Pilot Project Concept Note

Project Summary

- Project name: **Piloting Climate Change Adaptation and Mitigation Strategies through Payments for Ecosystems Services in Mangroves and Wetlands in Panama**

- Project location: Republic of Panama, Central America

- Project length and dates: 3 years, starting before June 2010

- Contact person: Sander van den Ende, Forest Carbon Specialist, svandenende@tnc.org

- Statement of project goal: To effectively reduce the climate change vulnerability of local communities located within or nearby 2000 hectares of mangrove and wetland protected areas by financing their restoration and conservation through payments for environmental services.
  - Names of project proponents and main project implementing organization:
    - National Environmental Authority of Panama, hereafter ANAM for its abbreviation in Spanish.
      - The Climate Change & Desertification Unit
      - The Protected Areas Unit
    - The Nature Conservancy, hereafter TNC
  - Total project cost: 1,200,000 euros
  - Total projected estimated carbon credits to be generated over carbon project lifetime (22 years): (**from Raul Gutierrez, ANAM internal communication)*

ACTIVITY	SURFACE AREA(ha)	CARBON(t/ha)	TOTAL CARBON (t)	TOTAL CO2 (t) *factor 3.67*
RESTORATION	1,400	172.4	241,360	885,791.2
REDD	600	351.9	211,140	744,883.8
TOTAL			**452,500**	**1,660,675**

** estimate to be revised during the development of the PDD*

- Amount of funding being requested from DFN: 800,000 Euros
- In kind matching funds could be provided by ANAM and TNC, if necessary

WHO- DETAILS OF THE PROJECT PROPONENT(S)

a. Contact details

Table 1. Contact Details

Name	Contact details	Role / responsibility
Dario Luque	Specialist Protected Areas Unit, ANAM Dario.luque@anam.gob.pa	CBD Focal Point, ANAM-CBD Liason and Project Coordination
Sander van den Ende	Forest Carbon Specialist, TNC svandenende@tnc.org	Project Implementation and Reporting
Leslie Marin	Director Climate Change and Desertification Unit, ANAM Leslie.marin@anam.gob.pa	Project design and facilitation
Adrian Benedetti	Director Protected Areas, ANAM Adrian.benedetti@anam.gob.pa	Project design and facilitation

b. Overview of organization's relevant expertise and experience

ANAM. The Environmental Authority of Panama (ANAM for its acronym in Spanish) is the prime authority which regulates and enforces all environmental policies and laws in Panama, created by Law 41 of 1998. ANAM is an autonomous body, governed by a General Administrator with the level of Ministry of Environmental Affairs. The organizational structure of ANAM is composed of various functions, from the political level which is the highest decision making body, to the operational level. ANAM is the official agency in charge of managing the protected areas, through the National System of Protected Areas (SINAP). ANAM is the national focal point for both the Biodiversity Convention and the Climate Change Convention.

TNC. The Nature Conservancy is a US based environmental non governmental organization with a registered office the Republic of Panama. TNC has operated for the past 17 years in Panama with outstanding achievements in strengthening protected areas management through financing and science based conservation strategies. TNC has helped fund and set up the Debt for nature swap agreements for Chagres National Park (US$10,000,000.00) and the Darien National Park (US$10,930,312.63), both of them providing long term financing for Panama protected areas system. TNC has pioneered carbon projects, starting in 1996 in Bolivia where The Noel Kempff Climate Action Project, the largest effort of its kind, is expected to avoid and/or mitigate the release of up to 5.8 million tons of carbon dioxide into the atmosphere over 30 years by preventing logging and agricultural conversion of the land.

c. Short Description of other project partners

The project will work in conjunction with the Aquatic Resources Authority of Panama (ARAP for its acronym in Spanish). ARAP was created in November 2006 and has jurisdiction over all coastal ecosystems including wetlands and mangroves, with the exception of protected areas which are the jurisdiction of ANAM.

WHERE – Location and description of the wetlands

The project will be implemented in a subset of the Protected Area wetlands and buffer zones from the following preselected list. The subset will be achieved through a selection process which will consider important criteria established by the National Climate Change Strategies (including REDD strategy), and Protected Areas Strategy (using National Gap Analysis criteria) and will strive to maximize the triple bottom line[1] on returns on the investment in carbon credits as well as providing useful lessons learned to government of Panama for financing a national forest carbon strategy.

Table 2. Initial List of Candidate Wetlands

Name	Punta Patino, Darien	Bahia de Panama	Area de Manejo Especial Municipal de Chame	Cienaga de la Macana	Cenegon de Mangle	Sarigua	Pablo Barrio	Isla Canas	Damani-Guariviari	San San Pond Sak
Location and size in UTM 1927 Zone 17 N & Hectares	807,465 W 918,115 N 13, 200 ha	755,652 W 964,325 N 82,652 ha	628,588 W 954,487 N 5,323 ha	547,894W 897,598N 930 ha	554,271W 894,985N 852 ha	558,557 W 889,131 N 4650 ha	612,182 W 836,493 N 15,031 ha	576,750 W 813,697 N 24,284 ha	418, 137 W 993, 015 N 25,274 ha	344,526 W 1,041,567 N 16,635 ha
Type of Wetland	Mangroves	Mangroves	Mangroves	Mangroves	Mangroves	Mangroves	Mangroves	Mangroves	Mangroves & Flood forest	Mangroves & Flood forest
Management category	Humedal de Importancia Internacional	Area de Uso Multiple	Area de Uso Multiple	Area de Uso Multiple	Refugio de Vida Silvestre	Parque Nacional	Refugio de Vida Silvestre	Refugio de Vida Silvestre	Humedal de Importancia Internacional	Humedal de Importancia Internacional
IUCN equivalent	IV	IV	VI	VI	IV	II	IV	IV	IV	IV
Other	RAMSAR	RAMSAR							RAMSAR in process	RAMSAR
Ecoregion	Gulf of Panama Mangroves	Gulf of Panama Mangroves	Gulf of Panama Mangroves	Gulf of Panama Mangroves	Gulf of Panama Mangroves	Gulf of Panama Mangroves	Gulf of Panama Mangroves	Gulf of Panama Mangroves	Bocas San Mangrove	

[1] Considering Economic, Social and Environmental Returns on the Investment

WHY – Status of the wetland

Panama's high coast to land ratio make coastal ecosystems and communities particularly vulnerable to climate change. With 1,813.38 km2 (CATHALAC, 2007) of mangrove forest covering 2.4% of its total surface area, ecosystem adaptation is an important strategy to reduce vulnerability to climate change impacts. While the Panamanian constitution and associated legal instruments strive to maintain the integrity of its coastal ecosystems (including mangroves) competing interests, conflicting policies, weak governance and a lack of incentives for protection has resulted in past and potential continued conversion of mangroves and associated ecosystems.

All mangroves and associated flood forests (mangroves hereafter) in Panama are state-owned, non transferable, and thus to a degree protected from conversion. To regulate this resource, there are a variety of legal mechanisms and associated institutions that control and regulate access and usage to mangroves. In order of importance, by institution and the activity they regulate these are: The Authority of Aquatic Resources (ARAP) which has the objective to administer, regulate and enforce measures which guarantee the sustainable use coastal resources (including mangroves and associated wetlands); ANAM with the objective of the protection, restoration and sustainable use of forests (thus including mangroves), which includes the granting of tourist concessions through approving Environmental Impact Assessments; the Ministry of Housing and Treasury for granting shrimp farm concessions, the Ministry of Agricultural Development for regulating cattle farming and rice production; the Ministry of Housing for regulating housing developments. Despite and in some cases because of the various authorities and interest groups, mangroves are under increasing threat of conversion.

The degrees of existing and potential threats vary proportionally with population densities. According to ANAM's forest cover maps, in the period 1900- 2000 approximately 200 ha of mangroves were lost per year (Gutierrez, internal communication). A recent comprehensive study carried out by CATHALAC[2] (2007) employing satellite imagery and extensive field work, found indices of absolute mangrove loss as high as 21% in populated areas and negligible in unpopulated areas. . The mangroves losses are directly related to agricultural conversion, shrimp farming, housing development and a high but not quantified degree of degradation due to forest product extraction. Degradation represents an insidious threat as all mangroves represent an important source of artisanal income for firewood and a variety of timber and non-timber forest products, activities which receive varying degrees of regulation. Expert opinions agree that the traditional (agriculture) and emerging (infrastructure) conversion threats will reach unpopulated areas in direct proportion to Panama's fast economic and population growth.

[2] http://www.cathalac.org./manglaresvspesqueria/

Despite these trends mangroves afford a high representation within Panama's National Protected Areas Network; with 36.7 % of all mangrove Ecoregions[3] in Panama under various categories of declared protection. Panama's Protected Areas System, while ambitious, ie/covering 38% of total national terrestrial surface area, it is vastly over powered by development pressures. Almost all protected areas include private lands, recent study found rates of fragmentation in National Protected Areas as high as those in neighbouring private lands (ANAM unpublished, 2007).

WHAT - Expected project outcomes

Goals

The main goal of the project is to effectively reduce the climate change vulnerability of local communities located within or nearby 2000 hectares of mangrove and wetland protected areas by financing their restoration and conservation through payments for environmental services. The payments will be funded by the project and carbon credits sales generated by protection and restoration activities. The activities will benefit local communities through income generation, providing sustained access to a multitude of mangrove and wetland resources and through reducing their vulnerability to impacts of climate change (storm surges, flooding, etc). The project will provide an example of an effective ecosystems based adaptation strategy through which important legal and institutional lessons can be transmitted to government partners in their commitments under the Climate Change Convention and the Convention of Biological Diversity.

Objectives

1. *Reducing coastal vulnerability to climate change impacts through the restoration and protection of 2000 hectares of mangroves and wetlands*

    - Design of Community Based Restoration and Protection Program designed to comply with CDM or VCS and CCB Standards
    - Implementation of Community Based Protection and Restoration Management Plans
    - Certified Carbon Credits sold under CDM or VCS and CCB Standards

2. *Producing verifiable benefits to local and indigenous coastal communities-*

[3] This covers 38.1%, 28.1% and 17.6% of the entire Bocas del Toro - San Bastimento - San Blas mangroves Mangrove, Gulf of Panama Mangrove, and Pacific Moist Forest Mangrove Ecoregions respectively

- Reduction of vulnerability to climate change through coastal wetland protection and restoration of 2000 ha
- Income generation to communities through equitable payments for environmental services (protection and restoration)
- Sustained access to mangrove and wetland resources (food, water, spiritual) through participative management planning and capacity building
- Establishment of long term funding mechanism to benefit communities through assisting in diversifying income generation

3. *Implementing pilot project to inform National Climate Mitigation Strategy*
   - Carbon rights and land tenure defined
   - Carbon registry and financial management structure
   - Compliance with CBD and UNFCC commitments

Major Outcomes:

1. Climate Change Mitigation

The project will mitigate climate change through carbon sequestration taking place on up to 1400 hectares and avoiding the carbon emissions of up to 600 hectares through avoided deforestation and degradation through improved management and protection. The project will show how Protected Areas and buffer zones are a critical component of Panama's national climate change mitigation and REDD strategy and will comply with early action commitments through takig into account results of the Ecological Gap Analysis of Panama's Protected Areas System.

2. Climate Change Adaptation

The project will result in the use of mangrove and wetland protected areas and surrounding buffer zones as tools for adaptation to climate change. The project will provide a viable example of Ecosystems Based Adaptation, reduce vulnerability of coastal areas to floods and storm surges and will inform the national climate change adaptation strategies through lessons learned.

3. Community Benefits

The project will generate income for local communities who will be given equitable payments for the environmental services of the Protected Areas and surrounding buffer zones. The improved management and protection of mangrove and wetland resources with provide food security to sustained access to the non timber forest products associated with wetlands and mangroves. Historical cultural and spiritual access will be maintained and enforced as an important part of the management plans.

Wetland aspects:

To improve local communities' adaptation to climate change, the project intends to avoid deforestation of 600 ha and restore at least 1,400 hectares of mangrove and wetland forests. The project will include measures to reduce degradation through over harvesting and as such will impact positively not only communities' livelihood, but also the flora and fauna species populations which are commonly harvested. The project will provide positive impacts on the function of mangrove forests as habitat for a diverse flora and fauna[4]. In addition Non Timber Forest Products like the traditionally harvested fish, crustaceous, molluscs, bivalves and a variety of timber species will be managed as per sustained harvest criteria using precautionary principles.

The project will work closely with ANAM and ARAP, in the design and implementation of multiple use protected areas forest management plans which include provisions for protection, sustained harvest and restoration. The project will also work closely with municipal governments on defining zoning rules in conjunction with national efforts to promote processes of "Planes de Ordenamiento Territorial". The project will build capacity within regional offices of ANAM and ARAP in order to assure that technical assistance and enforcement is delivered at the field level.

Communities and indigenous communities will be involved in management training and will receive payments for environmental services per verified impacts.

Community aspects:

In order to ensure permanence of carbon credits the project will directly involve and benefit local and indigenous communities through payments for environmental services. Local communities will be contracted directly to carry out environmental services (restoration & protection activities) such as nurseries, planting, maintenance and sustained harvest management. Training and capacity building will be delivered to local communities in order to insure they comply with contractual commitments under the improved management plans. Besides the additional income generation and food security provided by improved management of the resource, communities will retain culturally historical access to mangroves and wetland use. Because it is foreseen that carbon credits alone will not offset opportunity costs of competing land uses, the project will collaborate with other initiatives which ensure that communities will receive sufficient long term economic alternatives. The feasibility of a trust fund to provide long term support to economic alternatives start-ups will be explored depending on the revenue generated from the carbon credit sales and the financing options available.

Carbon related aspects:

[4] For a complete list please consult http://www.cathalac.org./manglaresvspesqueria/

The project will generate carbon credits through the restoration of converted mangrove areas and the avoided deforestation of mangroves under demonstrable threat. The project expects to protect and restore at least 2,000ha with up to 1,400ha of mangrove areas undergoing restoration through direct planting and maintenance. Protection will include absolute protection of area of high biodiversity value and sustained harvests to allow for continued community benefits. Special attention will be given to measures which reduce degradation through improved planning of timber and non timber forest products harvesting.

The project will quantify and monitor the change in all carbon pools according to the rules set out under IPCC Afforestation, Reforestation and Deforestation Guidelines and will strive to market the carbon credits in the voluntary market under the Voluntary Carbon Standard (VCS) and the Climate, Community and Biodiversity Alliance (CCB Standard). Carbon credits will be awarded to the registered landowners and be administered by the National Environmental Authority through its carbon registry. Landowners will enter into a contract with the National Environmental Authority which specifies the quantity/location of land, deliverable credits and the rules and responsibilities of both parties. In the case of state owned portions of the protected areas, the local Protected Area Office will be contracted in a similar fashion as private landowners. The project will work closely with ARAP in order to synergize on conservation and enforcement of surrounding mangroves under their jurisdiction.

Major assumptions, risks and threats to achieving outcomes:

The project is designed based on the assumption that a viable market for carbon credits generated by restoration and avoided deforestation will continue to exist post 2012. The project design assumes that a national carbon registry or a functional model thereof, to be administered by ANAM will be accepted by stake-holding Ministries. The project assumes that a government run carbon registry will be administered in a transparent and efficient manner which maximizes downstream benefits. The project assumes that the prices on the market will make the venture a viable investment. The project assumes that the investor is willing to receive less than market value.

HOW – Project description

Table 3: Project summary matrix

Project goal: To provide a practical example for implementing Panama's national climate change and protected areas strategies through pilot proje which stimulate the protection and restoration of threatened key mangroves and wetlands in Panama through Payments for Environmental Services, ther benefiting local communities through income generation, sustained access to mangrove and wetland resources and reduced vulnerability to climate cha impacts (flooding).			
Objectives	**Outcomes**	**Activities**	**Deliverable outputs**
Reducing vulnerability to climate change impacts through the restoration and protection of 2000 hectares of mangroves and wetlands	Decreasing the vulnerability of coastal communities through the improved protection and restoration of mangroves and wetlands. Utilization of ecosystems based adaptation with benefits to communities including income generation, resource use & food security and assured continued access to historical tradition and spiritual use.	Design of Community Based Restoration and Protection Program designed to comply with CDM or VCS and CCB Standards Implementation of Community Based Protection and Restoration Management Plans Coastal wetland protection and restoration of 2000 ha Production and Sale of Certified Carbon Credits sold under CDM or VCS and CCB Standards	Forest protection and management plan approved-validated by ANAM Participative community based mangrove/wetland management program Project idea note, Project Design Docume validated by CDM or VSC and CCB 1400 ha mangrove/wetland restored through reforestation and 600 ha mangrove/wetland protected from conversion
Producing verifiable benefits to local and indigenous communities	Training and capacity building delivered to allow communities to participate in emerging environmental services markets. Increased income generation through protection and restoration services provided by the local communities. Management plans produced out of participative processes which take into account the importance of community access and responsible use of mangrove and wetland ecosystems. Carbon credit income will be administered to support income generation activities over the expected carbon project lifetime (22 years)	Administration of contacts which deliver equitable payments for environmental services in return for community based protection, restoration, and sustained harvesting practises Capacity building for sustained yield harvesting and maintenance of conservation values Establishment of long term funding mechanism to benefit communities financed through carbon credits	Ecological and socio-economic monitoring program (baselines, progress reports) Multiple use mangrove/wetlands managemen plans. Equitable payments for environmental services contracts for community members Possible trust fund established which wi finance diversified income generating activities
Implementing pilot project for National Climate Mitigation Strategy	Concrete example of viable financing and implementation of climate adaptation and mitigation strategies. which can be implemented through an "upscalable" model. Improved compliance with CBD and UNFCC commitments and reduction of overlapping commitments.	Carbon rights and land tenure defined Carbon registry and financial management structure Review of project objectives and activities and harmonization with CBD and UNFCC commitments	Definition of carbon rights and land tenure. Carbon registry and management structure which can generate and manage projects under the national mitigation and adaptation strategy. Compliance with CBD and UNFCC commitment

Annotated technical description of project activities

The project will be carried out in 3 phases: Design, Implementation & Exit, with certain activities of each phase will be carried out during prior or subsequent phases.

Design

The first phase will focus on the design and planning of the project. The candidate list of mangroves and wetlands will be reduced to those protected areas and surrounding buffer zones which most elegantly fit the goals of the project. Communities will be consulted and given free and prior informed consent to participate in the program. Comprehensive management, operational and monitoring plans', using participatory techniques, for the restoration, protection and measuring of project impacts will be drawn up. A Project Idea Note and Project Design Document will be submitted for validation to the CDM or VCS and CCB. A review of existing working examples of governmental payment for environmental services programs in Central America (Mexico, Guatemala, Costa Rica) will be carried out. A presentation consultation of local possible adaptations with the relevant institutions will take place. A technical description of the fund structure and the carbon registry complies with the accounting rules of the UNFCC. The administrative costs and downstream benefit sharing of carbon revenues will be defined. Legal implications of carbon rights, land tenure and payments will need to be exhaustively explored.

Implementation

The restoration, protection and monitoring activities of the selected mangroves and wetlands will take place. Training, capacity building and support will be carried out in order for community members to provide contractual restoration and protection services to the project. Training will focus on building capacity for management plan sub-programs; nursery, planting, maintenance, protection, and harvesting techniques according to sustained yield principles and maintenance of high conservation values. Special attention will be given to community administrative skills in order to ensure compliance to contracts. Community based organizational structures and responsibilities will be defined and formed to implement management plan subprograms and contracts will be closely monitored in accord with goals set out in the management plans. Protection plans will be enforced by ANAM and ARAP officials and where relevant and specialized training and support will be given to field staff. Legally defined models of co-management will be tested and if feasible implemented by the relevant authorities and communities.

Exit

The exit strategy underpins the logic of the financial model to be used and as such will be implemented throughout the project implementation. The management structures needed to be in place will be assessed by the relevant accredited carbon certification standard and a schedule for carbon emissions will be agreed upon. It is estimated that the project will generate tranches of carbon sales, every 3 years, starting during the last year of the current project. The subsequent income will be administered in a transparent manner with the aim to maintaining the long term objective of the management plans produced by this project. The institutional structure of the carbon registry and its obligations (ie-brokering credits, reporting to national accounting system and monitoring project compliance) will be defined and made operational in relation to the implementing agency (ie-ANAM's field office and community based organization). A transparent and equitable system of payments will ensure that community members receive continued payments for their compliance to the environmental standards

defined in the management plans. Compliance will be administered and monitored by the ANAM field offices and reported to the carbon registry. The viability of a carbon fund will be assessed and if possible set up in order to provide permanent revenue for the project communities.

Methods and technologies to be used

Restoration and protection planning and implementation standards will be drawn from past efforts carried out by ITTO and ANAM in mangroves. The Nature Conservancy will apply its science based site based conservation planning methodology to establish conservation targets, monitoring indicators and mitigation strategies for protection and mitigation components. For estimating, monitoring, reporting and verifying carbon credits the project will comply with IPPC Guidelines on estimating and measuring carbon stocks over time. Carbon pools to be used will be determined by the costs of measurement and monitoring of these and the size and flux of each. The project foresees that it will employ at least tier 2 satellite based monitoring systems which draw upon existing national data and will employ higher resolution imagery (ie-SPOT) and tier 1 models where necessary. Project monitoring will be based on representative plots, taken from a stratified random sample of the project areas, the intensity of which will be calculated to minimize standard errors according to the carbon standard utilized. Biodiversity targets will be monitored to test for degradation. Community impacts will be monitored using socioeconomic variables, special attention will be given to test that opportunity costs of the foregone activities do not exceed payments for environmental services and additional benefits received from diversified income generation programme.

Table 4. Project schedule, milestones (deliverables)

Objectives	Activities	Y1.0	Y1.25	Y1.50	Y1.75	Y2.0	Y2.25	Y2.50	Y2.75	Y3,0	Y3.25	Y3.50	Y3.75	Y 4.0	Deliverables
Reducing vulnerability to climate change impacts through the restoration and protection of 2000 hectares of mangroves and wetlands	Design of Community Based Restoration and Protection Program designed to comply with CDM or VCS and CCB Standards														Forest protection and management plan app by ANAM
	Implementation of Community Based Protection and Restoration Management Plans														Participative community based mangrove/we program Project idea note, Project Design Docume CDM or VSC and CCB
	Coastal wetland protection and restoration of 2000 ha														1400 ha mangrove/wetland restored through and 600 ha mangrove/wetland protected from
	Production and Sale of Certified Carbon Credits sold under CDM or VCS and CCB Standards														
Producing verifiable benefits to local and indigenous communities	Administration of contacts which deliver equitable payments for environmental services in return for community based protection, restoration, and sustained harvesting practises														Ecological and socio-economic monitoring (baselines, progress reports) Multiple use mangrove/wetlands management Equitable payments for environmental serv for community members. Possible trust fund established which wi diversified income generating activities
	Capacity building for sustained yield harvesting and maintenance of conservation values														
	Establishment of long term funding mechanism to benefit communities through assisting in diversifying income generation														
Implementing pilot project for National Climate Mitigation Strategy	Carbon rights and land tenure defined														Definition of carbon rights and land tenu
	Carbon registry and financial management structure														Carbon registry and management structure generate and manage projects under the na mitigation and adaptation strategy.
	Review of project objectives and activities and harmonization with CBD and UNFCC commitments														Implementation of activities which comply UNFCC commitments

Table 5. Project team

Name	Job Title	Project Role
Leslie Marin	Director Climate Change and Desertification Unit, ANAM	Project Director
Adrian Beneditti	Director Protected Areas Unit	Project Director
Dario Luque	Advisor Protected Areas Unit	CBD Focal Point
Sander van den Ende	Forest Carbon Specialist, TNC	Project Coordinator
Rene Lopez	Technician Climate Change Unit	Project Officer
Raul Guttierez	Advisor Climate Change Unit	Project Advisor
Miguel Calmon	Director Forest Carbon Latin America, TNC	Project Advisor
Mayte Gonzalez	Representative Panama and Costa Rica, TNC	Project Legal & Institutional Advisor
Julio Rodriquez	Protected Areas and Funding Specialist, TNC	Project Financial Advisor

Community participation and benefits

Affected communities will receive free and prior informed consent to participate in the project. They will be engaged in contractual agreements with performance based rewards in the form of cash payments for the environmental services which the lands provide to which they are custodians. If financially feasible, a trust fund will be set up, to promote additional income generating activities which help to diversify the revenues of local and indigenous communities which participate. Since the majority of the carbon credits will belong to the Protected Areas administration, it will be foreseeable that the trust fund will be set up out of carbon credit payments to them and administered by a fund manager for them.

HOW MUCH – Project finance

a)Estimated Total project cost:

Table 6. Inception Phase Estimated Costs

Inception Phase		
Activity	Output	Cost (Euro)
Meetings to form project proposal development team and work plan	Project Proposal Team and Work Plan	500.00
TNC Staff time (1.5 month total) for developing full proposal	Full proposal written	8,000.00
Local travel for meetings with ANAM's central and regional project office staff	Minutes of consultation to be included in proposal	1,500.00
		10,000 Euro

Table 7. Total Budget 3 Years Estimated Costs

Estimated Summary Budget	
Budget Item	Estimated Expenditure (Euro)
capital and equipment (computers, programs)	15,000.00
other materials and inputs	3,000.00
transport and travel	15,000.00
Staffing	180,000.00
surveys and research	20,000.00
local consultants (contracts-reforestation)	350,000.00
International consultants	50,000.00
workshops and meetings	20,000.00
training and awareness	95,000.00
office running	50,000.00
monitoring and evaluation	30,000.00
3rd party costs for validation	30,000.00
verification and certification work	35,000.00
other (satellite imagery, SPOT).	20,000.00
unexpected	27,000.00
	940,000.00Euro

b)Total DFN investment sought: 800,000 Euro

c)Potential Sources of co-financing: ANAM 100,000 Euro (in application)
TNC 50,000 Euro (in application)