operationalization of agro-ecological production systems and production chains. Similarly, the community participation project was aimed at strengthening the capacity of social stakeholders and OSB to participate in State and Civil Society spaces in the aforementioned project proposals. To this end, the program had a multi-disciplinary team of an average of 15 technical staff.

4.5. SEPAR - Education Services for the Promotion and Support of Rural Development. In charge of the Community Rural Program. Pazos Micro-basin. Huancayo. **1995.**

The program included projects related to agro-ecological farming, aimed mainly at the marketing and primary processing of organic products (mostly native potatoes) and at the training of leaders and promoters in all aspects related to financing. The technical team was made up of 6 contributors, mainly Agronomists and Economists.

4.6. CIPUR - Research and Urban and Regional Projects Center. Director of Agricultural Development. Responsible for the formulation and implementation of projects in the lower and middle basins of the Chillón river. Lima and District of Santiago ICA. **1994-1995.**

The Integrated Rural Development Programme implemented projects aimed at marketing local food crop products in the Lima and Ica markets and at demonstrating the profitability of these products. The Lima project was important due to the pressure being exerted by the city of Lima on agricultural lands (lower part of the Chillón river basin) and the Ica project was significant because it affected migrant farmers from Ayacucho who were forced to leave their lands due to political unrest. These migrants were trained in the management of highly profitable crops, such as artichokes, under a technically modern trickle-irrigation system in eriaza lands. The team was made up of 5 multi-disciplinary technical staff.

4.7. IDMA - Development and Environment Institute. Director of the Eco-development Program for the Marino-Abancay River Basin. Responsible for the formulation and implementation of Sustainable Rural Development Projects in the Ampay National Sanctuary and 8 neighboring Rural Communities. **1990-1994**

The Program involved the implementation of projects aimed at the conservation of a native tree "Intimpa" (*Podocarpus glomeratus*) in the Ampay National Sanctuary. The program also involved working with the eight rural communities settled in the areas surrounding the Sanctuary in topics related to agro-ecological farming, irrigation technology and basic health issues, as well as training leaders, promoters and rural families in issues related to the aforementioned areas. Similarly, the program implemented activities with the population and political leaders of the city of Abancay on issues related to awareness raising and legal regulations for the protection of the environment and the Ampay National Sanctuary. The work team was made up of 15 multi-disciplinary professionals.

4.8. IFEA - French Institute for Andean Studies. Research Project on the Characterization of Production Areas and Systems in the Catahuasi and Tupe Communities. Cañete river basin. **1983-1989.**

Responsible for a research project aimed at the characterization and typology of production areas and systems in a micro-basin of the Cañete river, which is characterized, in the upper sections, as a relic of ancestral agricultural practices with a Proto-Aymara culture and language (Tupe community). The district of Catahuasi (lower part of the micro-basin) had market-oriented production areas and systems. The project work was my post-graduate thesis. The research lasted for 8 years.

5. LECTURER AND PRESENTER

- 5.1. Training courses for professionals and technicians in the areas of Sustainable Rural Development, Organic Production Areas and Systems (coffee and alternative crops) and Rural Communications.
- 5.2. Lecturer and presenter at national and international seminars and workshops on a variety of issues, including: Watersheds, Economic-Ecological Zoning and Land-Use Planning and Management; Rural Development; Agro-Ecological Farming; Environmental Management; Food Security; Production Chains; and other related topics.
- 5.3. Research and development work on watershed areas. i) Economic-Ecological Zoning in the Casma-Huarmey Watersheds. Commissioned by the Regional Environmental Commission of Ancash (2000-2001); ii) Water Resource Management in the Casma River Watershed. Subject of thesis for International Master's Degree. Thesis Sponsor: Dr. Axel Dourejeanni, Natural Resources Director of the Economic Commission for Latin America and the Caribbean, 1999-2000 (CEPAL). Diagnostic study on social stakeholders linked to water resource management in the upper and middle sectors of the Chillón River watershed. Work carried out in 1996 under agreement with CIPUR-Catholic University of Lima and CEPAL (Dr. Axel Dourejeanni).
- 5.4. Development, technical support and monitoring of projects on Sustainable Development, Environmental Management in Watershed Areas, Agro-Ecological Farming, Sovereignty and Food Security; Adult Training.

6. PROFESSIONAL MEMBERSHIPS

- 6.1. Member of the Ancash Regional Technical Commission for Ecological and Economic Zoning.
- 6.2. Representative of the Northern Zone Executive Council of Peru at the "Ciudades para la Vida" Forum.
- 6.3. Member of the Regional Executive Committee of the Ancash Consensus-Building Roundtable on Poverty Alleviation.
- 6.4. Member of the Regional Commission for the Development of the Food Security Strategy – Ancash.
- 6.5. Member of the Technical Consultative Committee for the Management of the Casma River Watershed (COGECUR).
- 6.6. Technical Adviser to FREDEMACC (Frente de Defensa del Medio Ambiente de la Cuenca del Río Casma).
- 6.7. Lecturer at Research Methodologies Course and thesis adviser, Post-Graduate School, University of Santa-Chimbote. Master's Program on Environmental Management.
- 6.8. Executive Secretary of the National Environmental Society.

7. PUBLICATIONS

Various articles, manuals, brochures and newsletters for farmers.

8. OTHERS

- Word processing software: Word 2003-2007.
- Spreadsheet software: Excel.
- Presentations software: PowerPoint.
- Internet and e-mail access (institutional and personal).
- GIS software: ArcView, ArcGis (basic).

EXECUTIVE SUMMARY



HENRRY CESAR PRECIADO CHUNE
Jr. Gamarra Nº 108 - Pampa Grande - Tumbes - Tumbes.
Tel: 52-505356
72-972639131 (cell phone)
#512485 (Rpm)
e-mail: hpreciado@medaperu.org
hencer0414@hotmail.com

II. ENVIRONMENTAL MANAGEMENT EXPERT

For more than 7 years, part of my professional training and work experience has been directly related to the administration and management of the Natural Protected Areas of Northwestern Peru and their respective Buffer Zones: Cerros de Amotape National Park, Tumbes National Reserve (former Tumbes Reserved Area), El Angolo Game Reserve and the National Sanctuary of Tumbes Mangroves, where I am currently working within the framework of the Total Administration Contract.

My professional work experience has centered on the Protection of Natural Resources and Biodiversity and Environmental Sustainability, as well as on the administration and management of Natural Protected Areas, with proven ability for field work, interpersonal and communications skills, as well as the capacity to engage and work as part of a team and under pressure. Furthermore, I am of sound mind and body, I have excellent social skills and I am responsible, honest and highly disciplined, with aspirations to constantly better myself.

My professional experience includes areas such as participatory management and the environment, within the framework of the project on Participatory Management in Natural Protected Areas (GPAN), which included activities related to community scoping and extension, environmental education, Sustainable Economic Activities Program (Programa de Actividades Económicas Sostenibles – PAES) and Monitoring and Control activities, among others. I also have experience in the development and implementation of environmental quality evaluation tools and have knowledge about and have participated in activities related to the monitoring of water resources in the Puyango-Tumbes river basin, as well as experience in the formulation and implementation of environmental studies and assessments, both in Natural Protected Areas and their buffer zones and in their areas of influence.

I have a broad knowledge of computer programs, including Windows XP, Vista, ArcView and AutoCat, and I am an advanced user of Internet tools. I am fluent in Spanish and have basic English skills.

1. PERSONAL DETAILS

- **Nationality** : Peruvian
- **DNI. No.** : 40548211
- **Profession** : Agricultural Engineer
- **CIP Register No.** : 89647
- **Military service record** : 1007713800
- **RUC No.** : 10405482113
- **Age** : 30 years
- **Date of birth** : 14 April 1980
- **Place of birth** : Tumbes
- **Marital status** : Married
- **Driver's license** : A UNO – A 40548211

2. EDUCATION

- Post-graduate studies** : **Master's Degree Candidate** – **Specialization area:**
Environmental Management
Institution : National University of Tumbes
- Graduate Degree** : **Agricultural Engineer**
Institution : National University of Tumbes
Faculty : Agricultural Engineering
Title : BA in Agricultural Engineering
CIP Record No. : 89647

3. FURTHER STUDIES:

- **NATIONAL UNIVERSITY OF TUMBES**
Language Center
Course: "English for Beginners"
Date : 15 January - 10 May 2001.
- **NATIONAL UNIVERSITY OF TUMBES**
Training, Updating and Professional Improvement Center.
Course: "Basic Internet Tools"
Date: March 2000.
- **NATIONAL SERVICE FOR INDUSTRIAL TRAINING - SENATI**
Course: Motorcycle Maintenance and Repair
Date: 03 - 06 March 2005.
- **NATIONAL SERVICE FOR INDUSTRIAL TRAINING - SENATI**
National IT Program
Course: WinOffice Intensive
Date: 27 - 29 June 2005.

4. ACADEMIC ACHIEVEMENTS:

- **Second top-grade average** in class of 1997 – II, National University of Tumbes – Faculty of Agrarian Sciences.
- **Second top-grade average** of graduation class, Faculty of Agrarian Sciences.
- Students representative at the **Council of the Faculty of Agrarian Sciences, National University of Tumbes**, November 1998
- Member of the Executive Council of the **Agricultural Engineering Alumni Association, National University of Tumbes**, March 2003.

5. WORK EXPERIENCE:

Environmental Management Area:

- 5.1 Responsible for environmental issues in the National Sanctuary of Tumbes Mangroves (SNLMT) (a marine – coastal area, listed as a RAMSAR site), an area protected by the Peruvian State through the implementation of a new and innovative process called “Total Administration Contract” which has been implemented by the Canadian NGO MEDA Subsidiary Peru for the past 5 years.

Date : May 2010 – to date.

The duties and responsibilities of my position fall mainly within the framework of two objectives. The first objective is related to mangrove forest rehabilitation and forest cover retention within the SNLMT, while the second objective is related to maintaining the current forest cover of the Dry Forest and to the defragmentation of 50 hectares of agricultural crops within the Buffer Zone of the SNLMT.

In short and more specifically, I am responsible for the following actions:

- Responsible for the forest rangers working within the framework of the Total Administration Contract of the National Sanctuary of Tumbes Mangroves.
- Responsible for the rehabilitation of fragmented and/or degraded ecosystems, gathering baseline data for the characterization and design of rehabilitation plans for mangrove forests and dry forest areas.
- A member of the “Social Tourism” program working together with the technical team of the Tumbes Regional Tourism Directorate.
- A member of Interest Groups Nos. 1 and 2 of the Management Committee of the National Sanctuary of Tumbes Mangroves and its Buffer Zone, responsible for leading actions aimed at reforestation and monitoring in mangrove forest and dry forest areas.
- A member of the CAT Environmental Education Technical Team, within the framework of the project “**Promotion of environmental education as a tool for sustainable development in the Tumbes region**”, which is currently being implemented by the Regional Government of Tumbes.

5.2 Technical officer, responsible for reforestation activities in the Mangrove Forest and Dry Forest areas of the National Sanctuary of Tumbes Mangroves and its Buffer Zone, within the framework of the Total Administration Contract for the NPA – SNLMT. These activities are within the bounds of objectives 1 and 2 of the SNLMT Total Administration Contract. Extensive experience in the rehabilitation of fragmented and/or degraded ecosystems and gathering baseline data for the characterization and design of rehabilitation plans for degraded mangrove forest and dry forest areas.

Date : 2008 - 2009

5.3 Between **November 2004** and **February 2008**, worked as a Consultant within the framework of the projects: Participatory Management in Natural Protected Areas (Gestión Participativa en Área Naturales Protegidas – GPAN) in areas related to the implementation of monitoring and control activities in the SNLMT; Support and Monitoring of Sustainable Economic Activities (Apoyo y seguimiento de Actividades Económicas Sostenibles – PAES) which provided community scoping and extension services and Environmental Education, in the jurisdiction of the National Sanctuary of Tumbes Mangroves and its Buffer Zone.

Date: November 2004 - February 2008.

In short and more specifically, the following actions should be highlighted:

- Member of the Technical Team of the Master Plan for the National Sanctuary of Tumbes Mangroves during the updating and review of the Master Plan of the NPA – SNLMT; 2007 – 2011. From 2005 to 2006
- Coordinator and lecturer in various courses – training workshops, in coordination with education institutions in the Province of Zarumilla. .
- Technical assistant and lecturer in participatory workshops for Directors and Teachers of the Environmental Education Network of the National Sanctuary of Tumbes Mangroves and its Buffer Zone; 2007 – 2009.
- Coordinator and logistic support officer in the preparation and coordination of the short list of applicants for the SNLMT Administration Contract; 2005 – 2007.

Others:

5.4 Judicial Expert, Judicial Box No. 225, Registered with the Registry of Judicial Experts of the Judiciary – Tumbes, 2009 - 2010.

5.5 Private Technical Assistant for major regional crops established through agricultural credits under the Puyango – Tumbes Binational Special Project, PEBPT, 2009.

5.6 Agricultural Site Valuer and Appraiser in the Tumbes Valley – Valuations conducted for the Puyango – Tumbes Binational Special Project, PEBPT, 2009.

5.7 Survey Officer, Fifth Survey Round of ENAPROVE – MINAG, conducted in the Region of Piura; 2004

5.8 Head of Production and Logistics, Municipal Nursery, Municipality of the Province of Tumbes; 2003

5.9 Technical support, Agricultural Production Office, Faculty of Agrarian Sciences, National University of Tumbes (UNT), Campus: Los Cedros and UNT; 2002.

5.10 Intern, Puyango – Tumbes Binational Special Project, “Puerto El Cura” Irrigation Operation and Maintenance Unit, as well as irrigation planning, implementation of work plan for: “IDENTIFICATION OF IRRIGATION COEFFICIENTS AND MODULES FOR RICE (*Oryza sativa*) CROPS – VARIETY NIR I, DIRECT SEEDING, IN THE PUERTO EL CURA IRRIGATION SCHEME”. 2 002.

- 5.11** Promoter and Private Technical Assistant, Getsemani Fruit Orchard, located in the District of San Jacinto – Tumbes.
Date: 1998 – 2008.

III. EXPERT IN LOCAL DEVELOPMENT AND INSTITUTIONAL STRENGTHENING



Erick Henry Sunción Castillo

BA Communication Sciences

Executive Summary

Bachelor's Degree in Communication Sciences, graduated from the Antenor Orrego Private University in Trujillo; diploma in Social Project Design and Management, Pontifical Catholic University of Peru; post-graduate degree in CADEM Marketing, Cesar Vallejo University, Trujillo; 10 years experience in community work in the Coast and Highlands regions of Peru; extensive experience in the development of communication strategies and in working with grassroots organizations, as well as in the development of community participation plans. Also, experience in the management of local development strategies and related mechanisms at the regional and municipal levels, as well as procedures relating to participatory budgets and community mobilization strategies for sustainable development.

Personal Details

- Date of birth: 14 February 1973
- D.N.I.: 18172707
- LM: 100122737
- Marital status: Married.
- Address: Calle 6 de Julio 107 – Tumbes
- E-mail: esuncion_castillo@hotmail.com
- Telephone: 072 - 52-4426 - 972611360 – 972806677 – RMP #732630

Education

Higher education:

- BA in Communication Sciences
"Antenor Orrego" Private University – Trujillo.
- Degree in Communication Sciences.
"Antenor Orrego" Private University – Trujillo.

Post-graduate studies:

- Specialization diploma in:
Social Project Design and Management, Pontifical Catholic University of Peru
- 2009
- Post-graduate diploma in CADEM Marketing
"Cesar Vallejo" University, Trujillo. - 2000

**Work
experience**

- Consultant – Development, implementation and monitoring of outreach strategy for administration contracts and community participation strengthening program for the National Sanctuary of Tumbes Mangroves. SNLMT Administration Contract, NGO MEDA SUBSIDIARY PERU 2010.
- Consultant – Establishment of baseline for National RED Anti-Corruption Project in the Tumbes Region, PRO ÉTICA 2009.
- Consultant – Development, implementation and monitoring of outreach strategy for administration contracts and community participation strengthening program for the National Sanctuary of Tumbes Mangroves. GPAN PROJECT “Participatory Management of Natural Areas”, NGO PROFONANPE, Financed by the World Bank, January 2007 – March 2008.
- Officer in charge of the project “Habilidades para la Vida en Tumbes” (*Life Skills in Tumbes*), financed by TDH – TERRE DES HOMMES HOLLAND, Implemented by the NGO KALLPA, December 2005 – October 2006.
- UGEL Tumbes Supervisor for FDA “Fondo de Desarrollo para la Agricultura” (*Fund for Agricultural Development*), 2006 National census on reading comprehension for 2nd grade school students and 2006 national census for teachers; December 2006.
- Trainer, development projects of the Cooperation Fund for Social Development FONCODES, October 2006.
- General Manager, E & E Natural Food, July 2004 –September 2005.
- Area Assistant for Training and Dissemination, Agrarian Health Development Program – PRODESA – Financed by the Inter-American Development Bank (IDB). National Agrarian Health Service - SENASA. LIMA, February 2002 – March 2004.
- Area Officer for Information, Education and Communication – Training and Community Work. PLANIFAM – JULCAN Project, Financed by USAID. PATHFINDER - PRISMA Implemented by the NGO AGROVIDA. Trujillo. July 2000 – December 2001.
- General Manager, Vistavisión S.R.L Communication and Information Systems. Audio and Video Production Company. January 1999 – August 1999.
- Officer in charge of market surveys organization and development, Cabinet, Trujillo. June 1997.
- Officer in charge of market surveys organization and development, Mermeladas Flory, Trujillo. October 1997.
- Reporter, Radio Antena 1, Trujillo Station.
- Publicity sales agent for agency *Quatro Publicidad*.
- Press photographer, *Facetas* magazine.

Academic training

- “Antenor Orrego” Private University, Faculty of Communication Sciences, Trujillo 1991 – 1997.
BA in Communication Sciences.

Other activities

- Producer and host of radio program “La Voz del Manglar” (*The Mangrove Voice*), NGO MEDA. 2010
- Reporter and host of radio program “Que Buena Vida” (*What a Good Life*), Tumbes and Zarumilla- NGO Calandria. 2010
- Facilitator of Trainer Training Workshops implemented in 2005 – 2006 for project “Habilidades para la Vida”, Tumbes, 40 hours of training.
- Participant in the Workshop on Social Infrastructure Project Management addressed to social trainers and implemented by the Tumbes Office of FONCODES, 05 - 06 October 2006, 13 hours of training.
- Presenter at the Workshop on Participatory Techniques and Methodologies, September – December 2005, 50 hours of training.
- Presenter at the workshop on SEXUAL AND REPRODUCTIVE HEALTH FOR ADOLESCENTS, 40 hours of academic training, June - October 2001, Julcan, Department of La Libertad.
- Trainer at the workshop on SEXUAL AND REPRODUCTIVE HEALTH FOR ADOLESCENTS for trainers, July - December 2001, Julcan, Department of La Libertad.
- Presenter, CROSS-SECTORAL PLAN FOR COMMUNITY DEVELOPMENT IN CARABAMBA, September 2000, Julcan, Department of La Libertad .

ANNEX 4. TERMS OF REFERENCE FOR THE MAIN PROJECT CONSULTANCIES

CONSULTANCY 1: TECHNICAL ASSISTANCE FOR THE STRENGTHENING OF REGIONAL CONSERVATION SYSTEMS

CONSULTANCY OBJECTIVES

Overall objective:

Strengthen the capacities of the Natural Resources Management Directorate to manage the regional conservation system in the project area.

Specific objectives:

- Planning and implementing activities related to the Regional System using a participatory approach.
- Coordinating, from the regional government perspective, the various conservation initiatives to be undertaken in the region, including the project.
- Implementing, in coordination with the relevant agencies within the Regional Government, the commitments undertaken by the region for the implementation of the project.

DUTIES OF THE PROJECT CONSULTANT WITHIN THE FRAMEWORK OF THE REGIONAL CONSERVATION SYSTEM:

- Based on a participatory approach, develop management instruments for the planned implementation of system actions: strategic guidelines, intervention methodologies, regulations, procedural design, etc.
- Coordinate with different Regional Government agencies within the framework of the Project Consultative Committee for the fulfillment of commitments undertaken by the region under agreement signed with SERNANP and MDA for the implementation of the project, which are in turn part of the objectives of the Regional System.
- Propose activities within the Project Operational Plan as part of the YPO of the Regional Government and coordinate their implementation within the project framework.
- In coordination with the Land Unit and the Regional Department in charge of the Regional Conservation System, develop an implementation plan for conservation actions to be promoted by the project in the region.
- Monitor and follow-up the development of proposals for regional conservation areas and their approval by the relevant regional government authorities.
- Supervise the development of master plans for RCAs and coordinate their implementation with RCA Management and the executing agents of eventual administration contracts to be financed by the project.
- Participate in the monitoring of RCAs, NPAs and other conservation modalities supported by the project in the region.
- Coordinate with the Project Technical Team and SERNANP's Land Unit for the implementation of project activities.
- Monitor the implementation of project activities under the responsibility of the Regional Government and prepare quarterly progress reports following the format approved by the Project Management.

QUALIFICATIONS:

- University degree in forest engineering, economics or agricultural, biological and/or social sciences.
- At least 02 years experience working with local communities and public and/or private institutions related to the management and conservation of natural resources and/or environmental management.
- Experience in participatory methodologies for consensus-building among institutions.
- Ability to interact with different stakeholders, including representatives of public and private institutions and rural communities.
- Good synthesis skills.
- Knowledge of the work area.

CONSULTANCY 2: TECHNICAL SURVEYS FOR THE IDENTIFICATION OF PRIORITY SITES, CONNECTIVITY ANALYSIS AND DEVELOPMENT OF REPRESENTATIVENESS AND CONNECTIVITY INDICATORS FOR THE MANGROVE ECOSYSTEM – BIODIVERSITY COMPONENT

CONSULTANCY OBJECTIVES

Overall objective:

Identify priority sites within the project area to be assigned for biodiversity conservation in the Region.

Specific objectives:

- Systematization/processing of available information on different biodiversity components within the project intervention area in the Region.
- Identification of information gaps relevant to biodiversity conservation.
- Field checking of collected information.
- Identification of conservation priorities map from the biological diversity perspective.

CONSIDERATIONS FOR THE IMPLEMENTATION OF THE CONSULTANCY:

- The consultant should coordinate with the Head of the Regional Conservation System of the relevant region for the implementation of activities.

Phase 1: Work plan

- Coordination of work:
In conjunction with the Head of the Regional Conservation System, a consultancy work plan should be developed within the overall work plan for the Regional Conservation System.
- Systematization/processing of information:
Official information will be requested from the Regional Governments involved, as well as from other public and private institutions. The information collected (cartographic databases, statistical information, climate data, biological data, etc.) will be duly organized in a geographic information system (GIS).

Phase 2: Review of conservation values and boundaries of priority areas

- Prioritization of patches: Based on the information gathered, the largest and most significant patches of natural plant resources will be selected to make up the expected target.
- Review of consistency between priority patches identified for the project.
- Review of conservation values of priority areas so as to assess their current suitability, and re-demarcation of boundaries as needed.

Phase 3: Identification of conservation and connectivity indicators for priority conservation sites

- Identification of conservation indicators for priority conservation sites classified by their significance for biodiversity conservation. Indicators will be developed for the priority conservation sites prioritized in the previous phase so as to assess their conservation status. This will require an evaluation of proposed areas to validate the feasibility of proposed indicators.

QUALIFICATIONS

- University degree in forest engineering, agricultural and/or biological sciences, or related disciplines.
- At least two years professional experience in biodiversity, flora or fauna assessments.
- Knowledge of geographic information systems.
- Good synthesis skills.
- Knowledge of the work area.

CONSULTANCY 3: TECHNICAL SURVEY ON LAND USES, TENURE AND STATUS TO DEFINE MANGROVE ECOSYSTEM CONSERVATION MODALITIES – CONSERVATION COMPONENT

CONSULTANCY OBJECTIVES

Overall objective:

Identify land uses and conservation status in the project target area to be assigned within the region.

Specific objectives:

- **Identification of major land uses in the project target area.**
- **Identification of land conservation status in the project target area.**

CONSIDERATIONS FOR THE IMPLEMENTATION OF THE CONSULTANCY:

- **The consultant should coordinate with the Head of the Regional Conservation System of the relevant region for the implementation of activities.**
- **The indicators to measure conservation status should conform to both the World Bank's METT SP2 indicators and to the indicators identified for specific sites as appropriate.**

Phase 1: Information search and collection

- **Development of work plan for the consultancy: Based on the arrangements made with the Head of the Land Unit, indicators and methodologies to be used will be identified, as well as assessment procedures, including the areas covered by the three outputs to be submitted.**

Phase 2: Report on conservation status indicators to be used in the project target area

- **Gathering of field information: The consultant will report on progress made regarding the indicators identified for the project target area in the region following the timetable agreed in the approved work plan.**

QUALIFICATIONS

- **University degree in forest engineering, agricultural and/or biological sciences, or related disciplines.**
- **At least two years professional experience in the conduction of assessments on natural resource status, use or related fields.**
- **Good synthesis skills.**
- **Knowledge of the work area.**

CONSULTANCY 4: TECHNICAL SURVEYS FOR THE IDENTIFICATION OF PRIORITY SITES, CONNECTIVITY ANALYSIS AND DEVELOPMENT OF REPRESENTATIVENESS AND CONNECTIVITY INDICATORS FOR THE MANGROVE ECOSYSTEM – ENVIRONMENTAL SERVICES COMPONENT

1. CONSULTANCY OBJECTIVES

Overall objective:

Identify priority sites within the project area to be assigned for biodiversity conservation based on the environmental services provided in the Region.

Specific objectives:

- Identification of major environmental services provided by the ecosystems in the Region.
- Identification of sites subject to environmental risk and land-use change.
- Field checking of collected information.
- Identification of conservation priorities map from the environmental services perspective.

2. CONSIDERATIONS FOR THE IMPLEMENTATION OF THE CONSULTANCY

- The consultant should coordinate with the Head of the Regional Conservation System of the relevant region for the implementation of activities.
- The implementation of this assignment will require close coordination with the consultancy on “Identification of priority sites for conservation – Biodiversity component”.

Phase 1: Information search and collection

- Literature review regarding major environmental services and environmental degradation risks: A preliminary identification of environmental services of major significance for the region and environmental degradation risks will be conducted.
- Prioritization of environmental services: Once environmental services are identified, a set of criteria will be established to identify the areas with higher or lower potential to provide such services. These criteria may include, for example, current and future climate features, presence of natural vegetation, landslide risk, number of beneficiaries, and contribution to the well-being of the population, among others. This work should be coordinated with the Head of the Regional Conservation System.
- Selection of criteria to assess environmental risks and land-use changes. Once the main land-use change and environmental degradation risks are identified, a set of criteria will be established for the development of a map of potential land-use change and land ecosystem vulnerability. To this end, existing information on current land uses, trends in the use of natural resources and other relevant aspects will be used.

Phase 2: Development of first draft proposal for priority conservation sites based on their significance for the provision of environmental services and environmental degradation risks

- Mapping of significant areas for the provision of environmental services: The development of this output will require location maps of providers of each environmental service identified as well as location maps of existing beneficiaries of each of these environmental services. At the same time, data will be collected on the number of beneficiaries and their use of each environmental service.
- Mapping of environmental degradation risks: Based on the criteria and indicators approved during the first workshop, a map will be developed to assess the level of risk of land-use change and environmental degradation.

Phase 3: Development of first proposal for priority conservation sites

- In coordination with the consultancy on “Identification of priority conservation sites in the mangrove ecosystem – Biodiversity component” and the head of the Regional Conservation System, a map of priority conservation sites will be developed on the basis of the output of the previous phase with areas prioritized according to their contribution to biological diversity conservation and connectivity requirements.

Phase 4: Identification of conservation and connectivity indicators for priority conservation sites on the basis of environmental services and environmental degradation risks

The following activities will be implemented in this phase:

- **Development of conservation indicators for conservation sites prioritized according to their significance for conservation based on the provision of environmental services or the risk of environmental degradation: Indicators will be developed for the conservation sites prioritized in the previous phase so as to assess their conservation status. This assignment will require an evaluation of the target areas to validate the feasibility of the indicators proposed.**

QUALIFICATIONS

- **University degree in forest engineering, agricultural and/or biological sciences, or related disciplines.**
- **At least two years professional experience in environmental services, economic valuation of resources, feasibility studies on natural resource harvesting, or related fields.**
- **Knowledge of geographic information systems.**
- **Good synthesis skills.**
- **Knowledge of the work area.**

CONSULTANCY 5: TECHNICAL SURVEY ON LAND USES, TENURE AND STATUS TO DEFINE MANGROVE ECOSYSTEM CONSERVATION MODALITIES – LEGAL COMPONENT

CONSULTANCY OBJECTIVES

Overall objective:

Identify land tenure status and rights in the project target area to be assigned within the region.

Specific objectives:

- Identification of land tenure status in the project target area.
- Identification of land rights in the project target area.

CONSIDERATIONS FOR THE IMPLEMENTATION OF THE CONSULTANCY:

- The consultant should coordinate with the Head of the Regional Conservation System of the relevant region for the implementation of activities.
- The minimum requirements established by SERNANP for regional conservation areas should be used as reference in the collection of information.

Phase 1: Information search and collection

- Development of work plan for the consultancy: Based on the arrangements made with the Head of the Land Unit, the methodologies to be used in the collection of information on land tenure and rights in the project target areas will be identified, including the areas covered by the three outputs to be submitted.

Phase 2: Report on land tenure status and rights in the project target area

- Gathering of field information: The consultant will report on progress made regarding the identification of land tenure status and rights in the project target area in the region following the timetable agreed in the approved work plan.

QUALIFICATIONS

- University degree in Law.
- At least two years professional experience in land surveys and property registers, identification of land rights, or related fields.
- Good synthesis skills.
- Knowledge of the work area.

ANNEX 5. Recommendations of the 41st ITTO Expert Panel and resulting modifications

Expert Panel Recommendations	Resulting modifications
1. Follow the adequate format as per ITTO's new Project Formulation Manual (Third edition, 2009).	The project proposal has been revised following the format stipulated in the ITTO Manual (Third edition, 2009).
2. Clarify the origin of the project, redefine the key problem and review the problem analysis, and based on the aforementioned, reassess and reduce the outputs required to achieve the objectives, while considering current outputs as activities; rewrite the logical framework accordingly and provide proper indicators and assumptions.	The origin of the project has been clarified; the key problem has been redefined; project outputs have been reduced to 6; the logical framework has been re-drafted and indicators and assumptions have been revised.
3. Explain how and to what extent the project will contribute to the objectives of the ITTA and the ITTO Action Plan.	The project contribution to the objectives of the ITTA and the ITTO Action Plan (2008 - 2011) has been described in detail.
4. Clearly explain how the proposal conforms to national forest policies.	Project conformity to SINANPE's forest policy and priorities has been explained in detail.
5. Provide clear indications and or maps on the exact location of the estuaries.	Maps have been included showing all project areas and the Mangrove /Dry Forest Biological Corridor has been added as an additional target area.
6. Further develop the project's social, cultural, environmental and economic aspects; the institutional set-up and organizational issues; the stakeholders' involvement in the formulation of the project; and the project's long-term sustainability after completion.	The project's social, cultural, environmental and economic aspects have been further developed. An analysis of the stakeholders' involvement in the project has also been included.
7. Revise the work plan based on the newly defined outputs and activities.	The work plan has been revised.
8. Provide detailed budgets by component and by source of funding, as per the examples in the new manual on project formulation, and verify all calculations, particularly as regards the Executing Agency's administrative costs, which cannot be included under the ITTO budget.	The budget has been prepared following the format stipulated in the ITTO Manual.
9. Adjust the costs for ITTO monitoring and review to US\$10,000 per year, include US\$15,000 for mid-term/ex-post evaluation, and recalculate ITTO's Programme Support Costs so as to conform to the standard of 8% of total ITTO project costs.	Budget adjustments have been made as requested.
10. Provide terms of reference for key project personnel and for the national and international consultants.	The terms of reference have been revised.
11. Clearly present the project areas of concentration.	The project areas of concentration are the mangrove forests along the northwestern coast of Peru.
12. Clearly demonstrate what MEDA/MDA will do in Tumbes and Piura Regions.	The responsibilities of MEDA/MDA as project executors have been described in detail, including a description of their intervention in the Tumbes and Piura Regions.
13. Clearly explain how the project results will be mainstreamed into national policies and plans.	The proposal now includes an explanation of how the project results will be mainstreamed into the national policies of Peru within the framework of decentralization.
14. Include an annex that shows the recommendations of the 41st Expert Panel and the respective modifications in tabular form. Modifications should also be highlighted (bold and underline) in the text.	This annex shows the revisions made in the text; the modifications were marked in blue*. <i>(* Note: the copy received was not marked.)</i>

ANNEX 6. Recommendations of the 42nd ITTO Expert Panel and resulting modifications

Expert Panel Recommendations	Resulting modifications
1. Clarify the origin of the project and link it to the key problem	The project origin has been clarified and linked to the new key problem – Page 6
2. Further explain how the proposal conforms to national forest policies	It has been further explained how the proposal conforms to national forest policies – Page 7
3. Revise the Logical Framework Matrix to make it consistent with the problem tree and use qualitative and quantitative smart indicators in adherence with the ITTO manual for project formulation	The problem and objectives trees have been revised; the logical framework matrix has also been revised including outcome and impact indicators. The key problem has been redefined – Pages 13 - 18
4. Reduce the outputs required to achieve the objectives to not more than three and verify that these are consistent with the problem tree and the logical framework matrix	The number of outputs has been reduced to 03, which are consistent with the problem tree and the logical framework matrix. However, a 4th output has been added in relation to project management – Page 19
5. Revise and consolidate the proposed activities as a function of each of the 3 remaining outputs	The proposed activities have been consolidated as a function of each of the 3 project outputs, amounting to a total of 7 activities – Page 19
6. Review the work plan taking into account the two prior recommendations	The work plan has been redrafted using ITTO ProTool software – Page 20
7. Provide greater details as regards the project's long-term sustainability after completion, and also by clarifying stakeholders' involvement	Greater details have been provided regarding the sustainability of the project – Page 26 The involvement of stakeholders has also been clarified – Pages 11 and 12
8. Further breakdown the master budget by activities, the consolidated budget by component and provide detailed in the itemized budgets by source of funding, as per the examples provided in the ITTO Manual on Project Formulation. Transfer the refund of pre-project costs to the counterpart budget, as ITTO cannot cover this item	The budget has been restructured based on the consolidation of outputs and activities and using ITTO ProTool software; therefore, the tables presented in the project budget are those contained in the software – Pages 21 – 25 It should be pointed out, however, that table 3.4.1 ("Consolidated budget by component") in the ITTO software provided was empty so it was necessary to prepare it manually.
9. Further explain how the project results will be mainstreamed into national policies and plans	It has been further explained how project results will be mainstreamed into national policies and plans – Page 10
10. Include an annex that shows the recommendations of the 41st and 42nd Expert Panels and the respective modifications in tabular form. Modifications should also be highlighted (bold and underline) in the text	This table is attached detailing the modifications made, including page numbers. All modifications have been highlighted in the text (in red and underlined).

ANNEX 7. Recommendations of the 43rd ITTO Expert Panel and resulting modifications

Expert Panel Recommendations	Resulting modifications
1. Further expand on the origin of the project and clearly describe its links to the key problem and logical framework matrix	The origin of the project has been described in more detail – Pages 7 and 8
2. Strengthen the participatory mechanisms through which the stakeholders are to be involved in the implementation of the project	The role of stakeholders in project implementation has been further explained – Pages 14 and 15
3. Reinforce the strategy for the sustainability of the project's activities and outcomes in the long term after project completion	Strategic arrangements to ensure the sustainability of project activities have been defined in accordance with SINANPE's financial sustainability strategy – Pages 29, 30 and 31
4. Include detailed budgets by component and source as per the components and subcomponents described in table 3.4.1: Consolidated budget by component, i.e. transfer the details from table 3.4.1 to tables 3.4.2, 3.4.3 and 3.4.4	The details of budget subcomponents shown in table 3.4.1 have been transferred to tables 3.4.2, 3.4.3 and 3.4.4 by financing source. All changes have been marked in bold and underlined in the printed copy and in red, bold and underlined in the digital version – Pages 23 - 27
5. Provide terms of reference for the project's key personnel and major sub-contracts, rather than attaching lengthy curricula vitae	Annex 4 has been added with the terms of reference for five consultancies – Pages 55 - 60
6. Include an annex that shows the recommendations of the 43rd Expert Panel and the respective modifications in tabular form. Modifications should also be highlighted (bold and underline) in the text	This table is attached detailing the modifications made, including page numbers. All modifications have been highlighted in the text (in bold and underlined).