



THE MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES

FIRST NATIONAL REPORT

*LAND DEGRADATION
IN
TIMOR-LESTE*

SUBMITTED TO
THE SECRETARIAT OF UNCCD



FEBRUARY 2007

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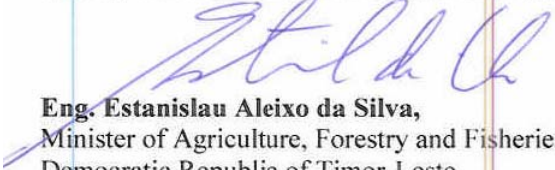
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ACKNOWLEDGEMENT

The Government of the Democratic Republic of Timor-Leste (RDTL) recognizes the importance of sustainable land management to achieve sustainable development and maintain ecosystem productivity while contributing directly to the environmental, economic and social well-being of the country.

After acceding to the UNCCD in August 2003 and ratification of the same Convention in April 2006, the Government of RDTL through the Ministry of Agriculture, Forestry and Fisheries has committed to fulfil the obligations under the Convention and submit periodically its national reports on CCD to the Secretariat of the Convention.

I would like to take this opportunity to submit Timor-Leste's First National Report to the Secretariat of the UNCCD and also express my sincere gratitude to the GEF, Government of Norway and UNDP for their support in the preparation of this report.



Eng. Estanislau Aleixo da Silva,
Minister of Agriculture, Forestry and Fisheries of the
Democratic Republic of Timor-Leste

ACRONYMS

| | |
|------------|---|
| AMCAP | Ainaro, Manatuto Community Activation Programme |
| ARP | Agriculture Rehabilitation Project |
| CDCU | Capacity Development Coordination Unit |
| CFET | Consolidated Fund for East Timor |
| Convention | United Nations Convention to Combat Desertification also UNCCD |
| GEF | Global Environment Facility |
| GoTL | Government of Timor-Leste |
| IFAD | International Fund for Agriculture Development |
| INA | Information Not Available |
| JICA | Japan International Cooperation Agency |
| MAFF | Ministry of Agriculture, Forestry and Fisheries |
| MDGs | Millennium Development Goals |
| MI | Ministry of Interior |
| NA | Not Applicable |
| NAP | National Action Programme (under the framework of the Convention) |
| NCB | National Coordination Body |
| NDAL | National Directorate for Agriculture and Livestock |
| NDCF | National Directorate for Coffee and Forestry |
| NDE | National Directorate for Environment |
| NDFA | National Directorate for Fisheries and Aquaculture |
| NDWS | National Directorate for Water Services |
| NDP | National Development Plan (2003 - 2007) |
| NEMP | National Environment Management Plan (administered by NDE) |
| NGOs | Non-Governmental Organizations |
| OCAP | Oecussi Community Activation Programme |
| RAP | Regional Action Programme (under the framework of the Convention) |
| RDTL | Democratic Republic of Timor-Leste |
| SRAP | Sub-regional Action Programme (under the framework of the Convention) |
| SSECTOPD | Secretary of State for Environmental Coordination, Territorial Ordinance and Physical Development |
| TFET | Trust Fund for East Timor |
| TL | Timor-Leste |
| UNDP | United Nations Development Programme |
| UNEP | United Nations Environment Programme |
| UNOPS | United Nations Office for Project Services |
| UNTAET | United Nations Transition Administration in East Timor |

SUMMARY

1. Focal point institution:

| | |
|---|---|
| Name of focal point | Manuel da Silva |
| Address including e-mail address | Ministry of Agriculture, Forestry and Fisheries Rua D. Aleixo Corte Real Fomento, P.O. Box 408 Dili, Timor-Leste nuelsilva@yahoo.com.au |
| Country-specific websites relating to desertification | 1. Environment Protection under MAFF... www.timor-leste.gov.tl/MAFF/English/environment_protection.htm 2. National Development Plan... www.primeministerandcabinet.gov.tp/ndp.htm 3. Timor-Leste Government gateway... www.timor-leste.gov.tl/Aboutgovt/aboutgovt.htm |

2. Status of NAP (please provide information relevant to the status in your country only):

| | |
|--|--|
| Date of validation: NAP not yet formulated | Body/institution/Government level which validated the NAP (validating bodies to be confirmed) |
| NAP review(s) NA | Date(s) NA |
| NAP has been integrated into the poverty reduction strategy (PRSP) | Yes/No/Currently under way (If yes, please specify the year in which the strategy was officially adopted.) NA |
| NAP has been integrated into the national development strategy | Yes/No/Currently under way (If yes, please specify the year in which the strategy was officially adopted.) NA |
| NAP implementation has started with or without the conclusions of partnership agreements | Yes/No NA |
| Expected NAP validation | Month/year NA |
| Final draft of a NAP exists | Yes/No NA |
| Formulation of a draft NAP is under way | Yes/No NA |
| Basic guidelines for a NAP have been established | Yes/No NA |
| Process has only been initiated | Yes/ No |
| Process has not yet started | Yes /No |

3. Member of SRAP/RAP (please provide information where appropriate):

| | | |
|---|--|--|
| Name of subregional and/or regional cooperation framework | | Involvement specifically in topics such as water harvesting techniques, soil erosion etc. |
| 1. | South East Asia Sub-regional Action Programme to Combat Desertification | Island co-operation between Indonesia and Timor-Leste relating to prevention and rehabilitation of soil erosion |
| 2. | | |

4. Composition of the NCB (indicate whether it is a Government or civil society organization, and provide information on the representatives' gender):

| Name of institution | Government (√) | NGO (√) | Male/female |
|--|----------------|---------|-------------|
| 1. Secretary of State for Environmental Coordination, Territorial Ordnance and Physical Development | Yes | | Male |

5. Total number of NGOs accredited to the process: **Information Not Available (INA)**

| | |
|---|--|
| Has an NGO National Coordinating Committee on desertification been established; if yes, how many NGOs or civil society organizations participate in it? | Yes/No (If yes, please provide the number of civil society organizations participating.) |
|---|--|

6. Total number of acts and laws passed relating to the UNCCD: **Three**
Name up to five most relevant acts and laws and/or regulations.

| Title of the law | Date of adoption |
|--|--|
| 1. UNTAET regulation No19/2000 on protected areas | 2000 |
| 2. UNTAET regulation No17/2000 on the Prohibition of Logging Operations and the Export of Wood from TL | 2000 |
| 3. Fisheries Decree Law No 6/2004 | 2004 |
| 4. Law on Environmental Impact Assessment | Waiting for approval by the Council of Ministers |

7. The consultative process

Number of partnership agreements that have been concluded and/or are being initiated within the framework of the UNCCD (please provide information where appropriate):

| Official title of partnership | Donor(s), international organization(s), and/or agencies of the UN system involved | Date of (expected) conclusion |
|---|--|-------------------------------|
| 1. Comoro Laco Community-based Water Shed Management Pilot Project | JICA | 2009 |
| 2. Ainaro Manatuto Community Activation Programme (AMCAP) | UNDP/UNOPS | 2007 |
| 3. Oecusse Community Activation Programme (OCAP) | UNDP/UNOPS | 2008 |
| 4. Participatory Rural Energy Development Programme | UNDP | 2007 |

List of consultative meetings on UNCCD implementation (please provide information where appropriate):

| Name of consultative meeting | Date/year | Donor countries involved | International organizations or agencies of the UN system involved |
|--|----------------------|--------------------------|---|
| 1. Sub-regional Workshop on Implementation of UNCCD | December 2005 | None | UNDP / UNEP / GEF |

Name of country which has taken over the role of *Chef de file* (please provide information where appropriate): **NA**

8. Name up to 10 projects currently under implementation which are directly or indirectly related to the UNCCD.

| Name of project | Project implemented within the framework of the NAP/SRAP/RAP? (Yes/No) | Project implemented within the framework of | Timeframe | Partners involved | Overall budget |
|--|--|--|---------------------|-------------------------------|---------------------|
| 1. Arresting land degradation and promotion of sustainable land management in Indonesia, Malaysia, Singapore, Philippines, Brunei and Timor-Leste | SRAP | Sustainable Land Management | 2006 to 2008 | GEF / IFAD | US\$ 400,000 |
| 2. Agriculture Rehabilitation Project (ARP I, II, III) | No | NDP / CFET | 2003 to 2007 | World Bank (TFET) / EC | US\$ 8.9m |

INTRODUCTION

The Democratic Republic of Timor-Leste (RDTL) includes the eastern end of the island of Timor, the enclave of Oecusse and the islands of Atauro and Jaco.

RDTL acceded to UNCCD on 20 August 2003 and the Convention entered into force for RDTL on 18 November 2003. The National Parliament of RDTL ratified the Convention in 11 April 2006.

Environment

Unlike many neighbouring islands that are derived from volcanic rock, RDTL is derived from limestone and metamorphosed marine clays. The island has relatively unproductive, low fertility, fragile soil. In most areas, this low fertility is compounded by the rapid decomposition of organic matter due to tropical climate.

As a general proposition, RDTL 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.

Rainfall and Climate

The rainfall patterns in RDTL are variable. The country can be divided into three zones based on altitude and rainfall. The northern coast, between 0 – 600 m above sea level, is characterised by an annual rainfall ranging from 500 mm to 1,500 mm and a dry season of five months. The mountainous zone is characterised by rainfall about 1,500 mm and a dry season of four months. The southern coast, between 0 – 600 m above sea level, has heavier rainfall, ranging up to 2,000 mm and a dry season of three months.

The average temperature is 24°C with high humidity (about 80%). The dry months from May to October experience moderate winds and slightly milder temperatures – about 24°C on the coastline and 20°C or lower in the mountains. During the monsoon season (November to April), the rivers become torrents due to the extremely high rainfall in the mountains.

As much as 44% of RDTL's area may have a slope of more than 40%. According to Bierenbroodspot (1986) the following classification of slopes may be valid for Timor: 1) Land with less than 17% slope; suitable for cultivation provided that any incipient erosion is controlled. 2) Land with 17-30% slope; best used for grazing, as soil erosion cannot be controlled under permanent or shifting cultivation. 3) Land with over 30% slope; unsuitable for sustainable cultivation, may require reforestation or crops providing perennial plant cover.

The country profile for RDTL is attached at the Annex 1.

POLICY DEVELOPMENT

The Constitution of RDTL provides for the environmental protection and sustainable development. Article 6(f) of the Constitution referring to the policy of sustainable development states:

“Everyone has the right to a humane, healthy, and ecologically balance environment and the duty to protect it for the benefit of future generations” and “[t]he State should promote actions aimed at protecting the environment and safeguarding the sustainable development of the economy”.

In addition, the First National Development Plan (2003 – 2007) of 2002 states that RDTL “will manage and utilise its resources in a sustainable manner that takes account of environmental needs in order to support economic growth and improved community welfare”.

The Government of Timor-Leste (GoTL) has set the following goals for protecting and managing the environment:

- a. Manage extractive activities in an environmentally appropriate fashion.
- b. Protect and enhance the natural environment.
- c. Raise community awareness about the importance of protecting the environment.
- d. Integrate environmental consideration into policies, programs and plans.
- e. Ensure accountability to the government and the community for environmental aspects of the extractive industries.

Forest Policy and Legislation

There are no specific laws and policies on desertification and land degradation. These issues are addressed under sectoral legislation. Most of the policies were developed by the government focused on forest land or agriculture land and of a very general nature.

There is a need for national policies to mainstream land degradation issues and sustainable land management. A draft forestry policy paper for RDTL is currently under consideration by the Minister of Agriculture, Forestry and Fisheries. The draft policy paper will then be submitted to the Council of Ministers for approval. A key component and objective of the policy paper is the rehabilitation and conservation of the country’s forest resources.

The draft policy paper (currently under consideration and referred to above) includes proposals to promulgate additional laws for the prevention of land degradation and promote sustainable land management. When the draft policy paper is approved by the Council of Ministers, the Ministry of Agriculture, Forestry and Fisheries (MAFF) and, in particular, the National Directorate for Coffee and Forestry (NDCF) will develop the forestry law and additional regulations and its implementing guidelines.

The draft policy paper was developed by adopting a participatory approach. Extensive consultations were conducted with various stakeholders including community groups. Workshops were held at the sub-district, district and regional levels and a final conference was held at the national level.

Table 1 (below) sets out the existing and proposed laws and policy papers of relevance to the implementation of obligations under the Convention.

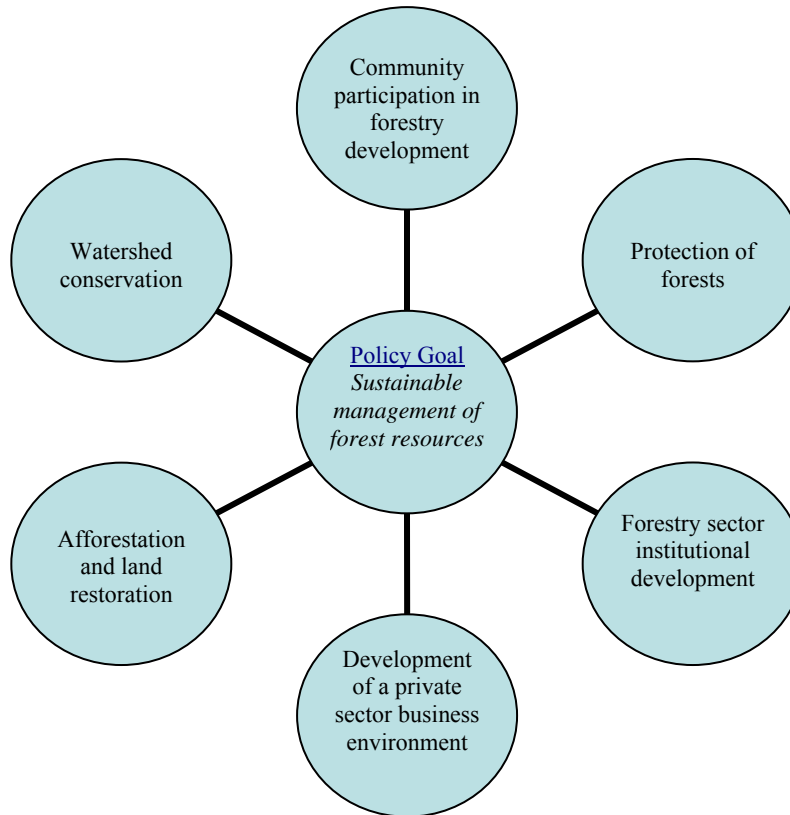
Table 1: Lists of legislation and policy plans

| Policy/strategy | Ministry | Date | Status |
|--|-----------------|-------------|-------------------------|
| - MAFF Policy and Strategic Framework | MAFF | 2004 | Adopted |
| - Forestry Policy, Goals, Objective and Strategy, NDCF | MAFF | 2005 | Being formulated |
| - The MAFF Sector Investment Plan | MAFF | 2005 | Adopted |
| - Fish for Sustainability: Our strategy Plan for Fisheries, Department of Fisheries | MAFF | 2005 | Draft/ Being formulated |
| - Regulation No19/2000 on protected areas | UNTAET | 2000 | Adopted |
| - Regulation No17/2000 on the Prohibition of Logging Operations and the Export of Wood from TL | UNTAET | 2000 | Adopted |
| - Law on Environmental Impact Assessment | SSECTOPD | 2006 | Waiting for approval |
| - Law on Pollution Control | SECAOTDF | 2006 | Waiting for approval |
| - National Disaster Risk Management Plan | MI | 2005 | Adopted |
| - Medium Term Capacity Development Strategy Part 1 and 2 | OPM/CDCU | 2005 | Adopted |
| - Water Services Decree | NDWS | 2004 | Promulgated |
| - Sanitation Management Decree: | NDWS | draft | Being formulated |
| - Water Resource Management Decree | NDWS | draft | Being formulated |
| - Fisheries Decree Law | NDFA-MAFF | 2004 | Adopted |

Draft Forestry Policy Paper

The draft paper elaborates on six policy objectives and strategies for achieving the objectives as illustrated in Diagram 1.

Diagram 1: Relationships between the Forest Policy Goal and Objectives



A key feature of the draft policy paper is to achieve an integrated landscape-based approach to sustainable forest resources management through the implementation of objectives and strategies aimed at achieving the most appropriate balance between conservation and environmental protection, the production of wood and non-wood forest products for national economic development while meeting the needs of poor and vulnerable people who depend on the forests for survival.

The maintenance of sustainable livelihoods for communities, the reduction of poverty, developing a lasting basis for community participation in all aspects of forestry and developing a private sector business environment are crucial to the success of the overall strategy in implementing the objectives.

The draft policy paper is consistent with the vision expressed in the National Development Plan to have a sustainable, prosperous and competitive forestry industry (as well as agriculture and fisheries industries) by 2020 that will support improved living standards for the people of the nation.

The six objectives to achieve the goal of sustainable management of forest resources and watersheds to provide environmental, social and economic benefits to the people of RDTL are as follows:

- (1) Protection of Forests - e.g. through conservation strategies and to empower, engage and involve communities to manage forest land;
- (2) Community and Private Participation in Forestry Development - e.g. through consultations and partnerships with private sector involvement in sectoral development to improve forest productivity, to increase incomes and employment within villages;
- (3) Watershed Conservation - e.g. to maintain and enhance natural water flows, to maintain high water quality and to minimise flooding and the erosion of rock and soil;
- (4) Afforestation and Land Restoration - e.g. through the allocation of long-term land use management agreements and utilisation rights for afforestation, utilisation and other aspects of forest protection and management;
- (5) Development of a Private Sector Business Environment - e.g. by encouraging private sector investment in forestry development, in forest utilisation and in marketing through appropriate legal arrangements (regulatory, licensing, leases, contracts), banking facilities (loans) and fiscal incentives (tax incentives, depreciation); and
- (6) Forestry Sector Institutional Development - e.g. by progressively training NDCF staff, particularly in districts, as professional extension advisers and management support personnel who can provide technical, utilisation and marketing advice to forest-dependant communities in a sympathetic manner, as opposed to having the primary regulatory roles of policing and licensing, and to ensure coordination and harmonisation of forestry with other sectoral policies and activities in consultation with appropriate stakeholders, especially on issues of land and forest use planning, national development, water and soil conservation, energy production, public works, education of young people at schools, commerce and trade, and marketing of forest products.

INSTITUTIONAL RESPONSIBILITY

The implementation of the obligations under the Convention is administered by several Ministries and international agencies. The key organs and their responsibilities are highlighted as follows:

Ministry of Agriculture, Forestry and Fisheries (MAFF)

MAFF has the prime but not sole responsibility for the Convention. This responsibility is administered by NDCF and National Directorate for Agriculture and Livestock (NDAL). These two directorates have programmes and policies which are closely linked to the implementation of the Convention's obligations.

The major goals of MAFF are to attain food security and improve self-sufficiency as well as to generate rural employment and increase income, through improved farming systems, crop diversification and agro-industrial development. These two MAFF goals are linked to the implementation of the Convention particularly on how to attain food security and improved farming system through a sustainable land management.

Priority programmes for the next three years for NDCF are: improving human resource capacity, particularly forestry employees, establishment of the community-based Protected Area Network (PAN) and implementation of reforestation and watershed protection programme through establishing pilot project for two districts.

The challenges faced by NDCF are:

- (1) Lack of human resources at the district and central level;
- (2) Lack of technical support to facilitate the implementation of programmes, e.g. supervision of programmes such as planting of seedlings for reforestation, expertise in agroforestry activities, and lack of expertise in the area of forest inventory and forest assessment;
- (3) Lack of financial support, e.g. government allocated budget is very limited and there appears to be a lack of donor interest in assisting in the implementation of programmes, as a consequence basic equipment such as computers and materials for implementation of the programme are not available.
- (4) Lack of equipment, e.g. communications are hampered by not having telecommunication equipment or means of transportation to more remote areas in the districts.

The overarching goal of the NDAL is to develop a high quality crops and livestock industry within farming communities typified by progressive and self-reliant farmers who are adopting profitable, productive, and sustainable farming systems practices.

Some of the challenges faced by NDAL include:

- (1) Lack of access to sufficient quantity and adequate quality of food in certain areas and seasons; deficits can be either seasonal or caused by natural disasters;

- (2) Rural poverty due to poorly developed, market-oriented agriculture and agroindustries;
- (3) Lack of data to support planning, with weak capacity to carry out policy analysis and planning and provide essential regulatory services; and
- (4) Inadequate service delivery to farm households.

The draft Forestry Policy Paper identifies the challenges faced by both the NDCF and NDAL and proposes strategies and plans to deal with these challenges. To successfully implement these strategies and plans, the Government of RDTL still requires technical assistance and partnerships to jointly develop human resource capacity and to execute projects.

Secretary of State for Environment Coordination, Territorial Ordinance and Physical Development (SSECTOPD)

The Secretary of State for Environmental Coordination, Territorial Ordering and Physical Development (SSECTOPD) is an institution under the Prime Minister office. The National Directorate of Environment (NDE), established under the SSECTOPD, is responsible for environmental management and coordinating with all Ministries and agencies environmental policies and the implementations of the three Rio Conventions.

The NDE programmes and projects are formulated in accordance with the National Environmental Management Plan (NEMP). The NEMP provides for the management of RDTL's scarce natural resources. Under the NEMP, development proposals will be screened for potential impacts through the implementation of environmental impact assessments (EIA).

The programmes and projects for the NDE are formulated within the Sector Investment Plan (SIP) but there is still a lack of institutional and individual capacity to undertake the wide range of tasks with which they confronted. The Directorate has very limited qualified human resources and inadequate financial support.

The effectiveness of the NDE is also significantly hampered by the lack of enabling legal and regulatory framework to support the responsibilities of the NDE. This results in weak control of the environmental impact of various development activities and reduces its effectiveness in establishing cooperative mechanisms with other agencies in relation to environmental management.

Ministry of Natural Resource, Minerals and Energy Policy (MNRMEP)

The Ministry of Natural Resources, Mineral and Energy (MNRMEP) is responsible for the development and management of natural resources, including minerals and energy sources for RDTL. The NDP sets out their responsibility to "*Efficiently administer legislation relating to minerals, energy and extractive industries in a consistent, fair, transparent, timely and accurate fashion; and partner industry and provide leadership in achieving regulatory reform*".

Non Governmental Organisation

Only a small number of Non-Governmental Organisations (NGOs) are involved in the activities related to combating desertification/land degradation. Most NGOs are concerned specifically with domestic environmental problems, including biodiversity conservation and development of other sectors such as; education, health and agriculture. However, because of close proximity of issues relating to desertification and biodiversity, some NGOs have contributed improving the conditions relating to desertification and land degradation.

The National University of Timor-Leste (UNTL)

UNTL is a public university and the largest one in the country.

It houses seven faculties, namely, Agriculture, Economic, Social and Political Science, Engineering, Law, Education, and Medical Health. It also has two national institutes, which have the same status as the faculties. National Research Centre is one of the national institutes that has been involved in researching issues relating to land degradation In co-operation with the Association of Rural Development from the United States of America. It also undertakes research in relation to community development and protection of the environment.

PARTICIPATORY AND CONSULTATIVE PROCESS

Environmental Governance Support Programme National Capacity Self-Assessment

The Government of RDTL through the National Directorate of Environment, with support from the United Nation Development Program (UNDP) and the Global Environment Facility (GEF) has established a National Capacity Self Assessment (NCSA) project. This project aims to identify capacity constraints and actions to remove these constraints in order to address global environmental management requirements, and in particular to enable the implementation of the three Rio Conventions in a country-driven manner. The overall information gained within this process will be used to determine capacity needs to meet RDTL's commitments under the conventions and to formulate strategy and action plans.

The NCSA project is on-going and is scheduled to be completed by April 2007.

FUTURE PLANS

Developing of the National Action Programme

RDTL intends to draft the National Action Programme (NAP) and has a tentative guideline for the contents of the NAP. However, RDTL requires technical assistance to ensure that the NAP is consistent and within the framework of Regional Action Programmes and Sub-Regional Action Programmes as required under the Convention and pursuant to Annex II of the Convention.

RDTL welcomes the assistance of the Convention Secretariat and regional / sub-regional organisations in the development of its NAP and in soliciting partnerships for the implementation of the NAP.

RDTL also welcomes the participation of Member States, donors, NGOs and any other stakeholder in facilitating and jointly implementing the various projects and programmes relating to combating desertification and land degradation in RDTL.

COUNTRY PROFILE
TIMOR-LESTE

Information provided by: **Manuel da Silva** (with assistance from UNDP and other agencies)

Organization: **National Directorate for Coffee and Forestry; Ministry of Agriculture, Forestry and Fisheries**

Designation: **National Focal Point for UNCCD**

Date: **4 August 2006**

Biophysical indicators relating to desertification and drought

1. Climate

1.1. Index of aridity (the ratio P/PET: P=precipitation, PET=potential evapotranspiration.)

Information Not Available at this time (INA).

1.2. Normal rainfall **1,666.67 mm/annum (averaged across three designated regions).**

1.3. Rainfall standard deviation: **INA.**

Sub-regional areas (divided by altitude and rainfall)

(a) **Zone 1 (Northern coast between 0 - 600 m above sea level) 500 to 1,500 mm/annum**

(b) **Zone 2 (mountainous zone) about 1,500 mm/annum**

(c) **Zone 3 (southern coast between 0 - 600 m above sea level) up to 2,000 mm/annum**

2. Vegetation and land use

2.1. NDVI (normalized difference vegetation index): **NA**

2.2. Vegetation cover (% of total land area): **57.2%**

2.3. Land use (percent of total land):

1. **Agricultural:** **27.5%**
2. **Non productive land:** **13.6%**
3. **Cities, towns, villages:** **1.3%**
4. **Lakes:** **0.3% (please see MAFF Policy & Strategy Framework)**

| Land use | 1990 – 1999 | 2000 – 2005 |
|-----------------------------|--------------------|--------------------|
| Arable crop land | | |
| - Irrigated | NA | 34,000 ha |
| - Rainfed | NA | NA |
| Pasture | INA | INA |
| Forest and woodland | NA | 854,254 ha |
| Other land (non-productive) | NA | 203,152 ha |
| 2.4. Surface albedo | NA | |

3. Water resources

| | |
|--|---|
| 3.1. Fresh water availability (million m ³): | 729,000 million m³/day (Dili) |
| 3.2. Fresh water resources per capita (m ³): | 65 liter person/day |
| 3.3. Agricultural water use (million m ³): | INA |
| 3.4. Industrial water use (million m ³): | INA |

4. Energy

Consumption

| | |
|---|------------------|
| 4.1. Energy use per capita (kg oil equivalent): | 0.4 - 0.6 |
| 4.2. Agricultural energy use per hectare (millions of BTU): | INA |

Production

| | |
|---|------------|
| 4.3. Energy from renewable excluding combustible renewable and waste (% of total supply): | INA |
|---|------------|

Renewable - Consumption by sector

| | |
|--|------------|
| 4.4. Industry (% of total renewable consumption): | INA |
| 4.5. Residential (% of total renewable consumption): | INA |
| 4.6. Agriculture (% of total renewable consumption): | INA |

5. Types of land degradation

| Type of degradation | 1990– 1999 | | 2000 – 2005 | |
|--|------------|-----------------------|-------------|-----------------------|
| | Million ha | Percent of total area | Million ha | Percent of total area |
| Deforestation / illegal logging / illegal land clearance | NA | | INA | 1.1% per annum |
| Slash and burn | NA | | INA | |
| Shifting cultivation | NA | | INA | |
| Over grazing | NA | | INA | |

6. Rehabilitation

| Lands under rehabilitation | 1990 - 1999 | 2000 - 2005 |
|---|-------------|-----------------------------|
| Rehabilitation of degraded crop land (km ²) | NA | INA |
| Rehabilitation of degraded rangeland (km ²) | NA | INA |
| Rehabilitation of degraded forest (km ²) | NA | Approximately 960 ha |

Socio-economic indicators related to desertification and drought

7. People and Economy

| | |
|---|--------------------------|
| 7.1. Population (total): | 924,624 (2004) |
| Population: urban (percent of total): | 24% |
| Population: rural (percent of total): | 76% |
| 7.2. Population growth (annual %): | 0.90% |
| 7.2. Life expectancy (years): | 55.5 years (2004) |
| 7.4. Infant mortality rate (per 1,000 live births): | 90 |
| 7.5. GDP (current US\$): | 370/capita (2004) |
| 7.6. GNI per capita (current US\$): | 550 (2004) |
| 7.7. National poverty rate (% of population): | 44% (2004) |
| 7.8. Crop production (metric tons) in 2004-2005: | |
| - Rice | 34,994 |
| - Maize | 82,209 |

7.9. Livestock production (metric tons): **INA**

8. Human development

8.1. Primary education completion rate (% age group):

| | |
|------------------|---------|
| 6 - 9 years old: | - |
| 10-14 years old: | 12.24 % |
| 15-19 years old: | 38.02 % |
| 20-24 years old: | 38.76 % |
| 25-29 years old: | 41.76 % |
| 30-34 years old: | 40.25 % |
| 35-39 years old: | 29.86 % |
| 40-44 years old: | 21.99 % |
| 45-49 years old: | 20.89 % |
| 50-54 years old: | 17.43 % |
| 55-59 years old: | 15.88 % |
| 60-64 years old: | 11.75 % |
| 65 + years old: | 8.68 % |

8.2. Number of women in rural development (total number): **INA**

8.3. Unemployment (% of total): 8.9% (2004)

8.4. Youth unemployment rate (age 15-24): 23.1% (2004)

8.5. Illiteracy total (% age 15 and above):

| | |
|------------------|--------|
| 15-19 years old: | 5.48 % |
| 20-24 years old: | 5.48 % |
| 25-29 years old: | 4.90 % |
| 30-34 years old: | 6.44 % |
| 35-39 years old: | 6.61 % |
| 40-44 years old: | 8.08 % |
| 45-49 years old: | 6.67 % |
| 50-54 years old: | 7.13 % |
| 55-59 years old: | 4.36 % |
| 60-64 years old: | 4.97 % |
| 65 + years old: | 8.00 % |

8.6. Illiteracy male (% age 15 and above):

| | |
|------------------|--------|
| 15-19 years old: | 5.79 % |
| 20-24 years old: | 5.18 % |
| 25-29 years old: | 4.34 % |
| 30-34 years old: | 5.60 % |
| 35-39 years old: | 5.38 % |
| 40-44 years old: | 6.73 % |
| 45-49 years old: | 5.98 % |
| 50-54 years old: | 6.90 % |

| | |
|------------------|--------|
| 55-59 years old: | 4.46 % |
| 60-64 years old: | 5.23 % |
| 65 + years old: | 8.42 % |

8.7. Illiteracy female (% age 15 and above):

| | |
|------------------|--------|
| 15-19 years old: | 5.22 % |
| 20-24 years old: | 5.73 % |
| 25-29 years old: | 5.39 % |
| 30-34 years old: | 7.16 % |
| 35-39 years old: | 7.67 % |
| 40-44 years old: | 9.25 % |
| 45-49 years old: | 7.27 % |
| 50-54 years old: | 7.33 % |
| 55-59 years old: | 4.28 % |
| 60-64 years old: | 4.75 % |
| 65 + years old: | 7.64 % |

9. Science and Technology

9.1. Number of scientific institutions engaged in desertification-related work (total number):

- (a) Programa de Apoio para Desenvolvimento Rural em Timor-Leste (PADRTL)
– Portuguese Mission
- (b) The National University of Timor-Leste, Faculty of Agriculture
- (c) Ainaro, Manatuto Community Activation Programme (AMCAP)
- (d) JICA Timor-Leste
- (e) Care International
- (f) Timor-Leste coastal mapping/marine, ecotourism, and fisheries development project.
- (g) There are small numbers of National NGOs involved in land degradation such as Santalum, Haburas and Halarae.

10. Please specify the data sources

- (a) Policy and Strategy Framework, Ministry of Agriculture, Forestry and Fisheries, 2004.
- (b) Timor-Leste Millennium Development Goals. Where are we now? 2005.
- (c) Timor-Leste Human Development Report, United Nations Development Programme, 2006.
- (d) Timor-Leste Census of Population and Housing 2004, Direcção Nacional de Estatística, 2006.