





# TIMORE LESTE Programme of Work on Protected Areas

## Strategic Action Plan Final

for the Department of Protected Areas & National Parks
September 2011











#### TABLE OF CONTENTS

A	CKNOWLEDGEMENTS	2
1.	. THE STRATEGIC ACTION PLAN	4
2.	. INTRODUCING THE PROTECTED AREAS	4
3.	. CHALLENGES AND OPPORTUNITIES	4
	Changes to Landscapes	6
	Increasing pressures	6
	Community expectations & aspirations	6
	LIVELIHOODS AND WELL-BEING	6
	Sharing experiences	6
	Working with government and community	6
	DEMAND FOR KNOWLEDGE	6
4.	. GUIDING PRINCIPLES	6
	LANDSCAPE BASED	6
	COLLABORATIVE APPROACH	6
	ECOLOGICALLY SUSTAINABLE DEVELOPMENT	8
	EDUCATION AND AWARENESS	8
	INCREMENTAL APPROACH	8
	RIGHTS OF USE	8
	ADAPTIVE MANAGEMENT	8
5.	. THE VISION	10
6.	MISSION STATEMENT	10
7.	. GOALS	10
8.	. KEY GOALS	10
9.	. OBJECTIVES	12
10	0. STRATEGIC ACTIONS AND ACTIVITIES	14
11	1. Broader Management Themes	16
	Mainstreaming Biodiversity	16
	BIOSAFETY	16
	Biosecurity	16
	Access and Benefit Sharing	16
	Sustainable Land Management	17
	Invasive Alien Species	17
	CARBON SINKS	18
	CULTURAL HERITAGE MANAGEMENT	18
	Livelihoods and Poverty Reduction	18
	AGRO-FORESTRY OPPORTUNITIES	19
12	2. MONITORING AND EVALUATION	20
	Monitoring	20
	Depositivo	20

#### **A**CKNOWLEDGEMENTS

We acknowledge the help and assistance of the staff of the Ministry of Agriculture and Fisheries (MAF) and especially the team at the Department of Protected Areas and National Parks (DPANP). Much of this work and product was a result of their direct inputs and verification through interactive forums and workshops. We would like to thank the GIS department ALGIS for enabling mapping data and information to be used in the process of engagement and plan production. We also thank staff from the Department of Environment. The United National Development Program was a great help in providing logistic and technical support, in particular we thank Expedito Belo, Carsiliano Oliveira, Tessa Koppert and Lin Cao. Peter Hunnam and Cathy Molnar provided much guidance in this work and for that we are most grateful. Support was also received from Demetrio Amaral (Haburas), Koen Mayers (UNESCO) and the Coral Triangle Support Partnership - CTSP team (Rui Pinto and Niall Byrne). We thank also Scott Atkinson for introducing us to the CTSP team. Clarissa Arida from the ASEAN Centre for Biodiversity was most accommodating in sharing information regards the NBSAP development. We hope that the information that the DPANP team provided about the process used was also invaluable to the finalization of the NBSAP for the ASEAN team. We are appreciative of the time provided by Marcal Gusmao from the National University of Timor Leste and his advice on human resource development and tertiary education options at the University. Hedley Grantham of CNRM Solutions Pty Ltd was a most helpful contributor of information gathered through the generation of the NEGA. We appreciate those inputs and our ongoing relationship. The rest of the team at Planning 4 Sustainable Development (Kari Martin and Geoff Dews) are also appreciated for the support work, research and writing of summary reports and frameworks used in the missions to Timor Leste.

Lastly I would like to show much appreciation to the PoWPA Project Manager and Head of the Department of Protected Areas and National Parks, Mr Manuel Mendes for his tireless input, translation and guidance in this work. A good team needs a strong leader and Manuel has certainly shown stamina in this regard.

#### Recommended citation:

McIntyre, M.A., 2011. Strategic Action Plan for the Programme of Works on Protected Areas, Timor Leste, 2011. Prepared for the Department of Protected Areas and National Parks, Ministry of Agriculture and Fisheries, Government of Timor Leste with the assistance of United Nations Development Program, Timor-Leste and the Global Environment Facility. Planning for Sustainable Development Pty Ltd, Landsborough, Queensland, Australia.

#### Structure of the Strategic Action Plan (SAP)

The SAP document has been structured to provide Explanatory Notes coinciding with each relevant section of the Plan. This has been done to assist with the understanding by the audience especially the stakeholders within Timor Leste. The final product can be reproduced with or without these explanatory notes.

#### 1.0 Establishing a comprehensive, adequate and representative system

Protected areas can be seen as the conservation component of landscape or land use planning processes, integral to integrated natural resource management. Protected areas must not be planned and managed as isolated "islands" but be linked with mechanisms such as buffer zones or corridors to ensure ecological integrity is maintained. The relationship between protected areas and surrounding lands and waters are also of paramount importance and should be considered so that management regimes for both protected areas and adjacent lands can be harmonized for their mutual benefit.

#### 2.0 Benefits of Establishing Protected Areas

Some of the more common benefits of Protected Areas include:

- Protection of areas with important traditional, cultural and ecosystem significance;
- Protection of specific natural and cultural features;
- Maintenance of healthy ecosystems (e.g. protection of watershed, soils and biodiversity);
- Protection of wilderness values;
- Preservation of species and genetic diversity;
- Providing tourism and recreation opportunities
- Utilizing renewable resources in a sustainable manner (e.g. forests and fisheries)
- Providing increased clarity for non-renewable resource development options
- Providing educational opportunities
- · Accommodating scientific research and monitoring

(Source: Northwest Territories Protected Areas Strategy, Govt of Canada, 1999)



#### 1. THE STRATEGIC ACTION PLAN

#### 2. Introducing the Protected Areas

Establishing and maintaining Protected Areas are recognised internationally as a key strategy in nature conservation. However there are broader benefits for nations and communities. With the emerging threats of climate change, among other matters, the role for protected areas to provide a safety net is of paramount importance.

In the short time since independence Timor Leste has acted quickly, despite overwhelming pressures, to institute processes to form protected areas consistent with the Programme of Works for Protected Areas (PoWPA), under the United Nation's Convention on the Biodiversity Conservation (UNCBD).

The Timor-Leste government signed the Convention on 10 October 2006, and became a Party to the Convention on 8 January 2007. As a signatory to the UNCBD, Timor-Leste undertakes to fulfil the Convention's requirements which include the Program of Work on Protected Areas – PoWPA (adopted by the 7th Conference of Parties (COP) to the UNCBD, 2004). The PoWPA is a global action plan to assist with the establishment of protected areas to cover at least 10% of each country. The focus of the global programme is for governments to identify and then fill gaps in their existing protected area networks (PANs). The aim is to ensure that all native species and sensitive ecosystems are represented in protected areas of various types with sufficient size, number and distribution to guarantee their long-term survival.

While an ambitious programme with 92 different activities agreed at the international level there are 13 actions that are deemed critical for good protected area implementation. The work in developing this SAP has been cognizant of these critical actions. As part of the formative work the DPANP has undertaken a National Ecological Gap Assessment (NEGA). This is one of the critical actions referred above that aims to assess ecological gaps in the protected area network.

The NEGA has been used as the basis for the extension of the number of Protected Areas nominated in Timor Leste, from the 15 recognized in Regulation 19/2000 (UNTAET) to 30 areas, including some covering both terrestrial and marine systems.

#### 3. CHALLENGES AND OPPORTUNITIES

This Strategic Action Plan has been developed by the Department of Protected Areas and National Park (DPANP), Ministry of Agriculture and Fisheries (MAF) as part of capacity work on policy development which commenced in February 2011. It has used the State-Pressure-Impact-Response (S-P-I-R) model of policy evaluation. It has concentrated on the 'Driving Forces' behind the 'Pressures' on the current biodiversity resources of the country. As such it has reinforced an understanding of the Key Threats to biodiversity conservation and protected areas. The experience of the DPANP team, the NEGA and the numerous reports and capacity building work related to natural area conservation since 2003 – have been invaluable in the formulation of the framework for the Strategic Action Plan.

Timor Leste's recent history has shaped the community's needs and expectations with regard to the country's biodiversity and sustainable land management. Years of community trauma, dispossession of land, translocation, socio-economic pressures forcing changes to land management – has seen significant habitat destruction, land degradation and impacts on sensitive water and marine systems. These pressures now mean that biodiversity upon which our food and water security relies – is threatened.

There are a number of key challenges and opportunities to setting up a Protected Areas Network (PAN) and enhancing the success protected areas. We have summarized these as follows:

#### 3.0 Why do we need a Strategic Action Plan for Protected Areas?

- To guide Timor Leste on the best means to protect and maintain areas of land and water with special natural and cultural values, and to protect biodiversity for social and cultural wellbeing;
- To provide the right context for specific action areas, capacity development and commitments to facilitate the establishment of protected areas.

The State, Pressure, Impact, Response model (S-P-I-R) of policy analysis can have a role in Plan generation as much as for State of the Environment (SOE) reporting or Monitoring and Evaluation (M&E) initiatives. It is a model used by the UNEP and many others, and has been built upon the 'cause-effect' analytical method. It's premise is that we are best to deal with the pressures upon our environments rather than continually try to fix the impacts.

#### 4.0 What will a Strategic Action Plan do?

It will ensure that the setting up of PAs will involve the representation of a full range of natural and cultural values across the country;

It will provide a more clearly defined context for environmental conservation, NRM and cultural management decisions for sensitive areas;

- It will enable the designating of various categories of protected areas (IUCN and other community based responses) to suite the circumstances of the case involved;
- It with provide clear distinctions with regard to scheduling and the resourcing of activities;
- It will steer and reinforce the leadership role of communities with government, NGOs and regional organizations;
- It will help guide future resource use and development in a manner so they do not compromise the special qualities of the protected areas;
- It will help focus attention on the need for mutually supportive terrestrial and marine protected areas.
- It will promote more collaboration and coordinated approaches among agencies responsible for environmental management and land use planning.



#### Changes to Landscapes

A culmination of socio-economic pressures, conflict, changes in agricultural practices and massive population pressures has seen extensive changes to the landscape. Deforestation and degradation has exacerbated to the point where immediate actions are needed to stem the driving forces for change and offer some protection for the critical sensitive areas that remain.

#### Increasing pressures

Development pressures in and surrounding bio-sensitive areas continue to increase. Population growth, landscape fragmentation, climate change, invasive species (weeds & pests), and changes to agricultural practice continue to create new challenges and impacts - demanding more effective responses.

#### Community expectations & aspirations

Corresponding to human induced pressures and impacts, there is heightened Community expectations and aspirations for government initiatives to stem land degradation and protect bio-diverse areas. There are increasing standards of community knowledge and participation and the DPANP needs to remain at the forefront of community engagement practice. Protection of ecological values is dependent on the support, choices and behaviour of the community.

#### Livelihoods and well-being

The role of natural resource management agencies in programs that promote livelihoods and community well-being continues to grow. Partnerships and collaborative mechanisms need to be extended to create an important platform for further integrated work across government and community.

#### Sharing experiences

There are opportunities to capitalise on the skills and experience across government and within communities. Environmental managers elsewhere in the region, such as those involved in the Coral Triangle Initiative, also offer an invaluable source of knowledge and experience. Through international networks managers can also avail lessons learned from elsewhere.

#### Working with government and community

A distinctive challenge lies in meeting the needs of government entities, NGOs and other community organizations – in working collaboratively with limited resources. Government will continue to develop and adapt regulatory and policy frameworks for natural and cultural resource management being conscious of the need for adaptive management over time.

#### Demand for knowledge

Growing pressures on natural resources and changing needs and aspirations of the community - create demands for new information and knowledge. This needs to aggregated, integrated and availed to all within government and the communities to bring about more-informed policy, decisions and management of natural resources. The DPANP has an important role to play in communicating knowledge and raising public awareness about the needs for and benefits of Protected Areas.

#### 4. GUIDING PRINCIPLES

The following guiding principles will be followed in the enhancement of the planning for, establishment and management of Protected Areas.

#### Landscape based

Action strategies will focus on the landscape scale, utilising a broad range of conservation initiatives in an integrated way, to achieve biodiversity conservation goals across marine and terrestrial ecosystems.

#### Collaborative approach

The collaborative approach will be followed and will include the forming of partnerships between key stakeholders to facilitate the establishment and development of a protected area network, including Government, business, community, non-government and international sectors.

#### 5.0 Who will benefit from this Strategic Action Plan?

- Communities, national & local government institutions, NGOs and organizations, regional organizations;
- Land owners, farmers, resource-based and tourism industries will be provided greater certainty and clarity about land use status, access and development options;
- Environmental managers will be provided with the means to ensure significant progress towards national and international commitments to protected areas
- Present and future generations will benefit from the ecological, social, cultural and economic values stemming from the protection of sensitive bio-diverse areas.

#### 6.0 Guiding Principles for Establishing and Managing - PAs

Agreeing on overarching policy principles is an important component of any Policy tool. It helps set the context of the SAP, and enables the manager to provide the best interpretation of goals, objectives and activities. The SAP should identify leading principles from the Government's and communities' perspective as well as those that are conveyed from international agreements and initiatives, such as the Principles of Sustainable Development and the Millennium Development Goals (MDGs). Some common heads of consideration in guiding principles are:

- Sustainability long term
- Community involvement/participation/awareness
- Traditional Knowledge and practices
- Adaptable and Flexible frameworks
- Fair and equitable share of ecological benefits
- · Capacity building and knowledge sharing
- Landscape and/or Ecosystem based management

The core values and principles noted here were adapted from those nominated in 2003 by the Government of Timor-Leste as part of earlier UNCBD work. They may need review and adapting to present circumstances.



#### Ecologically sustainable development

The inherent link between communities and the environment in Timor-Leste demands that social, cultural, environmental and economic implications are considered in order to ensure the long-term sustainability of the protected area network.

#### **Education and awareness**

Understanding, awareness and knowledge facilitates active participation in the processes that underpin effective conservation and promote ownership of the protected area network at local levels. Education and awareness programs would be developed in collaboration with local communities to ensure that key messages are both relevant and culturally appropriate.

#### Incremental approach

This approach recognises the value of expanding the protected area network in a sustainable way by:

- · Building capacity through initially focusing on implementation in priority areas; and
- Adopting a staged approach to project-level implementation that builds on the capacity developed at each stage.

#### Rights of use

The design of the protected area network would ensure that local communities may continue to reside in the area and use the natural resources (land, coast and sea) for sustainable traditional, spiritual and cultural needs. This approach facilitates:

- Greater ownership of the protected area by the community;
- Maintenance and enhancement of livelihoods;
- · Continuation of traditional cultural practices;
- Motivation for self-regulation and community-led enforcement of conservation measures, which is vital for the long-term sustainability of the protected area given limited financial and human resources.

#### Adaptive management

Program monitoring and evaluation would be undertaken to ensure a cycle of continuous improvement. This mechanism would operate at all levels and be applied to project management, project activities, staff development, capacity building and training, and community processes. This process also provides a platform for regular and effective communication and feedback to and from stakeholders. A further benefit of this approach is increased accountability and transparency.

#### 7.0 Tools to Assist in Policy Development.

There are a number of participatory methods to assist in policy analysis and developing policy, strategies & action plans. These tools can also be used establish effective Goals & Objectives. Essentially they enable us to revisit 'where we are now' and 'where we wish to go'. The problem tree analysis (PTA) is one method that has been introduced to the DPANP. This method can be very effective in group work through simple graphics and suggestions. It can also be adapted to a problem/issue based analysis table enabling interactive inputs. Examples of the template tables will be presented to the Stakeholders meeting.

Whatever tool is used there needs to be careful management of the process. Often there are numerous existing information sources and prior reporting. The challenge is to take on board the key outcomes of those works, but in a manner that new ideas are also merged.

Some Questions that are often used with tools to assist in identifying key goals for Protected Areas:

- a) What are the main themes or areas of management? (General)
- b) What values do you want to protect? (Specific)
- c) How much do you want to protect what percentage of area needs to be protected? (measurable)
  - What areas are to be included in the PA
  - What areas are to be included in the NP
  - What areas will be promoted as multi use
- d) Timeframe (realistic, timely)
- e) Who is involved in decision processes (acceptable)
- f) What do you need to enforce?



#### 5. THE VISION

The following represents the desired future for the Protected Areas and Biodiversity in Timor Leste.

"Creation of areas of conservation that guarantee equilibrium between ecological, socio-cultural and economic values, where sustainable, for community prosperity"

[Source: DPANP Annual Plan, 2011]

#### 6. Mission Statement

We see our Mission as:

- 1) To protect valuable biodiversity conservation and socio-cultural areas where threatened;
- 2) Promote and establish systems and effective and efficient management plans for protected areas and national parks to ensure sustainable development;
- 3) Preserve and restore valuable conservation areas of native vegetation, animals and socio-cultural livelihoods in collaboration with communities;
- 4) Promote conservation through sensible and community based education;
- 5) Promote community based economic development through nature based tourism and alternative livelihood activities;
- 6) Promote collaborations with communities and stakeholders.

[Source DPANP Annual Plan, 2011]

#### 7. PoWPA Goals

There are 13 critical action areas that the Global PoWPA wish members to pursue. Stemming from the problem analysis exercises performed by DPANP, these critical areas were reviewed and subset into seven (7) key Goals for Timor Leste.

#### 8. KEY GOALS

- Establish / Strengthen National Systems of Protected Areas;
- 2. Establish and Strengthen Networks and Improve Collaboration;
- 3. Build Capacity for the Planning, Establishment, Management of Protected Areas;
- 4. Prevent and Mitigate Negative Impacts of Key Threats to Protected Areas;
- 5. Promote Equity and Benefit Sharing;
- Enhance Involvement of Local Communities and Relevant Stakeholders through improved Communication, Education and Public Awareness;
- 7. Provide Enabling laws, Policy, Institutions and Systems for Protected Areas and ensure socio-economic benefits and Financial Sustainability.

#### 8.0 Making the Pathways: Vision, Mission and Goals

The Vision, Mission and Goals of the SAP describe the aspirations for nature conservation from the highest level (Vision) to the practical outcome level (Goals/Objectives).

The SAP is not only a high level guidance document for the DPANP but a pathway strategy for the broader Government of Timor Leste. It needs therefore to cater for both and be a direction changing policy platform as well as an instructive guide on means to increase capacity in government and community – to better manage critical biodiversity and sensitive areas.

It is critical that the four pillars of sustainable development are taken into account in the development of the strategic tools as well as the implementation mechanisms.

#### **EXAMPLE Vision Statement**

'To provide a framework for the Government of Timor Leste to conserve the country's biodiversity and to protect a viable nation-wide conservation network in partnership with the community, industry and other agencies.'

Formulating the Mission Statement can commence from a number of starting posts: for example:-

- Protect biodiversity
- Ensure sustainable livelihoods
- Ensure sustainable use of natural resources
- Ensure sustainable development of eco-tourism

#### **EXAMPLE Mission Statements**

"Provide direction, encourage and support the community of Timor Leste to protect the critical biodiversity of the country and share the cultural, socio-economic and spiritual benefits in the longer term."

"We are aware of the need to protect biodiversity in critical areas, acknowledging the community's role in protecting, conserving and rehabilitating outstanding environmental, social and cultural values of significance. It also recognizes our need to improve understanding, knowledge and appreciation of the biodiversity assets."

#### 9.0 Generating the Strategic Outcome framework: Setting Goals

At this step the practical facets of what we are trying to achieve are framed.

On one hand we have the goals identified by the UNCBD Secretariat of what it considers should be included in a SAP. On the other the Government has a number of historic strategic documents related to nature conservation that spell out desired objectives.

The following were goals/objectives generated in <u>2003</u> when endeavours to set up the Protected Areas Network first commenced in earnest.

- Establish the first Protected Area in Timor-Leste's Protected Area Network:
- Be of world class standard and internationally recognized as a Protected Area where the traditional interactions of people and nature are maintained in a way that protects the environment;
- Ensure the high level protection and conservation under the law of nationally and globally important natural, cultural, social, historical and livelihood values;
- Guarantee, respect and recognize customary ownership, continued use, access and participation rights by local communities;
- Contribute to the achievement of sustainable development for local communities both the
  existing rural economy and sustainable new economies (e.g. ethical and ecological tourism) by
  protection and sustainable management of all values;
- Ensure the active participation of, and foster ownership by the communities living within the National Park via a consultative, inclusive and collaborative joint management framework between Government, local communities and supported by civil society;
- Increase awareness of conservation and the sustainable management of biodiversity and natural resources and the impacts of human interactions with nature.

#### 9. OBJECTIVES

The problem tree analysis undertaken by the DPANP team considered past efforts in establishing objectives for protected areas, along with the meshing of UNCBD PoWPA critical areas to harmonize a number of key Objectives for the Goals nominated. These were nominate as the Objectives to be achieved over a medium to longer term (2020 to 2025),

#### Goal 1: Establish and Strengthen National Systems of Protected Areas

**Objective One:** Ensure protected areas of various types provide representation across biological scales and biological realms;

**Objective Two:** Ensure protected areas of various types provide protection of all critical habitats for endemic, migratory and threatened species;

**Objective Three:** Ensure that Protected Areas of various types are the right location, size & shape to ensure the persistence of biodiversity, to minimize fragmentation of protected area boundaries and maximize habitat connectivity between protected areas.

**Objective Four:** Ensure that protected areas of various types play a role in mitigating climate change;

**Objective Five:** Design protected areas so that they are resilient and able to withstand stresses and changes such as human-forced climate change.

#### Goal 2: Establish and Strengthen Networks and Improve Collaboration

**Objective One:** *Ensure the Integration of Protected Areas* planning and management into broader biodiversity conservation, land use & environmental planning and protected area management.

**Objective 2**: Improve the coordination and collaborative links across government and community

## Goal 3: Build Capacity for the Planning, Establishment and Management of Protected Areas

**Objective 1:** Develop capacity {criteria and methods} to establish protected areas based on ecological, cultural heritage, socio-economic and landscape values.

Objective 2: Ensure Site Based Protected Area Planning and Management;

**Objective 3**: Ensure access to suitable Technologies and knowledge management systems for Protected Areas

**Objective 4**: Build institutional and human resource capacity for the planning, establishment and management of protected areas.

#### Goal 4: Prevent and Mitigate Negative Impacts of Key Threats to Protected Areas

**Objective 1:** Ensure the Assessment of Risks and Vulnerabilities of all key threats to Protected Areas;

**Objective 2:** Ensure specific strategies are generated for the key risk matters such as Bushfires, Land degradation, Invasive Species, Mining and extractive industries, energy and infra-structure including nature based and economic development risks;

**Objective 3**: Develop capacity for the monitoring of key threats and addressing of impacts on Protected Areas

## Goal 5: Promote Equity and Benefit Sharing to ensure socio-economic benefits and Financial Sustainability

**Objective 1:** Ensure systems are developed to guarantee equity in access and distribution of benefits from protected areas.

**Objective 2**: Ensure direct and in-direct benefits from protected areas management for communities.

#### 10.0 From Goals to Objectives and Actions.

The Goals set the highest level aims of the Government and Community in establishing and enhancing protected areas. We need to expand these to tangible Objectives that provide our plausible and feasible Actions and Targets. The DPANP has commenced this exercise however it requires the input of the other Stakeholders involved in natural resource management.

Note that some practitioners nominate a hierarchy of Goals, while others refer to Goals and Strategic Outcomes or Key Result Areas. There is also a mix of practice regarding the cascading of Goals, Objectives, Strategic Actions and Targets.

#### A suggested Framework

Goal

XXXXXX

Objective/s

- Identify areas of outstanding value and ensure their appropriate protection *Strategic Action/s* 
  - Conduct biological research and surveys of terrestrial and marine environments

Review tenure and land use requirements

Strategic Actions	Activities	Key Performance Indicators	Verification	Responsibility	Budget Est

In setting up the policy framework we need to be able to provide clear linkages with existing legal frameworks and mission statements that may be currently dictated by Ministry corporate plans. We will also need to generate workable indicators and targets upon which to measure our achievements and review our practice. Indicators and targets should be guided by the 'SMART' approach – specific, measurable, acceptable, realistic and timely.

#### **NEGA Goals to Objectives:**

Five 'goals' were nominated through the NEGA engagement process. While these may be sufficient to meet in part the established Goals for PoWPA activities as nominated by the UNCBD Secretariat, other coinciding goals will need to be agreed. The SAP will look at these from a higher level and suggest they are best nominated as some of the key objectives to meet Goal 1 "Establish / Strengthen National Systems of Protected Areas".

Objective One: Ensure full representation across biological scales and biological realms.

**Objective Two:** Protection of all critical habitats for endemic, migratory and threatened species.

**Objective Three**: Ensure that protected areas are the right size to ensure the persistence of biodiversity.

Objective Four: Ensure that protected areas play a role in mitigating climate change.

**Objective Five**: Design protected areas so that they are resilient and able to withstand stresses and changes such as human-forced climate change.

However we should be conscious that to achieve Goal 1 to the satisfaction of the UNCBD, the IUCN and guides for Indigenous communities (e.g. WWF), we will need to also canvas cultural heritage, socio-economic and livelihood aspects. The objectives may therefore need to be extended to pick up on these elements.

## Goal 6: Enhance Involvement of Local Communities and Relevant Stakeholders through improved Communication, Education and Public Awareness.

**Objective 1**: Ensure participatory approaches for planning, establishment and management of protected areas;

**Objective 2**: Ensure the local stakeholders have key roles in the safeguarding of protected areas.

Objective 3: Ensure high quality of Communication, Education and Public Awareness.

### Goal 7: Provide Enabling laws, Policy, Institutions and Systems for Protected Areas.

**Objective 1**: Ensure legal frameworks, policies, institutions and systems for protected areas are functional.

**Objective 2:** Ensure policies, plans, strategies and activities are supported by adequate and sustainable funding.

#### 10. STRATEGIC ACTIONS AND ACTIVITIES

The DPANP team have nominated a number of key strategic actions and broad level activities that are needed over the next five (5) years to provide an adequate ground swell of achievements to ensure Protected Areas management in Timor Leste is sustainable. Budget estimates have been nominated for these Strategic Actions and key Activities. These are based on more in-depth budget analysis within the accompanying Capacity Development Action Plan. (CDAP). At this stage they do not account for recurrent costs of the DPANP.

A copy of the Log Frame Matrix is provided at **Annex 1**. This relates the Objectives, Strategic Action areas, broad Activities and nominates of Key Performance Indicators for each of the key Goals.

#### 11.0 Agreeing on Activities and Strategic Actions.

The next critical step is to agree on Activities that are needed to achieve the objectives.

The process usually involves the stakeholders nominating various Activities firstly related to the Objectives and Goal. These are then usually prioritized and merged into Strategic Actions (i.e. grouped Activities).

Some practitioners advise that Activities and Strategic Actions should be nominated at each Objective level, while others defer to nominating Activities then grouping them as Strategic Actions at the Goal level, having in mind the various Objectives. That is each Goal has merged Strategic Actions, rather than each Objective.

Again there is no right way to do this. It is up to the Stakeholders.

We prefer the use of Strategic Actions and Activities at the Goal level as it promotes better integration of effort



#### 11. Broader Management Themes

#### **Broader Environmental Governance Matters**

The strategic directions and achievements expected under this Strategic Action Plan for Protected Areas should be supported by enhanced environment and sustainable development governance. There are a number of useful initiatives happening within Timor Leste or planned in the near future. The implementation of this SAP should be coordinated and integrated with these initiatives. Provided below are summaries of these key cross-cutting matters.

#### Mainstreaming Biodiversity

Concerted effort is needed to ensure that biodiversity conservation is mainstreamed into government decision-making and national sustainable development policy platforms. As with Sustainable Land Management (SLM) the raising of the profile of biodiversity conservation across government and the community should be of paramount priority. The completion and approval of the National Biodiversity Strategic Action Plan (NBSAP) should provide the right policy platform for this to occur. Providing economic incentives for impoverished communities reliant on wood based products represents the most probable success tool to the acceptance of the need to reduce impacts on the natural resource base for the long term sustainable development of Timor Leste.

#### **Biosafety**

The Cartagena Protocol on Biosafety is a subsidiary agreement to the UNCBD. It seeks to protect biological diversity from the potential risks posed by living modified organisms (LMOs) produced from modern biotechnology that may have adverse effects on biological diversity. It takes into account risks to human health. It was adopted on 29 January 2000 and entered into force on 11 September 2003. To date, 159 countries plus the European Union have ratified the Protocol.

Consistent with the precautionary approach, contained in Principle 15 of the Rio Declaration on Environment and Development, the objective of the Protocol is to contribute to ensuring an adequate level of protection in the field through safe transfer, handling and use of LMOs. It establishes an advance informed agreement (AIA) procedure for ensuring that countries are provided with the information necessary to make informed decisions before agreeing to the import of such organisms that may have adverse effects on the conservation and sustainable use of biological diversity.

#### **Biosecurity**

Biosecurity is a strategic and integrated approach that encompasses the policy and regulatory frameworks that address and manage risks in the sectors of food safety, animal health, and plant health, including associated environmental risk. The concept of Biosecurity is relatively new in biodiversity management. It has been traditionally associated with forestry, agriculture and phytosanitary hazards, which covers such issues as quarantine legislation and measures and the prevention and control of insect pests and diseases. The management of biological risks in forests now encompasses issues such as Alien invasive species (AIS) and the deployment of genetically modified organisms (GMOs), which have increased concerns about environmental risks in the agriculture, forestry and fisheries sectors.

Globally biosecurity capacity work is managed by the Food and Agriculture Organization (FAO) who address the critical need for capacity-building for developing countries and countries with economies in transition. Work is carried out under the Umbrella Programme for Training on the Uruguay Round, and the Standards and Trade Development Facility (STDF).

#### Access and Benefit Sharing

The Nagoya Protocol was adopted on 29 October 2010 in Nagoya, Japan, and will enter into force 90 days after the fiftieth instrument of ratification is deposited to the United Nations Headquarters in New York.

The Protocol will create greater legal certainty and transparency for both providers and users of genetic resources by establishing more predictable conditions for access to genetic resources and helping to ensure benefit-sharing of the attributes of genetic research and development. By ensuring benefit-sharing, the aim of the Nagoya Protocol is to create incentives to conserve and sustainably use genetic resources. This in turn should enhance the contribution of biodiversity to community development and human well-being.

A key part of the Nagoya Protocol is the provision of a Clearing-House Mechanism for the sharing of important information on the implementation of the Protocol including legislative, administrative and policy measures. It also contains information on competent national authorities; permits or other equivalent documents that are evidence of the granting of 'prior informed consent' and the establishment of mutually agreed terms. The Protocol calls for tools for capacity-building such as model contractual clauses, or methods developed for the monitoring of genetic resources, and other codes of conduct and best practices.

#### Sustainable Land Management

Sustainable land management and agricultural production are inextricably linked to biodiversity conservation in Timor Leste. Land degradation through poor land and livestock management heightens fire hazard and opens up large tracts of land for invasive alien species. Soil becomes leached and landslip becomes common. Erosion and sedimentation then have serious impact on remaining soils and water systems.

Bushfires are a major threat to biodiversity conservation and are common as landowners are desperate to use fire to encourage grass regrowth or to clear vegetative trash to get access to firewood or timber for building. The skeletal soil and steep areas are especially prone and make access difficult to fight fires. Concentrated efforts are required to educate landowners on alternative means for sustainable livestock management and agriculture. The roaming grazing practices, especially of goats, also degrades hill slopes and bush areas which encourage invasive species and leads to heightened bushfire hazard.

There is a need for accelerated research programmes and broader uptake of alternate agricultural practices by farmers. Public-private partnerships may be the key to identifying and addressing knowledge gaps and disseminating effective agricultural approaches and techniques for farmers.

There are a number of measures and principles for protecting biodiversity through assisting agriculture activities:

- Protecting natural resources through sustainable agricultural practices including sustainable use of land, water and energy resources;
- Promotion of conservation agriculture, including the cultivation of local species suited to the landscape;
- Sharing knowledge of agriculture's role in preserving biodiversity through programmes targeting landowners and the provision of incentives for biodiversity-friendly practices;
- Building local access to agricultural techniques and practices to help protect biodiversity, such as multi-cropping systems, crop rotation, and reduction of 'trash-and-burn' techniques;
- Enabling access to markets and providing payment incentives for ecosystem services, such as carbon sequestration and/or bio-offsets as well as developing and supporting markets for local species which encourage local biodiversity conservation.

#### Invasive Alien Species

Closely aligned to the broader problems with sustainable land management, invasive alien species represent a significant disturbance to ecological and agricultural systems including terrestrial and aquatic environs. Invasive species have tremendous influence therefore on economic opportunity and human health. Degraded systems caused by invasive species are common and have affected many societal values, including biodiversity.

Invasive Alien Species are addressed under Article 8h of the UN Convention on Biological Diversity (UNCBD). A significant step was reached in 1996 through a UN Conference on Alien Species (Norway) which brought together representatives from over 80 countries, together with technical experts on invasive alien species. The key outcomes from this meeting were agreements that:

- Invasive alien species posed one of the greatest threats to global biodiversity loss;
- Countries had insufficient awareness, information or capacity to address their invasive alien species issues
- · Access to expertise on invasive alien species was limited, and
- knowledge and solutions were not being effectively shared between countries.

From this meeting the Global Invasive Species Programme (GISP) was birthed and later developed through a partnership involving the Scientific Committee on Problems in the Environment (SCOPE), CAB International (CABI) and the World Conservation Union (IUCN), who each had specific experience with invasive species issues. The GISP has two objectives:

- to assemble and make available best practices for the prevention and management of invasive alien species;
- to stimulate the development of new tools in science, policy, information and education for addressing these problems.

Alignment of Protected Areas management with activities and initiatives following the objectives of GISP will be invaluable in addressing one of the key threats to Timor Leste's Protected Areas.

#### Carbon Sinks

The burgeoning global carbon sequestration market can provide the impetus to gain significant financial resources for customary societies who sustainably maintain and enhance natural areas. The Reducing Emissions for Degradation and Deforestation (REDD) and REDD+ which espouse co-benefits for biodiversity conservation represents a powerful policy platform opportunity for Timor Leste to institute the 'payment for ecosystem services'.

Progressing REDD+ opportunities in Timor Leste from the formative work that has taken place so far may also be the most cost-effective means of integrating biodiversity conservation and climate change. REDD has the potential to deliver significant financial and indirect resources to rural communities, however it could also lead to inequitable access and sharing of benefits as well as exacerbate conflict over land tenure and use. If REDD and REDD+ are to socio-economic benefits as well as ecological benefits much work needs to be done on governance, enhancing land use policy and decision-making, creating accessible markets and micro-financing systems that are equitable and accountable.

#### Cultural Heritage Management

The development of this SAP has followed, where practicable, the Conservation Area Planning (CAP) methodology developed by The Nature Conservancy (TNC) and its partners and the closely aligned Participatory Rural Appraisal (PRA) techniques. The approach is used to analyse information about natural areas and plan key strategic activities that best address priority biodiversity conservation needs. However experience about the globe is that many prospect protected areas and the communities that live within and about them - also include valuable cultural heritage that should also be managed. Furthermore cultural heritage practices include many very useful and successful practices for environmental and biodiversity conservation. The long-term success in implementing activities on the ground will require the marriage of local customary processes and practices guided by science based and community information.

The Convention concerning the Protection of the World Cultural and Natural Heritage (referred to as the World Heritage Convention, 1975) adopted by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) is a powerful ally to the just recognition of cultural heritage in developing landscape approaches to the planning for, establishment and management of protected areas. The key aim of the Convention is to promote co-operation to protect natural and cultural heritage that is of significant universal value for all people in the community. From the Convention the UNESCO formed the Man and Biosphere Programme and the World Network of Biosphere Reserves. MAF is already exploring means to be involved in the programme through the nomination of the Nino Konis Santana National Park as a Biosphere Reserve. The Biosphere Reserve status will provide a focus for the community to work toward solving one of the most important challenges of our time: "how can we reconcile conservation of biodiversity and biological resources with their sustainable use" (UNESCO website).

#### Livelihoods and Poverty Reduction

Biodiversity conservation and poverty reduction have been inextricably linked at the international level. Both the UNCBD and the Millennium Development Goals (MDGs, 2000), while having different focuses, recognise links between these objectives:

 The preamble of the CBD recognises that "economic and social development and poverty eradication are the first and overriding priorities of developing countries" (United Nations 1993). In 2002, it adopted a target "to achieve by

- 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level *as a contribution to poverty alleviation* [emphasis added] and to the benefit of all life on earth" (SCBD 2002).
- The Millennium Development Goals (MDGs), Goal 7 includes a target to "reverse the loss of environmental resources", one indicator of which is the area of land under protection for biodiversity. In 2006 the CBD "2010 Target" was included as a new target within MDG7 (United Nations 2006) with additional biodiversity indicators (United Nations 2008).

The Millennium Ecosystem Assessment (MA) published in 2005, emphasized the link between biodiversity conservation and poverty reduction. The conceptual framework of the MA sees biodiversity as providing the foundations for the delivery of a range of ecosystem goods and services on which human well-being depends (Millennium Ecosystem Assessment 2005a, p 29). There are a number of subject areas that the MA highlights as providing opportunities with regard to this nexus:

- Agro-Biodiversity for Food Security
- Wild Food Products, Biodiversity and Food Security
- Biodiversity and Natural Hazards
- Biodiversity and Health Risks
- Biodiversity and Resilience

#### Agro-Forestry Opportunities

Agro-forestry is the practice of integrating domesticated trees or plants into natural and agricultural landscapes. The poverty reduction benefits can include: improved soil fertility from "fertilizer plants" (green manuring) that can increase the productivity of existing crops; diversification of food production for both commercial and subsistence needs; rehabilitation of degraded areas; erosion and sediment control and the stabilization of land-slip prone areas. In Timor Leste Agro-forestry also provides the means for high value niche non-timber forest products (NTFP) such as oils and medicines for alternative livelihood.

In addition to providing livelihood enhancement, agro-forestry can provide benefits for biodiversity conservation by providing structurally similar habitat for forest species, thereby serving as biological corridors between valuable areas within or between protected areas. Areas planned for agro-forestry can also lead to reduced human pressure on protected area forests by providing alternative sources of wood for energy and building. While agro-forestry may not contain the same levels of biodiversity value to natural forests, they can play host to valuable species as part of movement corridors or refuge during extreme events

#### 12. Monitoring and Evaluation

#### Monitoring

The SAP Log Frame Matrix at **Annex 1** provides targets for mid-term Objectives to 2020. Under the Strategic Action Areas the Activities include the nomination of Key Performance Indicators (KPIs). This presentation has been agreed by the DPANP team as the best means for plausible monitoring of progress within a flexible framework. We are cognizant of the threat to the whole SAP if Activities were also measured by quantitative targets, that may be usurped by the failure to achieve adequate funding in any one year – for instance.

These targets and key performance measures have been generated without the finalization of the draft National Biodiversity Strategic Action Plan (NBSAP). This work is progressing with assistance from the ASEAN Environment Division, through the Department of Environment. There will be merit in ensuring that indicator and KPIs of the NBSAP and SAP are harmonized.

#### Reporting

The DPANP will be responsible for programming the reporting to the UNCBD on all activities related to the International PoWPA. Again there is merit that these performance measurements and reporting be coordinated with that of the NBSAP to respect the inter-linkages. The national government holds ultimate responsibility and any performance monitoring report will need to be approved by the Council of Ministers.

The methods for monitoring should involve providing updates to all stakeholders.



#### Annex 1: Strategic Action Areas – Log Frame Matrix

LONG-TERM GOA	L 1: Establish and Strengthen National Systems of	Protected Areas
MEDIUM TERM OBJEC	TIVES: 2020	TARGETS
OBJECTIVE 1	Ensure protected areas of various types provide representation across biological scales and biological realms	<ul> <li>1.1 A minimum of 30% of the original extent for each major vegetation type to be placed in protected areas;</li> <li>1.2 A minimum of 50% of the current extent of estuaries are contained within protected areas; and</li> <li>1.3 A minimum of 30% of the distributions of each known taxa to be within a protected area.</li> </ul>
OBJECTIVE 2	Ensure protected areas of various types provide protection of all critical habitats for endemic, migratory and threatened species	<ul> <li>2.1 100% of the critical habitat for terrestrial threatened species to be captured in protected area of various types, and 50% of critical habitat for marine threatened species to be captured in a protected area;</li> <li>2.2 100% of the known range of terrestrial endemic species to be captured in protected areas of various types, and 50% of the known range of marine endemic species to be capture in a protected area;</li> <li>2.3 Where possible protect 100% fish spawning areas, and 80% mangroves given their importance as fish nurseries, within protected areas of various types; and</li> <li>2.4 100% of the known range of terrestrial migratory species to be captured in a protected area and 50% of the known range of marine migratory species to be capture in a protected area.</li> </ul>
OBJECTIVE 3	Ensure that Protected Areas of various types are the right location, size & shape to ensure the persistence of biodiversity, to minimize fragmentation of protected area boundaries and maximize habitat connectivity between protected areas.	<ul> <li>3.1 Maintain/restore 100% habitat connectivity within and around terrestrial protected areas;</li> <li>3.2 Maintain/restore 50% habitat connectivity within and around marine protected areas.</li> </ul>
OBJECTIVE 4	Ensure that protected areas of various types play a role in mitigating climate change;	<ul> <li>4.1 Ensure that 30% of the nation's sequestered carbon found in living terrestrial vegetation is captured inside protected areas;</li> <li>4.2 Ensure that 80% of the nation's mangrove forests are accommodated in protected areas.</li> </ul>
OBJECTIVE 5	Design protected areas so that they are resilient and able to withstand stresses and changes such as human-forced climate change.	<ul> <li>5.1 Where possible, ensure that protected areas are as large as they can possibly be;</li> <li>5.2 Where possible, ensure that protected areas connect protected areas, especially along elevation gradients for terrestrial protected areas; and</li> <li>5.3 Where possible, and where there is good areas that represent major geological features in the protected area system, to ensure climate refugia are protected.</li> </ul>

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
1. Develop capacity for Flora and Fauna survey & broaden Ecological knowledge	Broaden ecological knowledge within and about Protected Areas – (currently using signature species)  Flora – extend work from mostly trees Fauna – extend work from mostly birds Improve Survey techniques Develop capacity for taxa collection & analysis Catalogue known and future information on species  Develop Guides and Criteria to determine the classification of nominated and future Protected Areas: To assist in the nomination of future Protected Areas Relating the IUCN categories with customary based management regimes (e.g. Local Marine Managed Areas) incorporating the principles and practices of tara bandu to promote co-benefits e.g. action to protect freshwater ecosystems  Ensure coordination of surveys and assessments across Government, community and NGOs  Create methods of survey and assessment suited to Timor Leste  Develop a Toolkit on types of expertise required, with template TORs and best practices for biodiversity conservation  Develop specific data-bases on species Taxa, tied to geographic information  Knowledge transfer: outside expertise and outputs are to improve Timor Leste databases; Protocols for outside expertise work and Intellectual property rights (WIPO related)  Ensure capacity transfer between outside expertise and local staff and community  Work towards establishing a Centre for research and	National Ecological Gap Assessment (NEGA) is published  Recommendations of the NEGA followed up.  NKSNP becomes a Biosphere Reserve under the UNESCO Man and Biosphere programme  Ecological surveys of the PAs are undertaken  Ecological surveys of Areas of Interest (NEGA) undertaken  Databases and Knowledge Management Systems enhanced	The, Minister of Agriculture and Fisheries, GEF Focal Point and the Cabinet have reviewed and approved outputs and reports  DPANP annual report  PoWPA Project Reports	Manager Protected Area Survey and Mapping (DPANP)  National Directorate of Fisheries  Partner NGOs	5,000 50,000 15,000 150,000 60,000

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
	education  o Long term development of a herbarium o Begin the development of a Botanic garden o Form a botanic & ecological information repository o Botanic garden (ex-situ) o In-situ conservation				
2. Demarcate the Boundaries of Priority Protected Areas	<ul> <li>Develop criteria to assist in determining priority Protected Areas for Boundary marking;</li> <li>Research the benefits of other measures to enable regulation of activities while boundaries are being defined e.g. land use policy/regulation, EIA, Local Area Plans</li> <li>Improve Capacity for consensus building at the Village level through:         <ul> <li>More refined vegetation, ecological and biophysical information at the village level;</li> <li>Improved awareness and education at the village level</li> <li>Marketing the benefits of Protected Area designation</li> </ul> </li> </ul>	Boundaries to priority PAs demarcated  Alternative planning & management methods trialled.  Boundary and geophysical information availed in a format to suit local engagement	Agreement & MOUs signed between Villages and Govt for the relevant Protected Areas  DPANP annual report  PoWPA Project Reports	Protected Areas Boundary Management (DPANP)  National Directorate of Fisheries  Dept of Justice  National Directorate of Environment	25,000 10,000 25,000
	<ul> <li>Improved data and information collection, evaluation and aggregation for each Protected Area to improve community based decision-making</li> <li>Provide better mapping at the local scale to assist consensus building and decision-making</li> </ul>	Knowledge management system with GIS functionality available Detailed mapping available			15,000
	Provide contributions to the village level where inputs are needed and represent tangible payment for services	Support for local engagement provided			15,000
	<ul> <li>Research opportunities for Incentives to encourage better consensus building and collaborations for boundary demarcation (e.g. Carbon trading under REDD+)</li> </ul>	Information on options available in simple clear format.			15,000
	Secure necessary equipment	Equipment provided			12,500

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
3. Explore Natural Tourism opportunities - Marine	<ul> <li>Develop Guides on Site selection and evaluation of Natural Tourism sites and Activities</li> <li>Establish a Coordination Group to improve initiatives aiming to identify natural tourism opportunities.</li> <li>Continue studies and evaluations to nominate potential natural tourism areas;</li> </ul>	Guidelines for selecting and developing natural tourism sites are produced  Mapping and	DPANP annual report PoWPA Project Reports	Protected Areas Natural Tourism (DPANP)  National Directorate of	10,000
	<ul> <li>Use the outputs/outcomes of the assessments as criteria to be included in the future determination or nomination of PAs or extension of the areas currently nominated.</li> <li>Provide means to reach consensus on tourism opportunities:         <ul> <li>to verify sites:</li> <li>provide better information on benefits</li> <li>better promotion</li> </ul> </li> </ul>	reporting on natural tourism opportunities are produced and agreed at the District and Suco level.		Fisheries  Dept of Tourism  Involvement with Harburas and other partner	25,555
	<ul> <li>Improve Mapping capacity to assist with:</li> <li>Planning locations (broad)</li> <li>Assisting with site layout and design (detail)</li> </ul>	Mapping capacity within DPANP/ MAF /NGOs enhanced		NGOs	10,000
I. Explore Natural Fourism opportunities - Terrestrial	<ul> <li>Develop Guides on Site selection and evaluation of Natural Tourism sites and Activities;</li> <li>Continue studies and evaluations to nominate potential natural tourism areas;</li> <li>Use the outputs/outcomes of the assessments as criteria to be included in the future determination or nomination of</li> </ul>	Guidelines for selecting and developing natural tourism sites is produced	DPANP annual report  PoWPA Project Reports	Protected Areas Natural Tourism (DPANP)  Dept of Tourism	10,000
	<ul> <li>PAs or extension of the areas currently nominated.</li> <li>Identify good recreation areas</li> <li>Identify good camping areas</li> <li>Improve Mapping capacity to assist with site selection and evaluation of recreation and camping opportunities</li> </ul>	Criteria for selecting and expanding Protected Areas Network are agreed.		Involvement with Harburas and other partner NGOs	25,000
		Information is available to the Tourism office on good recreation areas, camping sites and trails to assist in national tourism marketing.			10,000

LONG-TERM GOA	L 2: Establish and Strengthen Networks and Improve	Collaboration
MEDIUM TERM OBJEC	TIVES: 2020	TARGETS
OBJECTIVE 1	Ensure the integration of Protected Areas planning and management into broader biodiversity conservation, land use & environmental planning and protected area management	<ul> <li>1.1 The Strategic Action Plan for Protected Areas is recognized in and entrenched as a key component of the National Biodiversity Strategic Action Plan (NBSAP);</li> <li>1.2 Protected areas and protected area systems are integrated into the wider land- and seascape governance, with acceptance of the landscape approach as a means to integrate ecosystem services, with cultural heritage management and land use planning;</li> <li>1.3 Designated protected areas are identified in District and local [village] level Land Use Policy and Integrated Local Area Plans [or the like];</li> <li>1.4 The designated protected areas and Strategic Action Plan are recognized in the National Sustainable Development Strategy (NSDS) [or the like] and included in national economic development strategies;</li> </ul>
OBJECTIVE 2	Improve the coordination and collaborative links across government and community	<ul> <li>2.1 The environmental management and conservation legal, policy and information platforms are reviewed and pathways for coordinated and integrated decision-making are agreed [established].</li> <li>2.2 Clearing-house mechanisms for biodiversity conservation planning and management provide government, NGOs and civil society with the knowledge and information base to instigate better coordination of intentions, programmes and projects;</li> </ul>

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
5. Improve	Establish a Coordination Group to integrate initiatives in	Coordination	MAF Corporate Plan	Head of	7,500
Coordination across government and	Protected Areas planning, establishment and management including for advancing  • natural and other tourism	committee or group established with key involvement of DPANP	& Annual Report  DPANP annual	Protected Areas (DPANP)	
community	<ul> <li>natural and other fourism</li> <li>alternative livelihood activities</li> <li>involvement of relevant national agencies</li> <li>community and NGOs participation</li> <li>roles for the private sector including natural tourism operators</li> </ul>	involvement of DPANP	report  PoWPA Project Reports	GEF Focal Point  National  Directorate of  Environment	
	Set up data exchange relationship with Indonesia to assist with quick capacity development.	Exchange network with Indonesia setup.		Head, Extension and Awareness Raising Section, DPANP	5,000

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
6. Improve Communication across government and community	<ul> <li>Strengthen coordination mechanisms and networks:</li> <li>Clearing house mechanisms for PAs</li> <li>Formation of a Protected Areas Network</li> <li>Integrate databases of information</li> <li>Sharing and exchanging of data/information</li> </ul>	A clearing house mechanism is active  A database of national and experts on national biological diversity is available	GEF Focal Point & Directorate of Environment report on the establishment of the CHM DPANP annual report	GEF Focal Point  National Directorate of Environment  Head of Protected Areas (DPANP)  Head, Extension and Awareness Raising Section, DPANP	5,000
7. Promote and Market the benefits of Protected Areas	Continued promotion of PAs and benefits across Govt agencies and community	Toolkits and skills are developed to assist with quick turnaround for PA promotion.	DPANP Annual report	Head of Protected Areas (DPANP)  Head, Extension and Awareness Raising Section, DPANP	15,000

LONG-TERM GOA	LONG-TERM GOAL 3: Build Capacity for the Planning, Establishment and Management of Protected Areas					
MEDIUM TERM OBJEC	TIVES: 2020	TARGETS				
OBJECTIVE 1	Develop capacity {criteria and methods} to establish protected areas based on ecological, cultural heritage, socio-economic and landscape values	1.1 Criteria and methods for the selection, establishment and managing Protected Areas are agreed by government, community and civil society stakeholders.				
OBJECTIVE 2	Ensure Site Based Protected Area Planning and Management	1.1 Priority protected areas have effective management in existence by 2020, using participatory and science-based site planning processes that incorporate clear biodiversity objectives, targets, management strategies and monitoring programmes, drawing upon existing methodologies and a long-term management plan with active stakeholder involvement.				
OBJECTIVE 3	Ensure access to suitable Technologies and knowledge management systems for Protected Areas	<ul> <li>3.1 The development, validation, and transfer of appropriate technologies and innovative approaches for the effective management of protected areas is substantially improved, taking into account decisions of the Conference of the Parties on technology transfer and cooperation;</li> <li>3.2 Scientific knowledge relevant to protected areas is further developed as a contribution to their establishment, effectiveness, and management</li> </ul>				
OBJECTIVE 4	Build Institutional and Human resource capacity for the planning, establishment and management of protected areas	<ul> <li>4.1 A comprehensive capacity building programmes and initiatives are implemented to develop knowledge and skills at individual, community and institutional levels, and raise professional standards</li> <li>4.2 The capacity of government and community to advance [use] [implement] community based spatial planning of terrestrial, coastal and marine resources is increased.</li> </ul>				

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
8. Develop Criteria for establishing new Protected Areas.	<ul> <li>Develop and gain approval of a process for the establishment of new PAs including criteria and methods for their selection, establishment and management.</li> <li>Produce guides and criteria for evaluating natural tourism locations/ activities, and to incorporate criteria in the PA</li> </ul>	A system for engagement exists for the input of local communities to discuss best forms of management & governance of future PAs Criteria for selecting and expanding	DPANP annual report PoWPA Project Reports	Head of Protected Areas (DPANP)  National Directorate of Fisheries  Dept of Tourism	15,000
	planning process:  • site selection	Protected Areas Network are agreed.			

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
	<ul> <li>trekking trail location</li> <li>locating and managing facilities</li> <li>Provide capacity to map potential trails and assess their feasibility</li> </ul>	Criteria and technical capacity to map and agree on potential trails			12,500
9. Produce Protected Areas Management Plans.	<ul> <li>Create participatory processes for site based management planning</li> <li>Produce a Site Based Management Plan for the Nino Konis Santana National Park         <ul> <li>Undertake NRM / land use analysis of Nino Konis Santana National Park area</li> <li>Undertake assessments for PA zoning using the Man and Biosphere approach (UNESCO) or similar suited to Timor Leste</li> <li>Use participatory methods to understand land use pressures and how best to respond using PA zoning,</li> <li>Integrate with the Livelihoods and Socio-Economic assessments at the community level.</li> </ul> </li> <li>Use the Management Plan outputs of the NKSNP as a template for the advancement of Management Planning for priority PAs</li> <li>Undertake NRM / land use analysis of other priority PAs</li> <li>Undertake PA zoning for other priority PAs using the participatory process agreed with the community.</li> </ul>	Participatory processes established The Nino Konis Santana National Park Conservation Environmental Management Plan is approved by the Council of Ministers  Operational management planning templates for other PAs are produced. Land use plans for priority PAs exist  NRM zoning plans for priority PAs exist.	Minutes from Council of Ministers approval of NKSNP Management Plan  Agreement & MOUs signed between NKSNP Villages and Govt for National Park.  DPANP Annual Report	Manager of Nino Konis Santana NP (DPANP)  Head of Protected Areas (DPANP)  National Directorate of Fisheries	12,500 80,000 15,000 25,000
10. Improve 'Individual' Capacity of DPANP	<ul> <li>Training for GIS and GPS to assist with Ecological Surveys, Boundary Demarcation, and identification of natural tourism and livelihoods opportunities</li> <li>Training in database creation, linking, analysis and management</li> <li>Ongoing training in ecological survey, taxa identification, conflict resolution and mediation</li> <li>Follow up and consistent training on survey techniques,</li> </ul>	Knowledge transfer and consistent training is programmed  Regular training in database development  Regular training in survey techniques & management  Ecological knowledge	DPANP Annual Report  Annual Review of Capacity Building Plan.	Head of Protected Areas (DPANP)	60,000 15,000 25,000

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
	Training in natural tourism planning and management including business development skills	Suco stakeholders is enhanced Regular training in natural tourism planning.			12,500
	Training in Environmental communications and curriculum development	Capacity building programs are instituted for local Experts working in the field of biodiversity protection,			12,5000
11. Improve Systems Capacity of DPANP	Improve GIS capability in DPANP including other associated tools (e.g GPS, database front end development)	GIS IT capacity is available within DPANP	DPANP Annual Report	Head of Protected Areas (DPANP)	25,000
OI DPAINP	Mapping and database development to support Community Needs Assessments	Maps and databases for biodiversity surveys, natural tourism, community needs etc are able to be produced.	Annual Capacity Building Plan review Maps are available from DPANP	Involving ALGIS	15,000
	Fill gaps in basic maps of land, vegetation, water and coastal resources, targeting priority PAs	Gaps in ecological, land and water systems are being filled.			12,500
	<ul> <li>Integration and linkage of databases of land, vegetation, water systems and coastal</li> </ul>	Database linkages established			7,500
	Improve IT and communication systems and equipment in DPANP including	Equipment provided			35,000
12. Develop capacity to advise on Livelihoods	Investigations and evaluation of livelihood opportunities for key PAs.	Livelihood opportunities for each PA are agreed.	DPANP Annual Report	Head, Extension and Awareness Raising Section,	20,000
opportunities.	Provide pilot resources to assist with establishing accommodation in tourism and recreation areas.	Pilot activities have begun and outputs used for further capacity building.	Guidelines are available from DPANP	DPANP Protected Areas Natural Tourism	7,500
	Secure adequate materials and equipment to assist with livelihood opportunities and pilot facilities e.g.:	Pilot activities inform		(DPANP)	7,500

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
	<ul> <li>Diving &amp; snorkeling</li> <li>Tank re-filling</li> <li>Safety equipment</li> <li>Secure adequate resources to assist with pilot Community Accommodation – e.g guest houses</li> </ul>	guides and criteria for natural tourism.  Guides for establishing guest houses from existing accommodation.		Head of Protected Areas (DPANP)	7,500
	Provide pilot resources to assist with establishing accommodation in tourism and recreation areas	Guides available on establishing new accommodation.			12,500
	<ul> <li>Produce guides and criteria for evaluating natural tourism locations/ activities:         <ul> <li>site selection</li> <li>trekking trail location</li> <li>locating and managing facilities</li> </ul> </li> <li>Provide capacity to map potential trails and assess their feasibility</li> </ul>	Consolidate guides & criteria for the location, design & siting of natural tourism development.			10,000

LONG-TERM GOAL 4: Prevent and Mitigate Negative Impacts of Key Threats to Protected Areas					
MEDIUM TERM OBJEC	MEDIUM TERM OBJECTIVES: 2020 TARGETS				
OBJECTIVE 1	Ensure the Assessment of Risks and Vulnerabilities of all key threats to Protected Areas;	1.1 Effective mechanisms for identifying and preventing, and/or mitigating the negative impacts of key threats to protected areas are in place			
OBJECTIVE 2	Ensure specific strategies are generated for the key risk matters such as Bushfires, Land degradation, Invasive Species, Mining and extractive industries, energy and infra-structure including nature based and economic development risks.	2.1 Strategies for each priority threat to Protected Areas are in place			
OBJECTIVE 3	Develop capacity for the monitoring of key threats and addressing of impacts on Protected Areas.	3.1 Transfer of knowledge and information regarding Threats and Responses takes place and there are improved coordination among agencies and civil society to monitor, evaluate and respond to key threats and pressures upon natural systems			

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
13. Provide better understanding of Key Threats at the Village level	<ul> <li>Complete Community Needs assessments to characterize the THREATs experienced by communities within and around PAs</li> <li>Develop approaches to rehabilitation and restoration of</li> </ul>	Key threats are prioritized at the village level for the PAs	DPANP Annual Report Database of	Head of Protected Areas (DPANP)	25,000
	protected areas at the village level.	Options for rehabilitation and restoration are agreed.	Community Needs for each PA	MAF ALGIS	20,000
14. Provide better understanding of Habitat destruction & land conversion issues at the Village	<ul> <li>Investigate the nature of land conversion, the pressures cause it and impacts on habitats at a broad level and also at a finer scale regarding each of the PAs</li> <li>Shifting agriculture</li> <li>Extensive and intensification of agriculture</li> </ul>	The characterization of the forces for land conversion at the village level is completed.	DPANP Annual Report GIS & databases for each PA.	Head of Protected Areas (DPANP) MAF	20,000
level.	<ul><li>Major infrastructure</li><li>Large developments</li></ul>	Options for treatment or encouraging alternate land use are agreed.		ALGIS	10,000

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
15. Provide better understanding of Bushfire Hazards	Investigate the particular nature of bushfire risk and hazards for each of the PAs	Bushfire hazard and risk assessment process tailored to Timor Leste is agreed.  Information exists on means to reduce bushfire hazards and	DPANP Annual Report GIS & databases for each PA.	Head of Protected Areas (DPANP) MAF ALGIS	25,000 15,000
16. Provide better understanding of alternative Land Management practices within Protected Areas.	Investigate the nature of land management and livestock practices and the implications for biodiversity conservation for priority Protected Areas.	risk.  For each PA the land management practices that lead to destruction and/or degradation are known.  Alternative land management practice options (for cropping & livestock) are agreed with the villages within and about PAs.	DPANP Annual Report GIS & databases for each PA.	Head of Protected Areas (DPANP) MAF ALGIS	20,000
17. Provide better understanding of the impacts of Illegal logging and cutting	Characterize the level of impacts from illegal logging and timber cutting among the PAs	The level of impact from illegal logging and timber cutting is understood for each PA.  Alternative practices and sources of energy are agreed with the villages within and about PAs.  Regulations enforced for good forestry practices	DPANP Annual Report GIS & databases for each PA	Head of Protected Areas (DPANP) MAF ALGIS	25,000 15,000 15,000

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
18. Provide better understanding of the extent of Invasive Alien Species about Protected Areas	Characterize the status of alien invasive species for each of the PAs, and developed strategies for the priority areas.	Information on critical invasive alien species and their treatment is available.  Programmes are agreed with MAF on priorities for eradication.	DPANP Annual Report GIS & databases for each PA	Head of Protected Areas (DPANP) MAF ALGIS	25,000

LONG-TERM GOAL 5: Promote Equity and Benefit Sharing to ensure socio-economic benefits and Financial Sustainability				
MEDIUM TERM OBJECT	TIVES: 2020	TARGETS		
OBJECTIVE 1	Ensure systems are developed to guarantee equity in access and distribution of benefits from protected areas	Mechanisms are agreed for the equitable sharing of both costs and benefits arising from the establishment and management of protected areas		
OBJECTIVE 2	Ensure direct and in-direct benefits from protected areas management for communities	Governance and micro-finance mechanisms are agreed between levels of government and community.		

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
<ul> <li>Undertake Socio-Economic Assessments</li> <li>Undertake Community Livelihoods Assessments         <ul> <li>National scale to consider options &amp; feasibility</li> </ul> </li> <li>Assess potential livelihoods opportunities for each PA         <ul> <li>To be integrative: forestry, agric, livestock, tourism</li> </ul> </li> </ul>	Undertake socio-cultural surveys around the PAs	Studies of current socio- economic/ patterns and practices completed.	DPANP Annual Report Databases for each PA	Head, Extension and Awareness Raising Section, DPANP	35,000
		Studies showing best potential livelihood opportunities		Protected Areas Natural Tourism (DPANP)	25,000
	Tailored options for key PAs		Head of Protected Areas	15,000	
	<ul> <li>Complete Community Needs assessments (general)</li> <li>Include education, health and infrastructure</li> <li>Community development focused</li> </ul>	Consolidated reporting on Needs tied to opportunities		(DPANP)	20,000

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
	Investigate options for Community Empowerment     Pilot projects	Options for community involvement in management and decision-making agreed.			10,000
20. Undertake Community Mapping	Spatial Mapping to support Community Livelihoods and socio-economic assessments to include capability for monitoring and evaluation.	Maps and associated databases covering socio-economic information exists.	DPANP Annual Report GIS and databases for each PA	Head, Extension and Awareness Raising Section, DPANP  Protected Areas Natural Tourism (DPANP)  Head of Protected Areas (DPANP)  MAF With support from ALGIS	30,000
21. Begin Community development pilots within Protected Areas.	<ul> <li>Promotion of Potential Income Opportunities for each of the PAs</li> <li>Investigate options for tourism related income generating activities e.g.         <ul> <li>Accommodation</li> <li>Recreation activities</li> <li>Handicrafts</li> <li>Bush foods</li> <li>Survival techniques</li> </ul> </li> <li>Assist communities on how to start and operate a business:         <ul> <li>Marketing, advertising &amp; promotion</li> <li>Finance &amp; budgeting</li> <li>Determining price</li> <li>Occupational health &amp; safety</li> </ul> </li> <li>Assist communities to develop Guidelines and requirements for [external] operators establishing activities within PAs.</li> </ul>	Promotional toolkits for Livelihood options and planning - is created.  Guides are produced for assisting communities with income generating options.  Pilot activities for income generating businesses have commenced.  Guides produced for	DPANP Annual Report  Guidelines are available from DPANP  Database records and monitors activities	Head, Extension and Awareness Raising Section, DPANP Protected Areas Natural Tourism (DPANP) Head of Protected Areas (DPANP) MAF With support from ALGIS	15,000 15,000 10,000 7,500

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
	<ul> <li>Secure adequate materials and equipment to assist with livelihood opportunities and pilot facilities, for example:         <ul> <li>Diving &amp; snorkelling</li> <li>Tank re-filling</li> <li>Safety equipment</li> </ul> </li> <li>Secure adequate resources to assist with pilot Community</li> </ul>	external operators  Support materials and trial equipment provided.			7,500
	Accommodation – e.g. guest houses  Training of communities on alternative livelihoods	Financial support gained			7,500
	opportunities	Training delivered at the local level for key PAs			15,000

LONG-TERM GOAL 6: Enhance Involvement of Local Communities and Relevant Stakeholders through improved Communication, Education and Public Awareness.  MEDIUM TERM OBJECTIVES: 2020 TARGETS					
IVIEDIUIVI TERIVI OB.	JECTIVES: 2020	TARGETS			
OBJECTIVE 1	Ensure participatory approaches for planning, establishment and management of protected areas	1.1 Full and effective participation mechanisms are in place for local communities, in full respect of their rights and recognition of their responsibilities, consistent with national law and applicable international obligations, and the participation of relevant stakeholders, in the management of existing, and the establishment and management of new protected areas.			
OBJECTIVE 2	Ensure the local stakeholders have key roles in the safeguarding of protected areas	2.1 Site Environmental Management Plans include provisions agreed by District and Suco level stakeholders with regard to their roles and responsibilities for Protected Area management.			
OBJECTIVE 3	Ensure high quality of Communication, Education and Public Awareness.	3.1 Public awareness, understanding and appreciation of the importance and benefits of protected areas is significantly increased			

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
22. Improve Communication with Protected Areas communities	<ul> <li>Complete Community Needs assessments to help focus community campaigns:         <ul> <li>Awareness</li> <li>Training</li> <li>Promotion</li> <li>To also address THREATs</li> </ul> </li> <li>Generate an Integrated Plan for Communication as a toolkit with guidelines and principles for best practice</li> <li>Develop a Community Campaign [toolkit] for villages around PAs to provide a better understanding of the benefits of PAs</li> <li>Secure resources for the design &amp; creation of materials &amp;</li> </ul>	Community Needs assessments are completed for priority PAs.  An integrated Plan for Communications with PA communities is produced. Toolkits are available	DPANP Annual Report  Database on  Communications  and Needs is  available	Head, Extension and Awareness Raising Section, DPANP  Head of Protected Areas (DPANP)	25,000 15,000 15,000
	<ul> <li>Secure resources for the design &amp; creation of materials &amp; community education</li> <li>Continued promotion of PAs and benefits         <ul> <li>across Govt agencies</li> <li>community &amp; NGOs</li> <li>village level</li> </ul> </li> </ul>	Promotional & education materials produced  Promotional campaign of the benefits of PAs continues across the community, including government.			12,500

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
23. Enhance Participatory Planning at the Village level.	Investigate options for Community Empowerment through pilot projects targeting especially the use of Tara bandu practices.	Incentives and mechanisms agreed for further development.	DPANP Annual Report	Head of Protected Areas (DPANP)	20,000
	Evaluate options for mainstreaming participatory approaches into environmental and land use legal and policy platforms	Options agreed for community based planning and management.	National Directorate of Fisheries  Involvement with Harburas and other partner NGOs	Directorate of Fisheries	7,500
	Explore opportunities for broader land use and environmental planning approaches at the local level to enhance the use of corridors between PAs.	Overlays produced for integrating into broader land use planning		other partner	12,500
	Institute mechanisms for village level inputs to decision-making with regards to land uses and activities proposed within or surrounding PAs:  - A process for defining the best means to integrate traditional and customary use;  -A protocol is agreed at village level on how to protect biological resources and their associated habitats within broader community development frameworks.	Mechanisms agreed and trialled for key PAs			12,500
	Institute mechanisms for village level inputs and making of management plans	Mechanism for village inputs into management plans are agreed and trialled for key PAs			15,000

LONG-TERM GOAL 7: Provide Enabling laws, Policy, Institutions and Systems for Protected Areas						
MEDIUM TERM OBJECTIVES: 2020		TARGETS				
OBJECTIVE 1	Ensure legal frameworks, policies, institutions and systems for protected areas are functional.	1.1 Standards, criteria, and best practices for planning, selecting, establishing, managing and governance of systems of protected areas are developed and adopted;  Output  Description:				
		<ul> <li>1.2 Frameworks for monitoring, evaluating and reporting on protected areas planning and management effectiveness are agreed and implemented.;</li> <li>1.3 National systems are established to enable effective monitoring of protected-area coverage, status and trends at national, regional and global scales, and to assist in evaluating progress in meeting global biodiversity targets</li> </ul>				
OBJECTIVE 2	Ensure policies, plans, strategies and activities are supported by adequate and sustainable funding	2.1 Sufficient financial, technical and other resources are secured to meet the costs to effectively implement the Protected Areas programme from national and international sources.				

5 Year Strategic Actions	ACTIVITIES	Key Performance Indicators	Verification	Responsibility	Budget Estimates
24. Improve the legal and policy bases for Protected Areas	<ul> <li>Update Regulation 19 2000</li> <li>Review options for better involvement of DPANP in land use planning and decision-making for activities and proposals within and surrounding PAs;</li> <li>Investigate options for the mainstreaming of PAs into other sector policy</li> <li>Create specific regulations or Ministerial diploma for boundary demarcation</li> <li>Investigate and introduce processes to apply strategic and project based EIA to projects within and surrounding PAs that may have significant impacts on PAs.</li> </ul>	Policies and legislative platforms are reviewed and revised to provide an enabling environment for more effective establishment and management of protected areas.  Options agreed and trial mechanisms instituted  Options agreed and trialled  Regulations drafted and supported by Council of Ministers SEA and EIA guides and procedures agreed	DPANP Annual Report  Council of Ministers approval recorded	Head of Protected Areas (DPANP)  National Directorate of Fisheries  National Directorate for the Environment Involvement with Harburas and other partner NGOs	20,000 10,000 7,500 5,000 7,500 15,000

25. Protect and enhance use of indigenous and local knowledge	•	Research the best means to implement WIPO – to ensure the adequate protection of traditional and indigenous knowledge  Ensure provisions in new legislative platforms contain adequate means to address Access and Benefit sharing & protection of traditional and indigenous knowledge under WIPO;	Actions are commenced to ensure adequate protection of traditional environmental and local knowledge guided by WIPO.	DPANP Annual Report Council of Ministers approval recorded	Head of Protected Areas (DPANP)  National Directorate of Fisheries  National Directorate for	7,500 10,000
	•	Investigate options for the longer term integration ofterrestrial & marine ecosystems Protected Areas management.			Involvement with Harburas and other partner NGOs	12,500
26. Mainstream Protected Area planning and management across Government.	•	Assist others in the development of Land Use policy and integrated land use plans, ensuring PAs is adequately covered; Promote the incorporation of PA planning and management in Poverty Reduction Strategic Plans (PRSPs) Assist others in the review of perverse incentives and establish of positive incentives including the advancement of REDD+ opportunities; Assist others in the harmonizing of sectoral policies and laws to ensure they support protected areas planning and management; Investigate means to ensure there are satisfactory alternative dispute resolution mechanism in protected areas planning, establishment and management.	Inputs provided to others progressing land use policy & planning.  The long term benefits of PAs feature in future PRSPs.  DPANP is involved and provides input to REDD+ & other carbon trading initiatives  Options for alternative dispute resolution are available.	DPANP Annual Report	Head of Protected Areas (DPANP)  National Directorate of Fisheries  National Directorate for the Environment  MAF	10,000 5,000 22,500 7,500 12,500