



## **Government of the Democratic Republic of Timor-Leste**

### **United Nations Development Programme and Global Environment Facility**

## **Capacity Building in and Mainstreaming of Sustainable Land Management in Timor-Leste**

#### **Brief description**

The sustainability of agricultural production, rural livelihood and the integrity of ecosystems in Timor-Leste are seriously affected by land degradation. The long-term goal of the project is to ensure that the agricultural, forest and other terrestrial land uses of Timor-Leste (TL) are sustainable, productive systems that maintain ecosystem productivity and ecological functions while contributing directly to the environmental, economic and social well-being of the country. The objective of the project is to build capacities for sustainable land management (SLM) in appropriate government and civil society institutions and user groups and mainstream SLM into government planning and strategy development. The project has four outcomes, namely, (a) SLM is mainstreamed into national policies, plans and legislation, (b) Human resources and institutional capacities needed for SLM are developed, (c) Capacities for knowledge management in SLM are developed and (d) National Action Programme (NAP) is completed. The project will be implemented over a period of three years beginning in January 2007. The project will be directly executed by UNDP. The project will receive guidance and oversight from a Steering Committee. A Project Implementation Unit will be established to execute the project. The total budget of the project is US\$ 475,000 and funded by the GEF.

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## ACRONYMS

AMCAP	Ainaro and Manatuto Community Activation Programme
ALP	Agriculture and Livestock Policy
APR	Annual Project Review
ARP III	Third Agriculture Rehabilitation Project
Aus AID	Australian Agency for International Development
CFET	Consolidated Fund for East Timor
CoPs	Conference of Parties
DAO	District Agriculture Officer
DEX	Direct Execution
DFO	District Forestry Officer
DIO	District Irrigation Officer
DLO	District Livestock Officer
DOE	Division of Environment
DOPW	Department of Public Works
DRE	Division of Research and Extension
DRRS	Division of Deforestation and Rehabilitation of Soils
DSA	Daily Subsistence Allowance
EC	European Community
EGSP	Environment Governance Support Programme
EP	End of Project
ESAs	External Support Agencies
EU	Environment Unit
FAO	Food and Agriculture Organization
GEF	Global Environment Facility
GIS	Geographical Information System
GoTL	Government of Timor-Leste
IA	Implementing Agency
LDC	Least Developed Country
MAFF	Ministry of Agriculture, Forestry and Fisheries
MAPTL	Missão Agrícola Portuguesa em Timor-Leste
MDG	Millennium Development Goal
MEA	Multilateral Environmental Agreement
MFAC	Ministry of Foreign Affairs and Cooperation
MNRMEP	Ministry of Natural Resources, Minerals and Energy Policy
MOJ	Ministry of Justice
MPF	Ministry of Planning and Finance
MPW	Ministry of Public Works
MSP	Medium-Size Project
MT	Mid-Term
MTR	Mid-Term Review
M&E	Monitoring and Evaluation
NAP	National Action Programme
NAPA	National Adaptation Programme of Action
NCSA	National Capacity Self-Assessment
NDAL	National Directorate of Agriculture and Livestock
NDCF	National Directorate of Coffee and Forestry
NDFA	National Directorate of Fisheries and Aquaculture

NDP	National Development Plan
NDLP	National Directorate of Land Property
NFP	National Forest Policy
NGO	Non-Governmental Organization
NRM	Natural Resources Management
NUTL	National University of Timor-Leste
OCAP	Oeccusi Community Activation Programme
OFF	Operational Focal Point
OP-15	Operational Programme 15
PDF	Project Development Facility
PIR	Project Implementation Review
PIU	Project Implementation Unit
PM	Project Manager
PNAs	Protected Natural Areas
PO	Programme Officer
PRA	Participatory Rural Appraisal
PRSP	Poverty Reduction Strategy Paper
PSs	Permanent Secretaries
RESPECT	Recovery, Employment and Stability Programme for Ex-combatants and Communities in Timor-Leste
SBAA	Standard Basic Assistance Agreement
SC	Steering Committee
SECTOPD	Secretariat of State for Environment Coordination, Territorial Ordering and Physical Development
SIDS	Small Island Development States
SIP	Sector Investment Plan
SLM	Sustainable Land Management
TAG	Technical Advisory Group
TCP	Technical Cooperation Programme
TFET	Trust Fund for East Timor
TL	Timor-Leste
TOR	Terms of Reference
TRAC	Target for Resource Assignment from the Core
UNCCD	United Nations Convention to Combat Desertification
UNCBD	United Nations Convention on Biodiversity
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNDP-CO	United Nations Development Programme – Country Office
UNFCCC	United Nations Framework Convention on Climate Change
UNTAET	United Nations Transitional Administration in East Timor
USD	United States Dollar
Y1	Year 1
Y2	Year 2
Y3	Year 3

## SECTION I - NARRATIVE

### Part I. Situation Analysis

#### A. Environmental context

Timor-Leste (TL) includes the eastern end of the island of Timor, the enclave of Oecusse and the islands of Ataúro and Jaco. The area of Timor-Leste is approximately 14,874 km<sup>2</sup> with the total length of approximately 265 km and a maximum width of approximately 97 km. To the North lies the Banda Sea and to the South lies the Timor Sea. TL has a spectacular topography, dominated by the central mountain range of Ramelau. The highest point, Mount Tatamailau is 2,963 m above sea level. Almost half the land has 40% or more slopes. Generally, the country can be divided into six ecological regions, namely, the mountainous areas, highland plains, moist lowland areas, arid lowland areas, marine and coastal areas, and urban areas (Annex 9). In general, the soils of TL are fragile and low in fertility.

The rainfall patterns are variable. The country has been divided into three zones based on altitude and rainfall.

1. The northern coast (0 – 600 m above sea level), is characterized by an annual rainfall ranging from 500 mm to 1,500 mm and a dry season of five months.
2. The mountainous zone is characterized by rainfall about 1,500 mm and a dry season of four months.
3. The southern coast (0 – 600 m above sea level), has heavier rainfall, ranging up to 2,000 mm and a dry season of three months.

The topography, dominated by steep slopes, increases the risk of erosion. In addition, the rainfall pattern, with its long dry season and short, but intense rains, amplifies the erosion hazard.

Land degradation in Timor-Leste is mainly caused by deforestation, unsustainable agricultural practices and recurring wildfires on grass-covered mountain slopes. Based on available data on changes in forest cover from 1972 to 1999, it is estimated that the rate of deforestation during this period was equivalent to 1.1% per year, four times higher than the global average of 0.3%. Within this period, it was estimated that about 114,000 hectares (35%) of dense forest were lost and 78,000 hectares (24%) of sparse forest were destroyed. Most alarming was an increase of more than 200,000 hectares of open areas. As a result of deforestation, there is severe soil erosion, reduction in forest productivity and loss of biodiversity.

During the Indonesian occupation, there was widespread deforestation and destruction of forest ecosystems. Unsustainable harvesting and exporting of much of the country's most valuable resources, notably sandalwood, ebony and redwood was prevalent during this period. This was due to two related factors, namely

- (a) The forestry policies and regulations were weak; and
- (b) The Indonesian government's failure to implement the forestry policies and regulations.

Data on the degradation of agricultural lands is very scant. Unsustainable agriculture in Timor-Leste manifests itself both through soil erosion and through decreased soil fertility. It is primarily a problem in the dry land farming areas where maize, beans and vegetables are grown in steep slopes. These crops are grown without any soil conservation measures – crop rows often run up and down the slope.

Forest fire occurs in the dry season thereby leaving the ground open during start of the rainy season. Soil erosion precedes the regeneration of the ground cover. Forest fires have multiple environmental effects, including: air pollution which in turn leads to health problems to the nearby population; loss of habitat; soil erosion leading to the sedimentation of rivers; and loss of organic matter leading to reduction in soil fertility.

Being in the “Wallace Zone” Timor-Leste is significant with regard to biodiversity. There are, at least, 25 species of endangered birds under the list of protected species in TL under the United Nations Transitional Administration in East Timor (UNTAET). Deforestation and land degradation cause loss of biodiversity due to reduction and modification of the habitat.

Land degradation and poverty are inextricably linked. Land degradation impacts the livelihood of rural populations in many ways. Reduction of soil fertility, silting of waterways and irrigation infrastructure, and flooding of agricultural lands, reduce agricultural productivity including livestock production and thereby affect rural income and the social wellbeing of poor and subsistence farmers. Unless land degradation is addressed decisively and in an integrated manner, it will hamper the government’s efforts to alleviate poverty and promote sustainable development.

## **B. Socio-economic context**

The National Development Plan (NDP) of Timor-Leste assigns the Ministry of Agriculture, Forestry, and Fisheries (MAFF) as the Government agency with prime responsibility for the development of agriculture, forestry, and fisheries sub-sectors. The vision, as laid down in the NDP, is to have by 2020 sustainable, competitive and prosperous agricultural, forestry and fisheries industries that support improved living standards for the Nation’s people. MAFF’s mission is to efficiently deliver to agricultural, forestry and fishing communities, services that support improved productivity, income earning potential and export and that, therefore, support improved social welfare in the rural areas of the Nation, taking account of MAFF’s human, capital and financial resources.

MAFF has three National Directorates, namely, agriculture, forestry and fishery; services for research and extension, and quarantine; and support units for planning and administration. MAFF’s policy and strategic framework was completed and formally adopted in September 2004. Within the MAFF’s policy and strategic framework, elaboration of specific sub-sector policies such as the Food Security Policy, the Forest Policy and the Fisheries Policy have begun and these policy documents are currently available in draft forms. Environmental issues are implicit in the MAFF’s policy and strategic framework and in the policy and strategy documents of the National Directorates of agriculture, fisheries and forestry.

The primary goal of the National Directorate of Agriculture and Livestock (NDAL) is to improve the wellbeing of farm families through encouraging them to adopt profitable, productive and

sustainable farming practices in relation to both crops and livestock. NDAL has identified several major challenges, but major focus is given to increasing the productivity and resilience of upland farming systems, and minimizing the vulnerability of upland agriculture to climatic and economic variability.

The goal of the forestry sub-sector is sustainable development of forest resources and watersheds to provide environmental, social and economic benefits to the people of TL. The National Directorate of Coffee and Forestry (NDCF) has six policy objectives, namely:

- Protection of forests
- Community participation in forestry development
- Watershed conservation
- Afforestation and land restoration
- Development of a private sector business environment
- Forestry sector institutional development

These objectives are inter-linked and need to be considered as components of a single and integrated forest policy.

The NDP of TL gives high priority to poverty reduction and the goal is to reduce poverty in all sectors and regions of the Nation. In this context, the Government of TL realizes that real and lasting poverty reduction is only possible if the environment is able to provide the services people depend on and if natural resources are used in a manner that does not undermine long-term development.

In TL more than 44% of the population was subsisting below US\$ 1.00 per day in 2001, which is one indicator of poverty. It is estimated that two-in-five Timorese fall below the national poverty line of US\$ 0.55 per day. Currently, 64% of the population suffers from food insecurity, and 30% of the land suitable for agriculture is used for crops along or in association with livestock production. The malnutrition rate among women is 26% and among children is 46%. Poor cropping methods and weak safety nets are key contributors to extreme poverty.

Lack of clarity about land tenure presents a constraint to assessing land degradation problems and implementing sustainable land management practices. The current situation relating to land tenure remains to be ascertained in accordance with the Constitution of the country. There is no proper land registry, no recording or verification of land transactions or no framework to determine competing claims to land.

A major element of the poverty reduction strategy of TL is to create an enabling environment to generate opportunities for the economic participation of the poor, improving their productivity and enhancing their income.

Land is a finite resource, while the natural resources it supports can vary over time and according to management conditions and uses. Expanding human requirements and economic activities are placing ever-increasing pressures on land resources, creating competition and conflicts and resulting in suboptimal use of both land and land resources. TL is no exception to the above phenomenon.

If TL's economic and social development goals are to be met in a sustainable manner, it is essential to resolve these conflicts and move towards more effective and efficient use of land and

its natural resources. Integrated physical and land-use planning and management are eminently practical ways to achieve this. By examining all uses of land in an integrated manner, it makes it possible to minimize conflicts, to make the most efficient trade-offs and to link social and economic development with environmental protection and enhancement, thus helping to achieve the objectives of sustainable development.

### **C. Policy, institutional and legal context**

Section 61 of the TL constitution is the policy reference for sustainable development in TL, including for environmental governance. It says the following: “Every one has the right to a humane, healthy, and ecologically balanced environment and the duty to protect it for the benefit of future generation”. Furthermore, it says that “The State shall recognize the need to preserve and rationalize natural resources.”

Since the approval of the NDP in 2002, several planning activities have been undertaken at both the national and sectoral levels. These include the following:

- Development of sectoral road maps;
- Adoption of the UN Millennium Development Goals to complement the NDP and Road Maps;
- Food Security as a flagship programme of the National Development Strategy which was approved by the Council of Ministers in mid-2003;
- Sector Investment Programmes identifying financial flows and gaps in funding with respect to high priority programmes of the different ministries which started in late 2003 and finalized in mid-2004;
- Sub-sectoral policy draft documents of Fisheries Directorate which was initiated in 2001, and Forestry-Watershed policy initiated in 2003; and
- Policy and Strategic Framework, which was approved by the Council of Ministers in September 2004.

The environmental emphasis is explicit in the first NDP of TL (2003-2007), which states, “Real, lasting poverty reduction is only possible if the environment is able to provide the services people depend on and if natural resources are used in a manner that does not undermine long-term development”. As its vision, “TL will manage and utilize its natural resources in a sustainable manner that takes account of environmental needs in order to support economic growth and improved community welfare”.

The implementation of the environmental strategic vision mentioned above is largely the responsibility of the Division of Environment (DOE) within the Secretariat of State for Environment Coordination, Territorial Ordering and Physical Development (SECTOPD). In addition, a number of other ministries, such as MAFF and Ministry of Public Works (MPW) are responsible for major programmes in natural resources management.

The Strategic Plan of the DOE has identified five objectives of which the following three are relevant to land degradation issues, namely

- (a) Increasing awareness within society of the importance of environmental protection,
- (b) Protecting and conserving natural resources and biodiversity in cooperation with relevant agencies, NGOs and civil society, and
- (c) Have environmental assessment and pollution control regulation enforced by 2002.

Policies and strategies of MAFF in general, and particularly that of the NDCF, deal relatively more directly with land degradation and sustainable land management.

The sustainable land management aspect is well reflected in the policy goals and strategy of NDCF. In the context of forestry protection, a key strategy of the new draft forest policy and strategy is to protect all forests from damage or loss through programmes that will empower, encourage and involve communities to manage forest land, through public relations and education activities, the prevention and physical control of wild fires and reduced livestock grazing.

#### **D. Causes of land degradation**

The main causes of land degradation in TL include;

- Deforestation
- Inappropriate dry land farming practices
- Shifting cultivation
- Forest fires
- Demographic pressure
- Overgrazing
- Illegal cutting of important tree species

Deforestation initiates a chain of environmental degradation. Loss of vegetation and soil leads to the degradation of the catchment and decrease in the amount and quality of water. With this comes a decline in agricultural capability and capacity, micro and macro climatic change, loss of biodiversity, and damage to marine habitats by increase in runoff and silting.

The majority of TL's population is engaged in upland farming in the form of shifting cultivation. Based on the survey conducted by NDCF, each family occupies 1 – 2 hectares depending on the available labour in the family. Each family has 2 –3 farm areas. Most of the farm areas are located in the fertile soil along the river or creek within the watershed areas. Crops that are commonly planted include corn, cassava, beans and some vegetables. The cultivation period lasts for about 3 years and the land is abandoned thereafter. This results in land and watershed degradation and loss of biodiversity.

Forest fires in TL could be unintentional or accidental and are often aggravated by climatic conditions. However, more often, the fires are due to animal grazing, shifting cultivation and hunting. In the northern part of the country, grazing lands are burned at the end of the dry season for the regeneration of new pasture. This practice often leads to soil erosion and loss of soil fertility. Forest fires normally happen in areas dominated by grasses, eucalyptus, bamboo, casuarina, and teak. Information on areas damaged by fire is incomplete but based on 1994 data, a total of 60,301 hectares have been damaged by fire within that year alone. Forest fires occur in the dry season thereby leaving the ground open during the rainy season. Soil erosion precedes the regeneration of a protective vegetation cover.

The demographic pressures in TL, expressed in annual population growth rate of 5.8%, exert influence on land quality and land degradation in many forms. Due to demographic pressure, the demand for timber and fuel wood far exceeds what the forest can supply in a sustainable manner.

Although not well documented, overgrazing could be a contributing to land degradation in TL. Overgrazing occurs in the rangelands, which are public lands and not owned by the people who own the animals. Generally, livestock is not “stall fed.” Livestock pens are only used in some areas. Under intensive grazing, regeneration of humus is affected and this causes soil mineralization over many years. This could lead to poor regeneration of grass rendering soil to water and wind erosion. Grazing by too many animals over a long period can result in the compaction of soils, which in turn would reduce the infiltration of water and increase the risk of excessive runoff and soil erosion.

Around 19 percent of total forest lands are set aside by GoTL as national parks and/or Protected Natural Areas (PNAs) which are distributed in around 5 sites nationwide. The largest of these areas is found in Tutuala in the Lautem District. A problem in managing these PNAs is the proliferation of slash and burn farming, cutting of timber and hunting of wildlife by the communities living inside the PNAs. Unless a long-term partnership is forged between the communities and the government, and planning of alternative livelihood is envisioned, the problem of encroachment will continue in the near future.

### **E. Land Use in Timor-Leste**

There is no comprehensive, up-to-date information on land use in TL. An Australian Government funded project – Rapid Rural Land Use Assessment and Model for Land Use Classification and Mapping – produced, in 2001, is the latest version of land use in TL. The land use classification consists of 8 land use categories and 23 land use classes (Annex 8). According to this latest information, approximately 57% of the land is covered in some type of forest. About 28% of the area is devoted to agriculture (including commercial tree crops) and rural settlements. 19% is identified as dry land agriculture, which makes this particular land use one of the most significant categories. However, it is not possible to determine the intensity of dry land farming. Almost 14% of the land is under grassland with extensive areas located along the drier northern coastal area, particularly east of Manatuto. There are also scattered grasslands on many of the interior steeper slopes of the country, probably as a result of past burning.

The Government is well aware of the above issues and the acute land degradation problem that the country is faced with. It recognizes the urgent need for sustainable land management. Despite its attempt to address this serious problem, it is faced with some serious barriers.

Barriers to sustainable land management in TL include:

- (a) Sustainable land management is not adequately incorporated into national development policies, strategies, legislation and regulations, i.e. sustainable land management is not mainstreamed
- (b) TL has relatively low human and institutional capacities for integrated and sustainable land management,
- (c) There is lack of awareness among stakeholders on the seriousness of land degradation and need for sustainable land management, and
- (d) The country does not have adequate funds to implement effective sustainable land management programmes. In addition, there is also lack of reliable, comprehensive and up-to-date information on the cause, extent, trends and economic and social implications of land degradation.

## **Part II. Strategy**

Timor-Leste acceded to the UNCCD in August 2003. It is currently taking actions to fulfill its obligations under the Convention, including developing a national strategy, formulating and implementing a National Action Programme (NAP), strengthening institutions, and reporting and attendance at all relevant meetings with regard to UNCCD and SLM.

Being a newly independent country, TL is investing much of its resources on pressing issues such as agriculture, health, education, infrastructure, and justice, etc., and so do the majority of donors. Consequently, policies and actions concerning land management are yet to be formulated and implemented.

The country has just completed a Sector Investment Plan (SIP) for natural resources and the environment, which will require about US\$22 million in the next three years (FY 2003-4 and 2006-7). The Investment Programme includes, among other things, proposals for building capacities for the management of the environment and assessments of water resources and watersheds. Funding for the Programme is expected to come from the US\$7 million donor support already committed, and the proposed US\$1.7 million Consolidated Fund for East Timor (CFET). Some US\$13 million new funding is therefore still needed.

In general, the country has limited capacity at the individual, institutional and systemic levels for sustainable land management. Land degradation issues are often not mainstreamed into national development decision-making. As a result, government budgetary allocations for mitigating land degradation are weak, and policy recommendations relating to economic growth often conflict with the goal of sustainable land management.

The Division of Reforestation and Rehabilitation of Soil under the NDCF is working on a draft national plan for controlling land degradation. However, this draft national plan is mainly concerned with the degradation of forestlands. It addresses four important aspects, namely,

- a) Reducing forest and watershed degradation and conservation of forest resources and biodiversity in protected forest areas;
- b) Establishing a suitable policy and legislative framework for trade and effective resource management of the forestry sub sector;
- c) Developing human resources, institutional capability and resource data, commensurate with the needs for forestry and watershed management; and
- d) Ensuring effective coordination and participation among major stakeholders in forestry and watershed development.

The major defect of this draft national plan is that it does not cover land degradation issues and solutions with regard to agricultural lands as well as lands under other uses. The draft thus needs considerable revision.

A GEF project on National Capacity Self Assessment (NCSA) is currently under implementation.

Recognizing the limitations faced by the country, UNDP is integrating aspects of land degradation and SLM into its on-going projects, to the extent possible, especially in those projects that deal with poverty reduction.

Several projects, which are either on-going or under preparation, have relevance to SLM, although they may not directly address the issue. The FAO funded project, under the Technical Cooperation Programme (TCP), which began in April 2003, supports MAFF in helping to achieve strategic objectives with regard to agriculture, forestry and fisheries. This project provides technical support for project identification, formulation and funding and capacity development for identification, formulation, implementation and appraisal of projects. Land degradation is one of the major areas addressed under the forestry and natural resources management component of the project.

The third phase of the Agricultural Rehabilitation Project (ARP III) includes a component of pilot participatory development in natural resources management, which, *inter alia* addresses land management issues. The pilot projects are carried out in seven districts, particularly in the upland areas.

The primary development partners working on land degradation and reforestation issues are UNDP (under AMCAP and OCAP projects), the Missão Agrícola Portuguesa em Timor-Leste (MAPTL), AusAID, and FAO. Their land degradation related initiatives are listed below:

- The AMCAP project is undertaking integrated watershed management activities in Ainaro and Manatuto Districts.
- The OCAP project will address agricultural and animal husbandry techniques aimed at increasing production and relieving pressure on unsustainable land use in the Oecusse District.
- MAPTL is conducting trial projects in Ermera and Aileu on the use of sluice gates for irrigation and erosion control, in association with reforestation.
- AusAID is implementing a community based watershed management project in Los Palos, Manatuto, Liquiça and Ataúro.

### **Capacity and mainstreaming needs for SLM**

Despite growing official recognition of the problem of land degradation in TL, SLM objectives have not been mainstreamed into policies, regulations, strategies, plans, educational systems, etc. There is no general recognition on the part of politicians and decision makers that land degradation is a significant barrier to sustained economic development. The National Action Programme for the implementation of UNCCD is still under development and SLM still needs to be integrated across the board into the National Forestry Policy and the Agricultural Policy that will be finalized in the near future. Other policies and regulations for SLM will need to be developed as appropriate as the SLM knowledge base is developed.

While sustainable development, environmental protection and natural resource management are addressed explicitly in the country's NDP and PRSP, land degradation and SLM are only addressed indirectly.

Mainstreaming of land degradation and SLM issues into national development frameworks and processes, including government budgetary process would involve the development of a policy paper on SLM, convincing the key line ministries and their superiors of the benefits of mainstreaming SLM issues into the NDP and PRSP, government budgetary process and other relevant national activities and processes.

The NDCF of the MAFF has recently drafted a forest sector policy which gives high priority to sustainable management of forest resources in the country. The preparation of this policy document was assisted by FAO. Linkages shall be established between the MSP and the FAO-TCP assisted new Forestry Policy, particularly in the implementation of those policy aspects that are directly related to controlling land degradation and application of SLM practices. The modality of linkage with the FAO-TCP assisted new Forest Policy and other on-going projects related to SLM is presented in a section on linkages in the project document.

The following capacity building needs are needed in order for TL to meet its obligations under the UNCCD and for implementing programs and projects on SLM:

- Human resources are the most crucial resources that are very weak. There is an urgent need to train a critical number of government officials, and other stakeholders such as NGOs, farmers, forest communities, civil society bodies and resource users by imparting knowledge and developing skills through training and other means.
- Institutions are also weak. Capacity needs include developing mandates, tools, guidelines and information management systems in order for appropriate institutions to function effectively.
- At the systemic level, the creation of an “enabling environment” to implement SLM policies, programmes and projects is crucial. This would require developing policy, economic, regulatory, and accountability frameworks (monitoring and evaluation) in the context of land degradation and SLM.

The demand for technical expertise in terms of human resources far exceeds the supply in all sectors. The situation is critical in MAFF and in its National Directorates. For example, the NDCF is manned by 57 staff or roughly 19 percent of the level during Indonesian occupation. Of the 57 staff of NDCF, only 7 have finished bachelor’s degree in forestry. The majority of the staff has only finished senior high school in forestry.

At its present level, the NDCF staff cannot efficiently manage and monitor the country’s forests. The ratio between district staff and forest guardians to forest area is 1: 17,400 hectares, far from the ideal 1:8,000 hectares, a benchmark in forest management. In addition, the staff has difficulty in fulfilling their functions because of the lack of facilities and equipment. There is a need therefore to revisit staff deployment strategies at the district level, with the idea of augmenting the number of staff where they are urgently needed. In addition, there is a need to develop their technical capability and skills in SLM in terms of on-the-job training and formal education in the long term. The on-going National Capacity Self Assessment project is expected to address this issue.

An integrated community-based approach has been accepted as a benchmark for SLM. However, this requires the highest level of coordination not only among members of the communities located near the forestry-watershed areas but also among agencies and NGOs involved in soil conservation, land use, forest management and associated ecosystem development activities. There are several local and international NGOs and international agencies promoting various activities that would enhance soil conservation and forest rehabilitation, thereby contributing to SLM. In 2003, there were more than 40 organizations involved in soil conservation and forestry. At least 5 of these are implementing major projects related to reforestation, agro-forestry and soil conservation. The diversity of agencies working on forest resource management is beneficial, but coordination is lacking. As a result, there is little information sharing or leveraging resources.

The available data on land, soils, agricultural lands and forests is inadequate. Much of the data was developed during the Indonesian occupation and most data are descriptive. Very limited quantitative data are available. Although MAFF received support from AusAID to establish a GIS Unit, the data generated so far is insufficient and in many instances lacks field validation (e.g. data on forest classification). Data gaps in the forestry sub-sector include forest inventory, environmental data, and biodiversity. This data is particularly important for decision-making on conservation and commercialization.

## **Objectives**

The project will contribute towards the achievement of the following long-term goal:

*The agricultural, forest and other terrestrial land uses of TL are sustainable, productive systems that maintain ecosystem productivity and ecological functions while contributing directly to the environmental, economic and social well-being of the country.*

The objective of the project is:

*“To strengthen the enabling environment for sustainable land management (SLM) while ensuring broad-based political and participatory support for the process”*

## **Outcomes**

- SLM mainstreamed into national policies, plans and legislation.
- Human resources and institutional capacities needed for SLM are developed.
- Capacities for knowledge management in SLM are developed.
- National Action Programme (NAP) is completed.

## **Global and local benefits**

The principal direct global benefit is the enhanced capacity for ecologically sustainable land management in TL. Indirect global benefits include:

- Cross-sectoral integration of sustainable land management into plans, policies, strategies, programmes, funding mechanisms and multi-sectoral stakeholder groups.
- Maintenance of the structure and functions of ecological systems.
- Enhanced biodiversity conservation due to reduced deforestation and reduced sedimentation in mangrove ecosystems and improved health of coral reefs.
- Enhanced carbon sequestration through improved capacities for sustainable agriculture and reduced deforestation.

The principal national benefits are the enhanced capacities for economic and financial sustainability of the agricultural, and forest use systems of the country. Indirect national benefits include the following:

- Enhanced crop production through improved soil fertility maintenance.
- Identification of new commercial uses of forest plantations.
- SLM contributes to the health of mangrove ecosystems and coral reefs that are in turn critical for the tourism industry, for fishing and, in the mid to long-term, for avoiding catastrophic beach erosion.

- Greater empowerment and self-sufficiency of resource users and stakeholders to participate directly in the conception, monitoring and adaptive management of lands and resources.
- Reduced impact of natural disasters.

### **Linkages to Implementing Agencies' activities and programmes**

Action will be taken to generate synergy between the MSP and the following projects that are being implemented by UNDP, GEF, GoTL, and other donors.

- Environment Governance Support Programme (EGSP) whose major objective is to develop an environmental governance framework emphasizing areas such as environmental law, policy on catchments, strategic planning for Multilateral Environmental Agreements (MEAs), National Capacity Self Assessment (NCSA), and forging inter-Ministerial Coordination for implementing MEAs
- Ainaro & Manatuto Community Activation Programme (AMCAP) whose aim is to increase food security and incomes of poor households in Ainaro and Manatuto Districts on an environmentally sustainable basis, using community-focused participatory methodologies including reforestation and soil conservation
- Oecussi Ambeno Community Activation Programme (OCAP) whose purpose is to achieve poverty reduction by empowering the Oecussi Ambeno communities by promoting community investments, developing new skills, introducing agro-forestry and soil conservation and generating supplementary income
- FAO-Technical Cooperation Programme (TCP) funded project on Forest policy formulation
- The third phase of the Agricultural Rehabilitation Project ARP III whose aim is to strengthen the capacity of the Ministry of Agriculture, Forestry and Fisheries (MAFF) assist rural communities and its development partners increase agricultural production and income in a sustainable way
- Missão Agrícola Portuguesa em Timor-Leste (MAPTIL) which is conducting trial projects in Ermera and Aileu on the use of sluice gates for irrigation and erosion control, in association with reforestation
- The watershed management component of the AusAID funded community based project in Lospalos, Manatuto, Liquiça and Ataúro

### **Identified Stakeholders**

The key Stakeholders identified in this project include government ministries, private sector bodies, NGOs, farmers, forest communities, civil society bodies and other resource users.

- Ministry of Agriculture, Forestry and Fisheries (MAFF) and its National Directorates, namely the NDAL, NDCF and NDFA
- Secretariat of State for Environment Coordination, Territorial Ordering and Physical Development (SECTOPD), and specifically, the Division of Environment (DOE)
- Farmers and forest dwellers
- Various civil society groups, private bodies, and NGOs

## **Part III. Management Arrangement**

### **Institutional framework and project implementation arrangements**

The project will be directly executed by UNDP under the Direct Execution (DEX) modality for a period of three years and the NDCF will be the implementing agency for the activities. On behalf of UNDP, the project will be administered by the Programme Officer, Environment Unit, who will be authorized to deal on all project implementation-related matters with NDCF. The project will receive high level guidance and oversight from the SLM Project Steering Committee (PSC) and Project Working Committee (PWC).

#### **Project Steering Committee (PSC)**

The PSC will be composed of the Permanent Secretary (PS) or representative of the Minister or Vice Minister of the key ministries related to SLM and will provide policy level guidance, reviews project progress and project financial status, and reviews/endorse budget revisions. It will be comprised of the representatives of the MAFF (chair), MPF, SECTOPD, MNRMEP, MPW, MFAC, NUTL, UNDP (secretariat) and any other relevant parties who will be invited as ex-officio members as necessary.

Regular PSC meetings will be held on a three-monthly basis until the completion of the project. Special sessions will be convened as required.

The PM, in consultation with NDCF, will be responsible for the timely formation of PSC. The TOR of the PSC is presented in Annex 1.

#### **Project Working Committee (PWC)**

The PWC discusses any issues arising from day-to-day implementation of the project. Members are of *working level* representatives of the key ministries related to SLM. Members of the PWC will be comprised of the representatives of the NDCF (chair), MPF, SECTOPD, MNRMEP, MPW, MFAC, NUTL, UNDP (secretariat) and any other relevant parties who will be invited as ex-officio members as necessary.

Regular PWC meetings will be held on a monthly basis until the completion of the project. Special sessions will be convened as required.

The PM, in consultation with NDCF, will be responsible for the timely formation of PWC.

#### **Project Implementation Unit (PIU)**

The PIU will play a key role in project execution. It will be located at NDCF and will be headed by a Project Manager (PM). The Director of NDCF will be the immediate supervisor of the PM. The PM will collaborate very closely with UNDP Environment Unit and will be responsible for implementation of all project activities in accordance with the DEX modality. He/she will be a national professional recruited for the three-year duration of the project. He/she will be responsible for the application of all UNDP administrative and financial procedures and for the use of UNDP/GEF funds.

The PM will have a small support staff (project assistant and driver) recruited by the project for a period of three years. The PIU will have overall responsibility for project management, administrative, technical and financial reporting. PIU will manage the selection process for all local contracts and consultants – this will also be done in close consultation with other concerned executing agencies. This will include preparation of TOR, call for bids and organization of the selection process. However, in accordance with the DEX modality, the awarding of all contracts and recruitment of all consultants will be administered by UNDP.

#### **Part IV. Monitoring and Evaluation**

Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provided by the Project Implementation Unit (PIU) and UNDP Country Office (UNDP-CO) with support from UNDP/GEF. The Logical Framework Matrix in Table 2 provides *performance* and *impact* indicators for project implementation along with their corresponding *means of verification*. Together with the Resource Kit for Monitoring, Evaluation and Reporting (as provided by the Global Support Unit for the LDC/SIDS Portfolio Project on SLM) these will form the basis on which the project's Monitoring and Evaluation system will be built.

NDCF will monitor activities to ensure that they are carried out appropriately and in a timely manner as per the work plan. The work plan is integrated into the activity budget as presented in Table 3. NDCF and PIU will ensure that project execution complies with UNDP's monitoring, evaluation, auditing and reporting requirements, as spelled out in the UNDP Programming Manual. In accordance with UNDP's Programming Manual and the Resource Kit for Monitoring, Evaluation and Reporting mentioned above, quarterly progress and other reports will be submitted by PIU to NDCF (MAFF) and UNDP - CO. In accordance with these documents, quarterly progress reports will provide a brief summary of the status of activities and output delivery, explaining any variances from the pre-agreed work plan and presenting work plan for each successive quarter for review and endorsement. The reports will also include the disbursement status during the implementation period.

NDCF will complete an annual review of the project following the current UNDP/GEF format for Annual Project Review (APR)/Project Implementation Review (PIR) as outlined in the M&E Resource Kit. A project Terminal Report will be prepared by PIU and submitted to NDCF (MAFF) and UNDP-CO assessing the delivery of inputs, the achievement of the project objectives and the project's impact/results.

One external mid-term review (MTR) will be performed after 18 months and a final evaluation will be conducted during the last three months of the project. Each review will consist of a three-week evaluation and will be conducted by one international consultant working with one national consultant. The focus of the MTR will be to make mid-term corrections to better achieve the project objective and outcomes during the remaining life of the project.

**Table 1: Detailed Monitoring and Evaluation Plan and Budget**

Type of M&E activity	Lead responsible party in bold	Budget	Time frame
Inception Report	<b>PIU</b>	US\$ 2,000	At the beginning of project implementation
APR/PIR	The Government, <b>UNDP-CO NDCF, PIU</b> , UNDP/GEF Task Manager <sup>1</sup>	None	Every year, at latest by June of that year
Tripartite meeting and report (TPR)	The Government, <b>UNDP-CO NDCF, PIU</b> , UNDP/GEF Task Manager	None	Every year, upon receipt of APR
Mid-term External Evaluation	PIU, UNDP/GEF headquarters, UNDP/GEF Task Manager, <b>UNDP-CO, NDCF</b>	US\$15,000	At the mid-point of project implementation.
Final External Evaluation	PIU, UNDP/GEF headquarters, UNDP/GEF Task Manager, <b>UNDP-CO, NDCF</b>	US\$25,000	At least two months before the end of project.
Terminal Report	UNDP-CO, UNDP/GEF Task Manager, <b>PIU</b>	None	At least one month before end of project.
Audit	<b>NDCF</b> , UNDP-CO, PIU	US\$500 per year	Yearly
Visits to field sites	<b>PM, NDCF</b>	US\$1,000 per year;	Yearly
<b>TOTAL COST</b>		<b>US\$46,500</b>	

## Part V. Legal Context

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement (SBAA) between GoTL and UNDP as signed by the parties on 20 May 2002. The host country-implementing agency shall, for the purpose of the SBAA, refer to the government cooperating agency described in that Agreement.

UNDP acts in this project as Implementing Agency of the Global Environment Facility (GEF), and all rights and privileges pertaining to the UNDP as per the terms of the SBAA shall be executed '*mutatis mutandis*' to GEF.

The UNDP Resident Representative in TL is authorized to effect in writing the following types of revisions to this project document, provided he/she has verified the agreement thereto by the UNDP GEF unit and is assured that the other signatories of the project document have no objections to the proposed changes:

- Revisions of, or addition to, any of the annexes to the Project Document
- Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of inputs already agreed to or by the cost increases due to inflation

<sup>1</sup> UNDP/GEF Task Managers is a broad term that includes regional advisors, sub-regional coordinators, and GEF project specialists based in the region or in HQ.

- Mandatory annual revisions which re-phase the delivery of agreed project inputs, or reflect increased expert or other costs due to inflation, or take into account agency expenditure flexibility
- Inclusion of additional annexes and attachments relevant to the Project Document

**Intellectual property rights:**

All data, study results, information, reports, etc, generated with UNDP/GEF project funds will be the property of GoTL and UNDP. In order to accord proper acknowledgement to GEF for providing funding, a GEF logo should appear alongside the UNDP logo on all relevant GEF project publications, including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding projects funded by GEF should also accord proper acknowledgment to GEF.

## SECTION II – RESULTS AND RESOURCES FRAMEWORK

**Table 2: Project Results and Resources Framework**

<b>Intended outcome/Country Programme Outcome:</b> Comprehensive approach to environmentally sustainable development integrated in national development planning.			
<b>Outcome indicators:</b>			
<ul style="list-style-type: none"> <li>▪ SLM mainstreamed into national policies, plans and legislation</li> <li>▪ Human resources and institutional capacities needed for SLM are developed</li> <li>▪ Capacities for knowledge management in SLM are developed</li> <li>▪ National Action Programme (NAP) for SLM is completed</li> </ul>			
<b>Applicable Strategic Goal (from MYFF 2004-07) and MYFF Service Line</b>			
<b>Goal 3:</b> Managing energy and environment for sustainable development			
<ul style="list-style-type: none"> <li>▪ Frameworks and strategies for sustainable development (SL 3.1)</li> <li>▪ Sustainable land management to combat desertification and land degradation (SL 3.4)</li> </ul>			
<b>Partnership Strategy</b>			
The MSP being a co-shared programme will rely on certain activities of various other identified on-going projects to complement the activities of the MSP. Linkages will be established to a number of on-going projects funded and or implemented by other donors. These will include, FAO-TCP, EGSP, NCSA, AMCAP, OCAP, ARP III, MAPTIL, and the AUSAID funded community based watershed management project.			
<b>Possible partners would include:</b>			
<ul style="list-style-type: none"> <li>▪ National governments, especially the Ministry of Agriculture, Forestry and Fisheries (MAFF) and its National Directorates, Secretariat of State for Environment Coordination, Territorial Ordering and Physical Development (SECTOPD), and specifically, the Division of Environment (DOE), Ministry of Planning and Finance, Ministry of Justice, local government authorities such as District/ Sub-district Administrators</li> <li>▪ Other Programmes/Projects of UNDP in Timor-Leste such as AMCAP, OCAP, EGSP,</li> <li>▪ Bilateral and multilateral development agencies working on complementary issues including, FAO, MAPTIL,</li> <li>▪ Various civil society groups, private bodies, and NGOs</li> <li>▪ Farmers and forest dwellers</li> </ul>			
<b>Project Title:</b> Capacity Building in and Mainstreaming of Sustainable Land Management in Timor-Leste			
<b>Project Number:</b>			
<b>Intended Outputs</b>	<b>Output Targets</b>	<b>Indicative Activities</b>	<b>Responsible parties, inputs and Costs</b>
<b>Output 1.1:</b> Integration of SLM into macro-economic policies and regulatory and economic incentive frameworks and multilateral and bilateral agreements	Incorporation of SLM into macro-economic policies and planning completed by end of year 1	1.1.1 Prepare draft guidelines for mainstreaming SLM 1.1.2 Conduct workshops with stakeholders to validate draft documents 1.1.3 Guide the approval process and inclusion of SLM into macro-economic policies and regulatory frameworks	PIU/Ministry of Planning and Finance (MPF)  2 weeks International consultant, 1 month. National consultant 1 workshop, prepare documents.

			<b>GEF: US\$ 11,500</b>
<b>Output 1.2:</b> Integration of SLM into Forestry Sector Policy and Agriculture and Livestock Sector Policy	Integration of SLM into Forest Policy and Agriculture Policy completed by mid-term	1.2.1 Prepare draft documents for integrating SLM into Forestry and Agriculture Policies. 1.2.2 Validate the drafts by workshops and consultation 1.2.3 Make arrangements to incorporate SLM into the Policy documents	PIU/NDAL/NDCF  2 months National consultant, workshop, prepare documents  <b>GEF: US\$ 5,500</b>
<b>Output 1.3:</b> SLM investment plan linked to priority actions defined in the NAP	The SLM investment plans completed by mid-term	1.3.1 Review NAP and identify areas for investment in SLM 1.3.2 Prepare project concepts and cost estimates 1.3.3 Prepare investment plan for SLM	PIU/Ministry of Planning and Finance  2 weeks international consultant, 1.5 months National consultant  <b>GEF: US\$ 10,864</b>
<b>Output 1.4:</b> Donor's interested and commitment to sustainable land management achieved	Donor meeting held and their commitment documented by year 3	1.4.1 Hold informal meetings with donors on SLM 1.4.2 Hold formal donors meetings and discuss priorities SLM projects 1.4.3 Prepare for SLM projects for funding by donors	PIU, NDCF, NDAL and MPF  2 months national consultant, donor workshop, Report preparation  <b>GEF: US\$ 00</b>
<b>Output 2.1:</b> Trained officers from NDCF, NDAL, DOE, DOPW, NGOs, and NUTL at national and regional levels in technical aspects of SLM	18 national level officers and 25 regional level officers trained. By mid-term	2.1.1 Prepare training material; prepare training schedule and select trainees. 2.1.2 Train 18 officers from NDAL, NDCF, DOE, MPF and Local NGOs in technical 2.1.3 Train 25 officers at regional level, DFO, DAO, DLO and DIO	PIU  2 months international consultant, 2 months National consultant, prepare training materials, conduct training classes  <b>GEF: US\$ 70,000</b>
<b>Output 2.2:</b> Trained farmers and forest communities at sucos and aldeia levels in SLM	20 villages, 50 community groups and 100 community members are trained in SLM practices by year 3	2.2.1 Identify villages, communities and community members to be trained 2.2.2 Prepare training material and schedule training activities.	PIU  2 months contract with NGO, 2 months National consultant,

		<p>2.2.3 Develop two pilot farmer field schools for training purpose</p> <p>2.2.4 Train 20 villages in SLM activities</p> <p>2.2.5 Train 50 community groups in SLM.</p> <p>2.2.6 Train 100 community members in SLM</p>	<p>prepare training materials, conduct training classes</p> <p><b>GEF: US\$ 39,000</b></p>
<p><b>Output 2.3:</b> Gender sensitization workshop and guidelines for integrating gender into SLM activities</p>	<p>Gender workshop and guidelines completed by year 1.</p>	<p>2.3.1 Conduct workshop on gender in SLM</p> <p>2.3.2 Prepare, distribute and popularize the guideline</p>	<p>PIU/NGO</p> <p>1 month NGO contract, workshop and publication</p> <p><b>GEF: US\$ 17,000</b></p>
<p><b>Output 2.4:</b> Mandates of NDAL and NDCF strengthened with special reference to SLM and appropriate tools and guidelines developed to enhance analytical skills and inter-sectoral approaches</p>	<p>Mandates, tools and guidelines developed by mid-term.</p>	<p>2.4.1 Review mandates of NDAL and NDCF and strengthen mandates with regard to SLM</p> <p>2.4.2 Develop tools and guidelines to enhance analytical skills and inter-sectoral approaches</p> <p>2.4.3 Conduct a workshop on enhancing analytical skills and inter-sectoral approaches in SLM</p> <p>2.4.4 Publish workshop proceedings and guidelines</p>	<p>PIU/MAFF</p> <p>1 month International Consultant, 2 workshops and publications – guidelines and case studies</p> <p><b>GEF: US\$ 21,500</b></p>
<p><b>Output 3.1:</b> Status report on land use and land degradation in TL</p>	<p>Information on land use and land degradation completed by year 3.</p>	<p>3.1.1 Carry out detailed stocktaking (extent, intensity, forms and causes) of current land use and land degradation.</p> <p>3.1.2 Conduct a workshop to validate the results and conclusions</p> <p>3.1.3 Publish the information in English and local language and in digital format.</p>	<p>PIU/DRE</p> <p>6 months National consultants, survey, workshop and publication</p> <p><b>GEF: US\$ 18,500</b></p>
<p><b>Output 3.2:</b> Computerized land use data base and information system</p>	<p>Computerized land use database and information system completed by year 3.</p>	<p>3.2.1 Study the existing land use information system in MAFF and identify gaps and needs to upgrade the system to meet the SLM needs.</p> <p>3.2.2 Develop an interagency protocol on information access and sharing and data standards</p> <p>3.2.3 Create the new computerized land use data base and information system.</p> <p>3.2.4 Launch the system to facilitate / promote SLM</p>	<p>PIU/DRE/GIS Unit</p> <p>3 months International consultant, 3 months National consultant, computer, hardware and software</p> <p><b>GEF: US\$ 104,587</b></p>

<p><b>Output 3.3:</b> Assessment of land ownership, tenure and property rights</p>	<p>Land rights and ownership study completed by year 2</p>	<p>3.3.1 Review the outcome and recommendations of the recent census and land survey. 3.3.2 Review existing land laws and regulations, including customary laws and practices. 3.3.3 Plan and implement a land ownership, tenure and property rights survey covering forest and agricultural lands. 3.3.4 Conduct a workshop to validate the findings of the survey and publish the report.</p>	<p>PIU/MoJ/NDLP  Contact with NUTL, land ownership and tenure survey, workshop and publication  <b>GEF: US\$ 25,000</b></p>
<p><b>Output 3.4:</b> An evaluation of the impact of fuel wood harvesting on watersheds</p>	<p>Study impact of fuel wood harvesting on watersheds completed by mid-term</p>	<p>3.4.1 Review the current practice of fuel wood harvesting and its impact on the watersheds. 3.4.2 Identify the root causes – social, economic and cultural 3.4.3 Propose solution to reverse the situation, by creating sustainable supplies and limiting demand for fuel wood. 3.4.4 Organize a workshop to validate your findings, and publish a report.</p>	<p>PIU/NDCF  3 months National consultant, NGO contract, survey, workshop and publication  <b>GEF: US\$ 22,000</b></p>
<p><b>Output 3.5:</b> An evaluation of the impact of upland and dry land farming practices on SLM</p>	<p>Study of sustainable upland farming system completed by year 2</p>	<p>3.5.1 Review current upland/ dry land farming practices. 3.5.2 Review the MAFF proposed strategy and Programmes to increase productivity of upland farming systems 3.5.3 Identify potential threats to land conservation, land productivity and sustainability. 3.5.4 Recommend appropriate SLM practices and other measures to ensure the sustainability of upland farming systems. 3.5.5 Organize a workshop to validate your findings, and publish a report</p>	<p>PIU/NDAL  4 months national consultant, rapid assessment of upland farming, workshop and publication  <b>GEF: US\$ 16,000</b></p>
<p><b>Output 3.6:</b> SLM investment plan linked to priority actions defined in the NAP</p>	<p>Report on a mechanism to sustainability financing SLM completed by year 3</p>	<p>3.6.1 Review the current government ad donor financing mechanism and their strengths and weaknesses 3.6.2 Organize a workshop to discuss the issues and formulate a mechanism for sustainable financing SLM activities 3.6.3 Consolidate the outcome of the workshop and prepare a report</p>	<p>PIU  <b>GEF: US\$ 7,000</b></p>

<b>Output 4.1:</b> Draft NAP document completed	NAP completed by year 1	4.1.1 Assemble a national Team to formulate NAP 4.1.2 Prepare draft NAP document	PIU  3 months National consultant  <b>GEF: US\$ 00</b>
<b>Output 4.2:</b> Final NAP document approved and supported by the Government, published and also made available in the local language	Final and approved NAP document on SLM in English and local languages	4.2.1 Validate the NAP through a national workshop. 4.2.2 Guide the adoption of the NAP by the Government. 4.2.3 Translate the NAP into the local language 4.2.4 Print the NAP documents and widely disseminate.	PIU  2 months National consultant, workshop, translation of documents. Govt. contribution in kind.  <b>GEF: US\$ 00</b>
<b>Management Cost:</b> <b>(For Output 1, 2, 3 and 4)</b>		4.1.3 Assemble a national Team to formulate NAP 4.1.4 Prepare draft NAP document	PIU (Project Manager, Project Assistant, driver) One project vehicle Office equipment and furniture Stationery  <b>GEF: US\$ 106,549</b>

## SECTION III - TOTAL BUDGET AND WORK PLAN

**Table 3: Total Budget & Work Plan**

<b>Award:</b>		<b>00045102</b>							
<b>Award Title:</b>		<b>PIMS 3405 LD MSP: Capacity Building in and Mainstreaming of SLM</b>							
<b>Project ID:</b>		<b>00053217</b>							
<b>Project Title:</b>		<b>PIMS 3405 LD MSP: Capacity Building in and Mainstreaming of Sustainable Land Management in Timor-Leste</b>							
<b>Implementing Partner/ Executing Agency:</b>		<b>DEX: UNDP</b>							
<b>GEF Outcome/Atlas Activity</b>	<b>Responsible Party</b>	<b>Source of Funds</b>	<b>Atlas Budgetary Account Code</b>	<b>ERP/ATLAS Budget Description/Input</b>	<b>Amount (USD) Year 1 (2007)</b>	<b>Amount (USD) Year 2 (2008)</b>	<b>Amount (USD) Year 3 (2009)</b>	<b>Total (USD)</b>	
<b>OUTCOME 1: SLM mainstreamed into national policies, plans and legislation</b>	<b>UNDP</b>	<b>GEF</b>	71200:	Int. Consultant (4 weeks)	7,500.00	7,500.00		15,000.00	
		<b>GEF</b>	71300:	Nat. Consultant (5 months)	4,500.00	3,000.00		7,500.00	
		<b>GEF</b>	74500:	Miscellaneous (2 workshops & Sundries)	3,000.00	4,864.00		7,864.00	
		<b>Sub-total of Outcome 1</b>							<b>30,364.00</b>
<b>OUTCOME 2: Human resources and institutional capacities needed for SLM are developed</b>	<b>UNDP</b>	<b>GEF</b>	71200:	Int. Consultant (2 months)	13,500.00	13,500.00		27,000.00	
		<b>GEF</b>	71300:	National Consultant (6 months)	3,000.00	4,500.00	1,500.00	9,000.00	
		<b>GEF</b>	71400:	Service Contract (for NGOs & Trainers)	7,000.00	42,000.00	14,000.00	63,000.00	
		<b>GEF</b>	72500:	Supplies (Stationery and Publications)	5,000.00	2,500.00		7,500.00	
		<b>GEF</b>	74500:	Miscellaneous (Training material, 3 workshops & Sundries)	8,500.00	15,000.00	4,500.00	28,000.00	
		<b>Sub-total of Outcome 2</b>							<b>134,500.00</b>
<b>OUTCOME 3: Capacities for knowledge management in SLM are developed</b>	<b>UNDP</b>	<b>GEF</b>	71200:	Int. Consultant (2.5 months)	34,000.00			34,000.00	
		<b>GEF</b>	71300:	National Consultant (19 months)	13,500.00	10,500.00	4,500.00	28,500.00	
		<b>GEF</b>	71400:	Service Contract (with UNTL, NGO, etc.)	7,500.00	26,500.00		34,000.00	
		<b>GEF</b>	71600:	Travel (DSA/ travel expenses)	3,000.00	8,000.00		11,000.00	
		<b>GEF</b>	72400:	Communications & AV Equipment				4,587.00	4,587.00
		<b>GEF</b>	72500:	Supplies (Stationery & Publications)	1,000.00	8,500.00	3,000.00	12,500.00	
		<b>GEF</b>	72800:	Info Technology Equipment (Computer hardware & Soft ware)				50,000.00	50,000.00
		<b>GEF</b>	74500:	Miscellaneous (5 workshops, sundries)	750.00	13,750.00	2,500.00	17,000.00	
		<b>Sub-total of Outcome 3</b>							<b>191,587.00</b>







<b>Output</b>	<b>Activities</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>	<b>Q11</b>	<b>Q12</b>
	3.2.3 Create the new computerized land use data base and information system.												
	3.2.4 Launch the system to facilitate / promote SLM												
3.3 Assessment of land ownership, tenure and property rights of private, community and public forest and agricultural lands	3.3.1 Review the outcome and recommendations of the recent census and land survey.												
	3.3.2 Review existing land laws and regulations, including customary laws and practices.												
	3.3.3 Plan and implement a land ownership, tenure and property rights survey covering forest and agricultural lands.												
	3.3.4 Conduct a workshop to validate the findings of the survey and publish the report.												
3. 4 An evaluation of the impact of fuel wood harvesting on watersheds and recommendations to mitigate the adverse impacts.	3.4.1 Review the current practice of fuel wood harvesting and its impact on the watersheds.												
	3.4.2 Identify the root causes – social, economic and cultural.												
	3.4.3 Propose solution to reverse the situation, by creating sustainable supplies and limiting demand for fuel wood.												
	3.4.4 Organize a workshop to validate your findings, and publish a report.												
3.5 Improving productivity and sustainability of upland/ dry land farming by adopting SLM.	3.5.1 Review current upland/ dry land farming practices.												
	3.5.2 Review the MAFF proposed strategy and Programmes to increase productivity upland farming systems.												



## **ANNEXES**

### **Annex1: Approved Proposal**

(See in PIMS)

### **Annex 2: Terms of Reference for Project Manager, Project Steering Committee and Project Working Committee**

#### **1. Project Manager**

**Background:** The Project Manager (PM) will be responsible for the implementation of the project, including the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors. The PM will be fully accountable to the General Director of NDCF and to the Steering Committee for satisfactory execution of the entire project in accordance with the DEX modality and will be responsible for meeting the government obligations. The Project Manager will be the head of the Project Management Unit. The PM shall perform a liaison role with government, UNDP, and all stakeholders involved with the project.

#### **Duties and Responsibilities**

1. Overall management of the project.
2. Supervise and coordinate the production of project outputs as per the project document;
3. Ensure the technical coordination of the project;
4. Mobilize all project inputs in accordance with DEX procedures;
5. Finalize the ToR for the consultants and subcontractors;
6. Coordinate the recruitment and selection of project personnel;
7. Supervise and coordinate the work of all project staff, consultants and sub-contractors;
8. Work closely with project partners to closely coordinate all the actors involved with achieving Project Outcomes, Outputs and Activities;
9. Supervise the work of all PIU staff.
10. Prepare and revise project work and financial plans, as required Government and UNDP;
11. Manage procurement of goods and services under UNDP guidelines and oversight of contracts;
12. Ensure proper management of funds consistent with UNDP requirements, and budget planning and control;
13. Establish project monitoring and reporting;
14. Arrange for audit of all project accounts for each fiscal year;
15. Prepare and ensure timely submission of quarterly financial consolidated reports, quarterly consolidated progress reports, mid-term reports, and other reports as may be required by UNDP.
16. Disseminate project reports to and respond to queries from concerned stakeholders;
17. Report progress of project to the Steering Committee.
18. Oversee the exchange and sharing of experiences and lessons learned with relevant conservation and development projects nationally and internationally.

19. Preparing a detailed annual work plan for the project
20. Undertaking any other activities that may be assigned by the Steering Committee.

### **Selection Criteria**

1. Post-graduate degree in agriculture, natural resources management or other relevant academic and profession qualifications with at least 10 years professional experience;
2. Proven extensive experience and technical ability to manage a large project and a good technical knowledge in the fields related to SLM, participatory approaches and/or environmental economics;
3. Effective interpersonal and negotiation skills proven through successful interactions with all levels of project stakeholder groups, including senior government officials, business executives, farmers and communities;
4. Ability to effectively coordinate a complex, multi-stakeholder project;
5. Ability to lead, manage and motivate teams of international and local consultants to achieve results;
6. Good capacities for strategic thinking and planning.
7. Excellent communication skills; and
8. Knowledge of UNDP project implementation procedures, including procurement, disbursements, and reporting and monitoring highly preferable.

**Duration of the assignment:** 3 years

### **2. Project Steering Committee (PSC)**

The PSC will be composed of the Permanent Secretary (PS) or representative of the Minister or Vice Minister of the key ministries related to SLM and will provide policy level guidance, reviews project progress and project financial status, and reviews/endorse budget revisions. The PS or representative of the Ministry of Agriculture, Forestry and Fisheries (MAFF) will chair the PSC. The PSC membership will be the following:

1. PS, Ministry of Planning and Finance
2. PS, Ministry of Agriculture, Forestry and Fisheries
3. PS, Secretary of State for Environment Coordination, Territorial Ordering and Physical Development.
4. PS, Office of the Vice Minister of Natural resources, Minerals, and Energy Policy
5. PS, Ministry of Public Works
6. Vice Chancellor, National University of Timor-Leste
7. UNDP

The principal tasks of the PSC are as follows:

1. Provide high level orientation and guidance for the project.
2. Ensure that the project develops in accordance with national development objectives, goals and policies.

3. Pay special attention to the assumptions and risks identified in the log frame, and seek measures to minimize these threats to project success;
4. Ensure collaboration between institutions and free access on the part of project actors to key documents, land information systems, remote sensing imagery, etc.
5. Pay special attention to the post-project sustainability of activities developed by the project.
6. Ensure the integration and coordination of project activities with other related government and donor-funded initiatives.

Regular PSC meetings will be held on a three-monthly basis until the completion of the project. Special sessions will be convened as required. The PM, in consultation with NDCF, will be responsible for the timely formation of PSC.

### **3. Project Working Committee (PWC)**

The Project Working Committee discusses any issues arising from day-to-day implementation of the project. Members are of working level representatives of the key ministries related to SLM.

The head of the Executing Agency, the National Director of Forestry and Water Resources will chair the PWC. The PSC membership will be the following:

1. Representative of the Ministry of Planning and Finance
2. Representative of the Ministry of Agriculture, Forestry and Fisheries
3. Representative of the Secretary of State for Environment Coordination, Territorial Ordering and Physical Development.
4. Representative of the Ministry of Natural resources, Minerals, and Energy Policy
5. Representative of the Ministry of Public Works
6. Representative of the National University of Timor-Leste
7. Representative of UNDP
8. Representative of NGOs (ex-officio)
9. Representative of the farmers group (ex-officio)

The PWC will be composed of 10 individuals from government, the private sector, NGOs, and civil society institutions. PWC members will be composed of individuals who are widely recognized as being amongst the most competent in their field. The suggested disciplines to be included are the following: sustainable agriculture/soil science, forest management, watershed protection, participatory approaches to natural resource management, remote sensing, information management systems, and ecology.

Regular PWC meetings will take place on a monthly basis. Special sessions will be convened as required. The PM, in consultation with NDCF, will be responsible for the timely formation of PWC.

**Annex 2: Management Costs**

<b>Project Management Cost</b>	<b>GEF</b>		<b>Total</b>
6.1 Project Manager	<b>39,600</b>		39,600
6.2 Project Assistant	<b>19,800</b>		19,800
6.3 Driver	<b>8,280</b>		8,280
6.4 Vehicle	<b>23,119</b>		23,119
6.5 Running costs for vehicle	<b>5,000</b>		5,000
6.6 Desktop computer	<b>1,000</b>		1,000
6.7 Lap-top computer (Note book)	<b>1,500</b>		1,500
6.8 Printer/Scanner/UPS	<b>750</b>		750
6.9 Phone line and phone	<b>1,000</b>		1,000
6.10 Furniture	<b>1,000</b>		1,000
6.11 Induction workshop	<b>2,500</b>		2,500
6.12 Audit fees	<b>3,000</b>		3,000
<b>Total</b>	<b>106,549</b>		106,549



**Annex 4: Responsibility by Output**

Outcome	Output	Lead responsibility	Cooperating Institutions
<b>Outcome 1:</b> SLM mainstreamed into national policies, plans and legislation	1.1 Documents for integration of SLM into macro-economic policies and regulatory and economic incentive frameworks	MPF	MAFF, SECTOPD and NUTL
	1.2 Documents for integration of SLM into Forestry Sector Policy and Agriculture and Livestock Sector Policy.	Jointly by NDAL and NDCF	MPF and DOE
	1.3 SLM investment plan	MPF	MAFF and SECTOPD
<b>Outcome 2:</b> Human resources and institutional capacities needed for SLM are developed	2.1 Trained officers from NDCF, NDAL, and DOE at national and regional levels	PIU	NDCF, NDAL, DOE, MPF, MPW, NUTL and NGO
	2.2 Trained farmers and forest communities in SLM	PIU	NDCF, NDAL, NDCF, ARP III and NGO
	2.3 Gender sensitization workshop and guidelines for integrating gender into SLM activities.	PIU/NGO	NDAL, NDCF and DOE
	2.4 Enhanced capacity in analytical and advocacy skills and inter-sectoral approaches.	MAFF	NDAL, NDCF and DOE
<b>Outcome 3:</b> Capacities for knowledge management in SLM are developed	3.1 Status report on land degradation and land use	DRE	NDAL, NDCF and DOE
	3.2 Computerized land use data base and information system	GIS Unit/DRE	NDAL, NDCF and DOE
	3.3 Assessment of land ownership, tenure and property rights of private, community and public forest and agricultural lands	Ministry of Justice	NDAL, NDCF, DOE and NUTL
	3.4 An evaluation of the impact of fuel wood harvesting on watersheds and recommendations to mitigate the adverse impacts.	NDCF	NUTL, DOE and MNREP
	3.5 Improving productivity and sustainability of upland/ dry land farming by adopting SLM.	NDAL	NDCF, DOE and NUTL
<b>Outcome 4:</b> The National Action Program (NAP) on SLM completed and adopted	4.1. Draft NAP document on SLM	PIU	NDCF, NDAL, DOE and MPF
	4.2 Final and approved NAP document on SLM in English and local languages	PIU	NDCF, NDAL, DOE and MPF

## CO-FINANCING BASELINE (ON-GOING) PROJECTS

### Annex 5: Environmental Governance Support Programme (EGSP)

#### Summary

**Objectives:** The overall objective of the project is to enhance the GoTL's capacity to develop and implement environmental governance structures including policy formulation, legal-regulatory frameworks and inter-ministerial coordination, both at national and international levels, to support sustainable and equitable natural resources management in Timor-Leste.

The specific objectives of the project are:

1. Through NSCA process, identifying capacity constraints and determining actions to remove the constraints to address global environmental management requirements, in a country driven manner.
2. Developing and enhancing the capacity of GoTL to implement MEAs and to represent Timor-Leste perspectives at global environmental forums.
3. Promoting inter-sectoral policy coordination, consistency and coherence through support to the newly established *Sustainable Development Inter-Ministerial Working Group* and help establish the envisioned related *Task Forces*.
4. Developing a strategy plan to support sustainable use of marine living resources.

#### Components and Activities:

Component I: National Capacity Self Assessment – Funded by GEF

Component II: Facilitate on-going MEA accession process by supporting GoTL to prepare for and participate in MEA related international meetings, such as CoPs, and assist with cost-benefit analysis of the accession to additional MEAs. An important element of this strategic analysis is to assist GoTL access future GEF funds. This component is funded by UNDP TRAC resources.

Component III: Strengthening inter-sectoral collaboration, focusing on newly established Sustainable Development Inter-Ministerial Working Group through support to its establishment as a permanent Secretariat and creation of the envisioned Working Groups.

This component is funded by UNDP TRAC resources.

Component IV: To develop some key planning tools pertaining to integrated sustainable use of marine resources. This component is funded by UNDP TRAC resources.

The cost of implementing components II and III are included into the co-financing cost of the MSP.

#### Budget

Component I - Fund allocation – USD 200,000

Component II - Fund allocation – USD 69,000 (Co-financing MSP)

Component III - Fund allocation: USD 20, 000 (Co-financing MSP)

Component IV - Fund allocation – USD 74,000

Project Management – USD 37,000

## Outputs of the Environment Governance Support Programme matching with the outputs of MSP

<b>Component</b>	<b>Outputs</b>	<b>Corresponding outputs in MSP</b>
<b>Component II:</b> National capacity developed to access and implement MEAs	2.1 The UNCBD and UNFCCC acceded by 2005. 2.2 Existence of qualified national technical Focal Points on key MEAs. 2.3 Strategic plan for MEA implementation	Outputs: 1.1 Mainstreaming national policy (USD 20,000); 1.2 Mainstreaming sector policies (USD 14,000); 4.1 Draft NAP (USD 10,000); and 4.2 Final NAP (USD 15,000)
<b>Component III:</b> Formalization and consolidation of Inter – Ministerial Working Group	3.1 The Inter-Ministerial Working Group established as a permanent Secretariat 3.2 TORs, legal setting and Operational Guidelines for Working Groups and Task Force prepared. 3.3 Annual work plans for Working Groups and Task Force prepared	Output: 1.3 SLM Investment Plan USD (20,000)

## CO-FINANCING BASELINE (ON-GOING) PROJECTS

### Annex 6: Ainaro & Manatuto Community Activation Project (AMCAP)

#### Summary

**Objectives:** The overall objective of the 5-Year Project is to increase food security and incomes of poor households in Ainaro and Manatuto Districts on an environmentally sustainable basis, using community-focused participatory methodologies. This will be achieved through the development of sustainable upland farming systems, irrigation rehabilitation, livestock improvement, local seed multiplication capacity, and reforestation while improving technical capacities through a community training centre. In addition, the project will assist in key aspects of community development, including healthcare, post-trauma community reconciliation and women's empowerment.

**Immediate Objective 1:** To establish effective project management and transparent monitoring systems (Not directly related to the MSP).

**Immediate Objective 2:** To improve the productivity and sustainability of lowland and upland farming (One output related to MSP).

Output 2.1: Local adoption of improved upland farming technologies through demonstration units

**Immediate Objective 3:** To reverse severe upland environmental degradation through a process of soil conservation and reforestation (All outputs related to MSP).

Output 3.1: Catchment management plan

Output 3.2: Village planting material supply programme and 5 commercial nurseries

Output 3.3: Gully planting and reforestation of upper slopes

**Immediate Objective 4:** To contribute to community empowerment with improved standard of community nutrition and health in Ainaro district (Not directly related to the MSP).

Outputs and Activities of the AMCAP project matching with the outputs of MSP

Outputs/Activities	Total	Corresponding outputs in MSP
Training Nursery Operators (4) (A)	2,220	Outputs: 2.2 Training Village/community (USD 20,000) and 2.3 Gender workshop (USD 37,620)
Training VFs (10) (A)	5,400	
Ainaro Community Training Centre	15,000	
Training of Trainers	25,000	
Training Extension Facilitators (A)	10,000	
Training Total	57,620	
Purchase Tree Seeds/lings (A)	15,000	Outputs 3.1 SLM Stocktaking (USD
Tree seedling distribution (A)	3,000	

Vetiver splits for gully planting	22,500	52,000),
Tree seeds/seedlings for gully planting	22,500	3.2 Information System (USD
Community Resource Centre/Library	12,000	52,000),
Reforest/gully planting	182,250	3.3 Land ownership survey (USD
Environmental Monitoring (A)	12,000	52,000),
Knowledge management Total	269,250	3.4 Fuel wood study (USD 52,000), and 3.5 Upland agriculture (USD 61,250)

## **Annex 7: Third Agriculture Rehabilitation Project (ARP III)**

### **Objective**

The Third Agriculture Rehabilitation Project is basically a continuation and consolidation of the Second Agriculture Rehabilitation Project. However, its expressed objective is modified in keeping with the needs of the current time: *To strengthen the capacity of the Ministry of Agriculture, Forestry and Fisheries (MAFF) assist rural communities and its development partners increase agricultural production and income in a sustainable way.* This focuses the project objective to the main goal of MAFF of attaining food security and generating employment.

### **Project Components**

Project Component 1: Participatory development and natural resources management (Relevant to the MSP)

Project Component 2: Irrigation rehabilitation and management

Project Component 3: Services to farmers

Project Component 4: Programme management

#### Project Component 1

To strengthen the self reliance of poor upland and coastal communities of Timor-Leste through participatory development and natural resources management.

#### **Specific Objectives:**

1. To continue supporting the implementation of community groups natural resources management activities in 30 ARP II pilot villages.
2. To organize, training and provide support to additional 20 upland and coastal villages to implement livelihood and natural resource management activities.

#### **Expected Outputs**

1. Continuation of the support to the community groups NRM activities in 30 pilot villages and expansion of these activities to at least to 20 villages.
2. At least 200 community groups in the target villages are formed, trained and assisted to implement livelihood and natural resource rehabilitation and conservation activities.
3. At least 3000 community members in the target villages are participating actively in the implementation of NRM activities in their villages.

## Outputs and Activities of the ARP III project matching with the outputs of MSP

Components /Outputs	Total	Corresponding outputs in MSP
3.1 Training and Workshops	48,750	Output 2.2 Training at village / community levels (USD 48,750)
4.1 Community grants/support to community groups	50,000	Out put 3.4 Fuel wood study (USD 25,000) and 3.5 Upland agriculture (USD 25,000)

**Annex 8: Land Use Classes and Estimated Areas**

<b>Land use Category</b>	<b>Land Use Class</b>	<b>Area ha</b>	<b>%</b>
Forested Land	Coastal Forest-	19,709	1.32
	Coastal Forest-Mangrove	1,802	0.12
	Highland Forest-Moist Mixed	65,103	4.36
	Highland Forest-Single Species	2,356	0.16
	Dry Lowland Forest – Single Species	135,720	9.09
	Moist Lowland Forest-Sparse	174,992	11.72
	Moist Lowland Forest-Dense	261,694	17.52
	Dry Lowland Forest- Mixed	189,080	12.66
	Montane Forest	2,611	0.17
	Wetland Forest-Swamp	269	0.02
	Man-Made Forest	918	0.06
	Commercial Agriculture	Estate Crops	68,074
Small Holder Estate Crops		6,504	0.44
Water Bodies	Lake	5,080	0.34
Cities and Industrial Land	Cities and Large Towns	13,346	0.89
Villages and Gardens	Villages and Mix Gardens	6,588	0.44
Agricultural Land	Dry Land Arable – Food Crops	284,300	19.04
	Wet Land Arable	45,856	3.07
	Shifting Cultivation Areas	6,244	0.42
Non-productive Dry land	Grassland	107,090	7.17
	Savanna	93,378	6.25
	Bare Land	2,279	0.15
Non –productive Wetland	Shrub, grasses and Reeds	405	0.03
	Total land area	1,493,399	100

## **Annex 9:** Ecological Regions of Timor-Leste

Timor-Leste can be divided into six ecological regions, namely:

- Mountainous areas
- Highland plains
- Moist lowland areas
- Arid lowland areas
- Marine and coastal areas
- Urban areas

**Mountainous areas:** The mountainous areas are characterized by very steep terrain, at altitudes above 600 m. Temperatures are below 24° C, rainfall is above 1500 mm per year, and the dry season lasts four months. Vegetation was originally rainforest, semi-evergreen forest or moist deciduous forest. In this region, parts of the primary forest are still intact, but generally large tracts of even very steep slopes have been cultivated. As a consequence, this is a region where frequent landslides are presently experienced during the rainy season.

**Highland plains:** The highland plains lie mostly between 300 and 700 m above sea level, and are presently dominated by agricultural land. The highland plains in East Timor differ significantly in soil types and availability of water. Large parts of the Maliana plains are cultivated for irrigated rice production, and will in normal years constitute an important part of the “bread basket” of East Timor. The plains around Lospalos, on the other hand are mainly used for grazing. The top soil types cause the area to be swampy in the rainy season, whereas in the dry season the clayey soils dry out and crack-up. The plains around Baucau airport are generally dryer and less cultivated. The groundwater level is shallow, so that while people in the escarpment have an abundance of water all year around, people on the plains have to dig deep wells to access water during the dry season.

**Moist lowland areas:** Moist lowland areas may roughly correspond to the climatic zone along the southern coast at altitudes between 0 and 600 m, where the temperatures are above 24° C, there is a heavier rainfall and the dry season lasts three months. The original vegetation was mainly moist deciduous forest, semi-evergreen forest, or rainforests. Human activities have changed this zone into cultivated lands, plantations, secondary vegetation, and some bad lands. On the southern coast, the coastal plain is quite wide, but the ecosystem also includes steep hillsides.

**Arid lowland areas:** Arid lowland areas may roughly correspond to the climatic zone constituted by altitude between 0 and 600 m along the northern coast, where the mean temperature is above 24° C, annual rainfall is below 1500 mm, and the dry season lasts 5 months. Vegetation is to a large extent reduced from the original deciduous forest to cultivated land, savanna-like grasslands, badlands or secondary forests. The flat coastal plains are narrow, and a large proportion of this zone is steep hillsides.

**Marine and coastal areas:** Marine and coastal areas consists of the shallow seas close to land, with coral reef and other valuable marine ecosystems, specialized coastal vegetation

like mangroves, and land areas close to the sea, where the population obtain important resources for subsistence and income from the resources in the sea. The marine fisheries are also important for the coastal zone population, and the marine ecosystems are therefore included here.

**Urban areas:** The urban areas in East Timor are small, but face specific environmental problems, while also influencing the environmental situation in the surrounding countryside.

It may be important to point out that these ecosystem types of East Timor are interconnected. The soil erosion, land slides, and ensuing problems for farmers are communities in the higher altitudes lead to increased particle transport in the rivers; the soils are moved downstream. These sediments cause siltation of irrigation channels and destruction of related infrastructure in lowland areas. Removal of forest vegetation in the upper parts of the watersheds increases the frequency and size of flash floods. Thus, poor, or ill-informed management in the upper watersheds harm the livelihoods and property of the people in the lower watersheds.

**Annex 10.** Use of the products from KM

Output	KM objects	The use of the KM outputs
Output 3.1	Status reports on land use and land degradation in TL.	The report will be published and widely disseminated. Information on land use and land degradation would be readily available and used by policy planners, technical departments and land users in implementing SLM.
Output 3.2	Computerized land use database and information system.	Information on agricultural and forestland uses would be digitized and integrated into a computerized land information system. The staff of MAFF and DOE and others will have ready access to the information, via off-line (CD- Rom based) and on-line (intranet/ internet). Government departments, NGOs, private sector, etc. will use the information system to plan and manage all land uses in an integrated manner and to promote SLM.
Output 3.3	Assessment of land ownership, tenure and property rights.	The report will be published and widely disseminated. Information on land ownership and land rights including public, private and communal lands and protected areas would be available to relevant departments and others. The information will be used for land use planning and to promote SLM.
Output 3.4	An evaluation of the impact of fuel wood harvesting on watersheds.	The report will be published and widely disseminated. The staff of MAFF and in particular, NDCF, will use the information generated by the study to formulate projects and programmes in forest conservation, fuel wood production and watershed management. The study will form the basis to formulate a full-size project on this subject.
Output 3.5	An evaluation of the impact of upland and dry land farming practices on SLM.	The report will be published and widely disseminated. The staff of MAFF and in particular NDAL, will use the information generated by the study to formulate projects and programmes to improve upland and dry land farming practices. The study will form the basis to formulate a full-size project on this subject.
Output 3.6	A study to identify potential mechanisms for sustainability financing SLM.	The report will be used by the government and the donor community to develop a donor support strategy and programme and ensure sustainable financing of SLM in TL.



Timor-Leste

## SIGNATURE PAGE

### Country: *Timor-Leste*

UNDAF Outcome(s)/Indicator(s): <i>(Link to UNDAF outcome)</i>	<i>To integrate the principle of sustainable development into country policies and programmes.</i>
Expected Outcome(s)/ Indicator(s): <i>(CP outcomes linked to SRF/MYFF goal and service line)</i>	<i>Comprehensive approach to environmentally sustainable development integrated in national development planning. G3 – Environment and Energy for livelihood. G3-SGNI-SASNI-Policy Framework. (3) Energy and Environment for Sustainable Development. (3.4) Sustainable land management to combat desertification and land degradation.</i>
Expected Output(s)/ Indicator(s): <i>(CP outcomes linked to SRF/MYFF goal and service line)</i>	<i>A National Strategy for Sustainable Development (NSSD) with national implementation targets adopted.</i>
Implementing partner: <i>(designated institution/Executing agency)</i>	<i>United Nations Development Programme Ministry of Agriculture, Forestry and Fisheries</i>
Other Partners: <i>(formerly implementing agencies )</i>	<i>Secretariat of State for Environment Coordination, Territorial Ordering and Physical Development</i>

<b>Programme Period:</b> 2007-2009 <b>Programme Component:</b>  <b>Project Title:</b> Capacity Building in and Mainstreaming of Sustainable Land Management in Timor-Leste  <b>Project ID:</b> 00053217 <b>Project Duration:</b> 3 years <b>Management Arrangement:</b> DEX
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<b>Budget</b> Total Budget of the Programme: US\$ 1,032,970  <b>Total Budget of the Project: US\$ 475,000</b>  <b>Allocated resources:</b> <ul style="list-style-type: none"><li>• GEF: US\$ 475,000</li><li>• UNDP Timor-Leste: US\$ 415,870</li><li>• GoTL in kind contributions: US\$ 43,350</li><li>• Others (Trust Fund of East Timor): US\$ 98,750</li></ul>
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**Agreed by Government:** \_\_\_\_\_

**Agreed by Implementing Partner/Executing Agency:** \_\_\_\_\_

**Agreed by UNDP:** \_\_\_\_\_