

Lao People's Democratic Republic
Peace - Independence - Democracy - Unity - Prosperity

Provincial Natural Resources Management

A Component Description

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FOREWORD

The government of Sweden has provided technical assistance to the Government of Lao PDR in the Natural Resources Sector since 1977. Until the mid 1980s the assistance focused on support to the Department of Forestry and two State Forest Enterprises. From 1985 assistance was expanded to include support for the establishment of a Forestry Training Organization including the Forestry Technician School at Mouang Mai. In the late 1980s the Lao Swedish cooperation was further expanded to cover shifting cultivation stabilization and nature conservation. During the first half of the 1990s the cooperation gradually changed to institutional building/strengthening of the Department of Forestry at the centre and in selected Provinces.

The co-operation is based on the premise that national ownership of bilateral programmes will contribute significantly to sustainability after the programmes have been completed.

In more recent years the programme has addressed sustainable land use aspects in the village development context with the view that community participation in partnership with government services will enhance the potential for sustainable management of forest and agricultural resources.

The Phase IV of the Lao Swedish Forestry Programme (LSFP) (1996- 2001) has concentrated on three aspects of institutional building; competence development, model development and research management. The development efforts have covered a process of formulating, improving and disseminating models (methods and procedures) in four main areas including Participatory Village Development and Sustainable land Use, Participatory National Bio-diversity Conservation Area Management, Natural Resources Management and Institution Building. Monitoring and gender mainstreaming have been incorporated as cross cutting efforts in the model development work. The development activities have been performed in partnership with national, provincial and district administrations and with village communities in response to Lao policies.

This document is one in a series of resulting documents, which have been produced in both Lao and English languages to assist and provide knowledge and ideas to personnel responsible for policy, planning and implementation of agriculture and forestry development programmes. It contains lessons and experiences learnt during the programme. I encourage the personnel of departments and agencies to study and assess the content of the documents and apply the relevant parts depending on local conditions.

I wish to commend the Swedish International Development Cooperation Agency (Sida) for it's continued support during four phases of technical assistance to the Ministry of Agriculture and Forestry, and the LSFP personnel and advisers, who have made a major contribution this development and documentation.

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ABOUT THIS DOCUMENT**1. Intended Audience of this Document**

- Policy makers and programme planners at central level
- Policy makers and planners at Provincial level (Offices of the Governor and sectors including the Provincial Agriculture and Forestry Office)
- The Donor community

2. Explanation of 'Component'

The Provincial Natural Resources Management component is part of the Natural Resources Management Initiative. Good qualitative data is necessary for planning. Natural resources, socioeconomic and other data is required.

Development work of the component has only started and development of detailed procedures is proposed to continue within the frame of future co-operation between Sida and NAFRI.

3. Purpose of the Document

To provide both provincial and central planners and decision makers with insights into methods for sustainable Natural Resources Management and associated socioeconomic development

4. Information provided in the Document

- The objectives of natural resources management
- End users and target beneficiaries
- Descriptions of procedures and methods
- Discussions on gender responsiveness
- Monitoring and evaluation
- Evaluation and recommendations

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1. BACKGROUND

Provincial Natural Resources Management (PRONAM) is a very recent initiative within the LSFP, aimed at assisting the GoL in developing sustainable use of natural resources to the benefit of rural and urban people. The idea was born in a dialogue between LSFP and the Governor's office in Savannakhet Province. It was recognized that the Province lacked a comprehensive system for Natural Resources Management (NRM), although there were numerous ongoing initiatives through Government bodies and projects.

The situation can be explained as follows: multiple demands are being placed on agriculture, forestry, fisheries, hydropower, irrigation and bio-diversity resources by people and investors in Lao PDR. The demands need to be seen in the light of sustainable development, meaning sustainable use of natural resources, sound development at regional level, and improved livelihood for local people. Currently no complete planning framework exists for objectively analyzing and integrating the diverse needs and tradeoffs among these various resource sectors and stakeholders.

The problem of competing demands on the resource base is particularly relevant at provincial level because of its mandate for strategic planning.

It is also important for the central government to have a dialogue with, and to provide guidance to the Provinces for the planning use of the country's natural resources.

Therefore PRONAM, when further developed, will provide both the Provinces and the Centre with the following benefits:

Provincial level

- A framework for better integration and co-ordination of the province's diverse NRM and socioeconomic development programmes
- A contextual framework for the provincial government to learn from, integrate, and utilize the results and findings of the various NRM and socioeconomic related projects and programmes.
- Improved provincial strategy and planning which will attract appropriate donor and government support for priority NRM issues
- Improved monitoring of the natural resources to secure sustainable management

Central level

- Procedures for replication by the GoL to the Provinces throughout the country
- A system for NAFRI for the development of methods and tools for regional and national level
- Support to the GoL policy on dialogue and devolution of planning and management authority to the provincial level.

Accordingly PRONAM could be an important instrument for the implementation of national policy directives, and the feedback would allow the centre to better understand opportunities, limitations, and threats perceived at the provincial level.

It should be noted that the PRONAM efforts fit well with decentralization as a means to pursue the Government's development goal of 2020.

'The macro management remains at the central level, while micro management is transferred to the local level by making provinces into strategic units, districts into planning and budgeting units and villages into implementation units'

It is recognized that PRONAM could have different detailed designs in flat land and sloping land planning situations. To cover such variations, it is proposed to undertake further PRONAM development work in 2 Provinces:

- Savannakhet, which represents a flat land situation
- Luang Prabang, which represents a sloping land situation

During the semi-annual review between MAF and Sida in October 2000, it was agreed that further development of PRONAM be postponed, and that it should be included into the planned new research co-operation programme, which is due to start in 2001. The presentation below is the result of the initial development work within the frame of LSFP.

2. OBJECTIVES

To provide provincial and central planners and other decision-makers with tools for sustainable NRM and related socioeconomic development

3. END USERS AND TARGET BENEFICIARIES

At the provincial level, the end users of PRONAM are the Office of the Governor and the technical offices, such as PAFO's provincial planning office. Both districts and villages will have critical roles in the implementation of PRONAM.

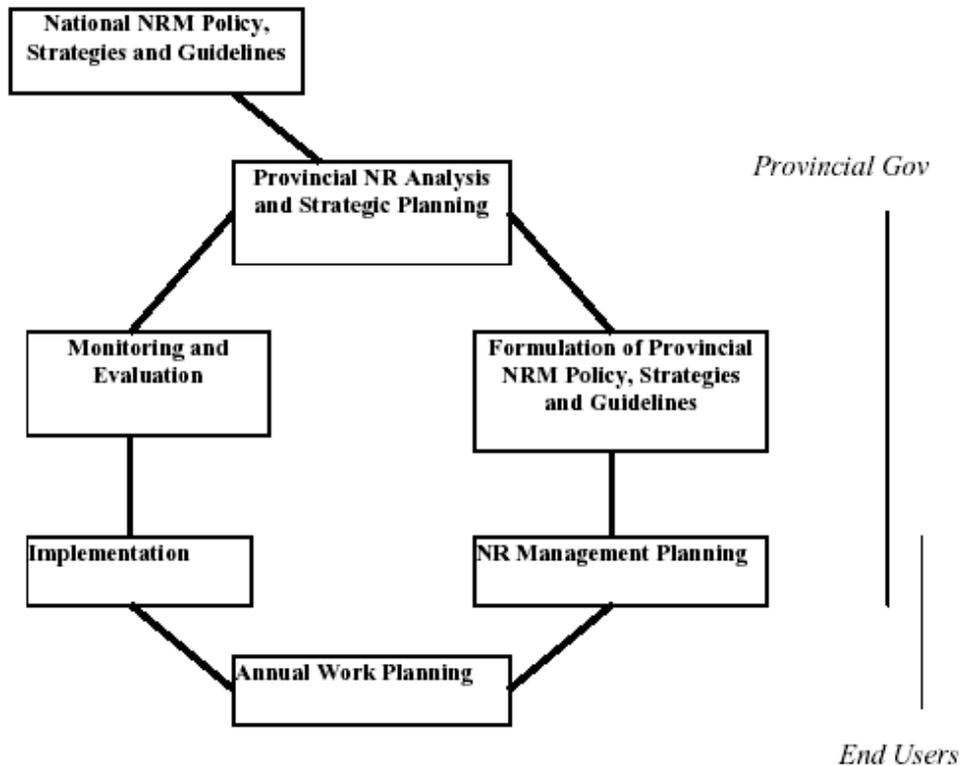
The central government is user by providing national policy and guidelines to PRONAM and receiving feedback for monitoring and continuous improvement of the NRM. NAFRI will provide methods/tools, NRM research, databases and training to the process. The target beneficiaries are the Nation and its people.

4. DESCRIPTIONS OF PROCEDURES AND METHODS

To be able to formulate and implement appropriate provincial NRM policy, strategies and guidelines, a first step is a careful analysis of the current status of Natural Resources and the socioeconomic situation, as well as a set of strategic integrated NR planning exercises. This work is to be done mainly by the different NR sector departments. There should also be procedures at inter-sectoral level (Department of Planning) to integrate the different NR information and plans, to make an overall NR analysis, and integrated strategic planning.

The strategic NR planning exercises should not be geared to produce extensive, detailed (top-down) NRM Master Plans for the provinces. PRONAM should rather be used as a dynamic tool to identify critical issues and areas, and give ideas and other inputs into annual review/revisions of the provincial NR policy, strategies and guidelines. PRONAM could be seen as a continuous planning 1 implementation 1 learning process for gradual improvement of the NRM and associated socio-economic development. PRONAM can be presented in an 8-step process cycle as follows:

Figure 1. PRONAM Process Overview



Step 1. Provincial Natural Resources Analysis and Strategic Planning

This activity will consist of several sub-steps, such as:

- Data collection and database creation.
- Analysis of the current NR situation (mainly the agricultural, forestry and water systems) and trends over the last 10 years.
- Identification of threats to the NR, and problems in present NR management.
- Identification of development potentials for the different NR.
- Analysis of the socioeconomic situation (including gender and poverty) at district and village levels, and its relation to the NR.
- Innovative spatial analysis and zonings of NR and socioeconomic characteristics.
- Identification of critical issues and critical geographical areas/villages/groups of people etc. for improved NR management and development.
- Prioritisation (of issues and areas) and conclusions.

The activities involve people of different areas of interest, and conclusions are drawn on the basis of consensus or common understanding.

Data should be gathered from different sources at central, provincial, district and village levels. NAFRI could provide help to the Provinces through Support Systems including nation-wide NR inventories, NR data bases and GIS technology (e.g. Arcinfor, ArcView), and research data input.

There is a considerable amount of data available for commencing the PRONAM process as indicated below.

Ongoing or completed projects may have collected NR, infrastructure, and socioeconomic data in the province. The province also has its regular annual data collection from villages, including data on population, agriculture, livestock, living conditions, manufacturing/handicraft, education and health. The centre may have collected or is collecting similar data from the provinces, the agricultural census being one example. All this information should be used, and could be fed into a well-structured database in the province.

Two Special Studies should be done at an early stage of a PRONAM process:

Study 1: Analysis of long-term changes in land use including forest/vegetation cover

As the starting point, it is important to have a good understanding of the current land use, including forest/vegetation cover in the province and how it has changed. Aerial photos and related data on land use are available for the whole country from 1982 and 1998. Satellite Image Maps (SIMS) of scale 1:100,000 or 1:50,000 are available for all provinces from 1990. By procuring and interpreting new SIMS, it would be possible to identify the changes from 1982 through 1990 up till the present as well as to produce forest/vegetation and land use maps. This is an important baseline for PRONAM. The Forest Inventory and Planning Centre (FIPC) could support each province in undertaking the study. The following should be produced:

- A provincial map showing the present land use and forest/vegetation cover.
- A map showing the locations of the major changes in the forest/vegetation cover during the last decade
- A report with a description and analysis of the major changes.

Study 2: 'Living Situation' Classification and Rating of All Villages

As mentioned above, there is a considerable amount of socioeconomic data at village level in each the Provinces. 10-20 appropriate living condition indicators should be related in a participatory manner. All the villages in the province could then be rated against these indicators and be classified into identified '*Living Situation Categories*', (very good to very poor).

With this classification and the village locations, it will be possible to perform spatial zoning of the 'living situation' in the province, and match these zones against the NR and other zones. Later on, when the village borders are mapped, they will replace present indicative locations.

The indicators should reflect factors such as access to roads, water supply, health, education and food production.

The need for other complementary data collection and special studies may be identified later in the course of the PRONAM process and may vary from province to province.

For the spatial analysis and zoning, a technique with map overlays should be used. In its simplest form, this could be done with the help of transparent maps and an overhead projector. Obviously GIS technique would be of great value.

Step 2. Strategic NR Projects/Activities

These activities include

- Method development projects
- Pilot projects
- LUP/LA activities
- Environmental Impact Assessments
- Feasibility studies
- Applied research/special studies

It should be noted that from a strategic point of view, most of these activities are aimed at verifying the relevance of major activities planned. Examples of already ongoing or completed pilot projects of relevance are the components of the LSFP's Participatory Village Development and Sustainable Land Use System, which include LUP/LA, Extension and JFM and the WorldBank/Finnida supported village forestry project (FOMACOP).

One outcome of the analysis and strategic planning could be that a specific NR management method and related socio-economic activity should be developed and/or tested in the province before it is recommended for use at a large scale. The earlier mentioned LSFP-JFM and FOMACOP-village forestry projects and other LSFP method development projects are typical strategic NR projects. Other examples of strategic NR activities are the ongoing LUP/LA activities (preparing the villages for improved NRM), environmental impact assessments (EIA), feasibility studies (on specific NR interventions), and applied research/special studies.

The on-going strategic NR projects/activities in the province should be reviewed and assessed by staff from the Governor's office. NAFRI should also follow up these projects/activities as the results and findings may be useful in other provinces or at the national level.

Step 3. Formulation of Provincial NRM Policy, Strategy and Guidelines

This activity is performed based on knowledge and understanding gained in steps 1 and 2.

The province should formulate updated/improved provincial NRM policy, strategies and guidelines based on the following inputs:

- National NRM policies, strategies and guidelines. NR research findings from NAFRI and others.
- Experiences from strategic NR projects/activities in the Province.
- Conclusions and priorities from the annual analysis and strategic NR planning exercises.
- Monitoring information from the field NR implementation activities.
- The provincial staff's own local knowledge and experiences from NR use and management in the province.

The NR policy, strategies and guidelines are mainly directed towards the NR users (e.g. villages), but also to the other PRONAM stakeholders at provincial and district levels. The NR policy, strategies and guidelines should be reviewed annually, based on recent monitoring data, and changed or modified, if needed.

Step 4. Training extension and other natural resources support

This step aims at preparing and upgrading the knowledge base for use and management of natural resources.

The NR policy, strategies and guidelines should be backed-up by training, extension and other support activities, based on the need/demand from the NR users and staff working with NRM. The PRONAM process should identify and suggest such support activities.

The Provincial Government's analysis, strategic planning and guidance of the NR use generally stops at this point, and the NR users' activities in the PRONAM cycle takes over.

Step 5. Natural Resources Management Planning

In this step preparation for management/use is made for the long and medium term. Based on the provincial NRM policy, strategies and guidelines, and the NR users' own knowledge about the particular NR, markets etc., the NR users should carry out 'bottom-up' planning of the NR management units, including long/medium term management planning and annual work planning. The NR management unit could be farm, village, concession area, district etc. The management plans generally need to be approved by the Government (District/Province).

The PRONAM process should review/assess the different NR users' management systems and give recommendations for improvements. Also the NR users' need for guidelines and support should be identified.

In respect of use of forests, the development of a management plan system should be linked to PRONAM. This includes assessment of volumes/species of trees and how harvesting should be done for sustainable use and for specified management units.

Similar thinking should be applied to the use of water as well as to agricultural land and so on.

Step 6. Annual Planning work

This step is repeated annually on appropriate level (e.g. management unit level)

Step 7. Implementation

It should be noted that PRONAM consists of both steps to be able to prepare a plan on sound basis, but also a step to *implement* the plan. The annual plan is a guiding tool for the short term.

Step 8. Monitoring and Evaluation

During and after implementation of the NR activities by the users, control, monitoring and evaluation activities will be performed. These should preferably be carried out jointly by the Province, Districts and the NR users. The monitoring should include e.g. post-harvesting inspections to see that the harvesting has been carried out according to laws, regulations and agreed practices (for forestry) Similar monitoring should be applied to use of agricultural land, water etc. The monitoring should make reference to work plans, budgets and sustainability indicators. Strategic NR projects/activities will be evaluated and an agreement made as to whether such activities should be implemented on a larger scale.

The PRONAM process will develop a monitoring and evaluation system to meet its needs while trying to co-

ordinate/integrate with other existing monitoring systems in the Province, such as the annual village data collection.

The following activities are to be covered:

- Monitoring/control related to laws and regulation
- Monitoring related to work plans and budgets
- Monitoring of economic, social and environmental sustainability indicators
- Project evaluations

The results of monitoring and evaluation are to be fed back to policy makers and planners for refinement of policies, strategies and plans.

After this, the PRONAM cycle is closed, and a new cycle starts. The cycle should generally be annual, as the renewable NR follows an annual harvesting/using cycle.

How the different steps links to each other are shown in figure 2.

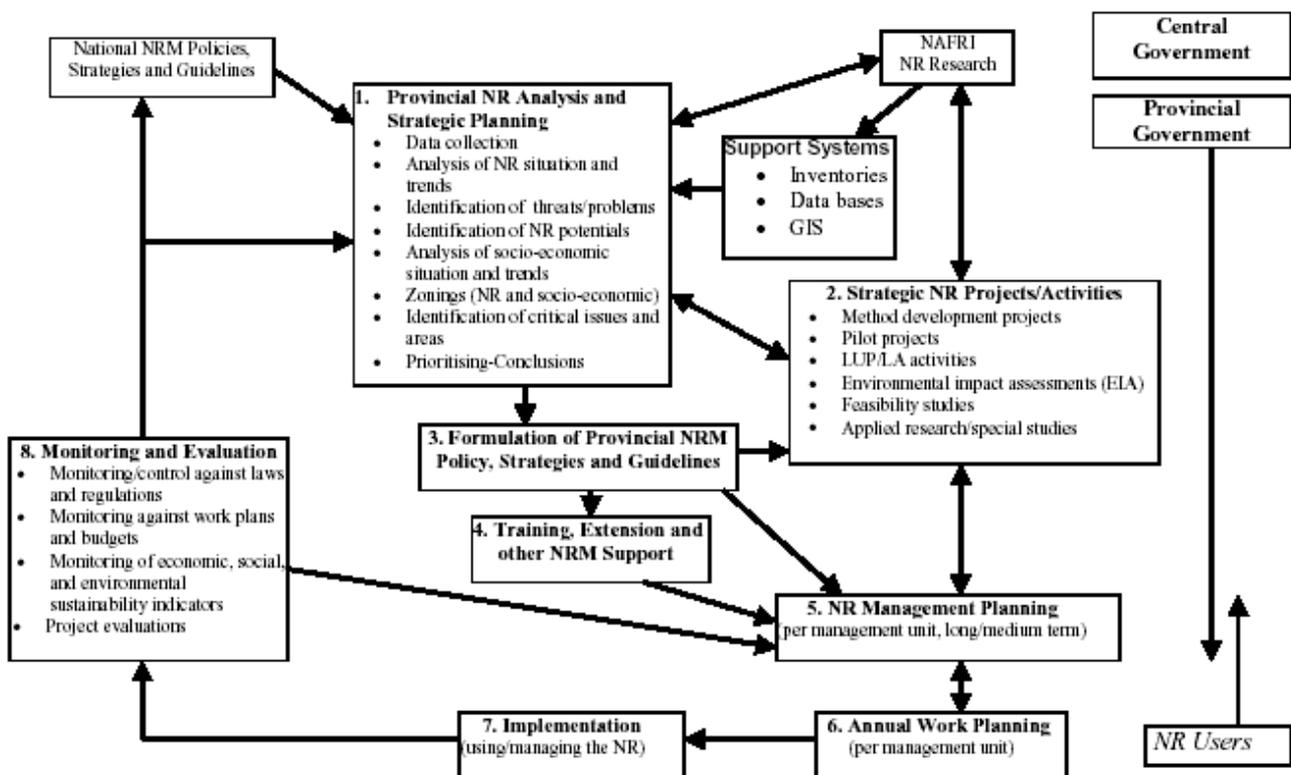


Figure 2. PRONAM Process Activities (Cycle)

5. GENDER RESPONSIVENESS

With its primary focus on technical and policy issues at provincial and national levels, the PRONAM involves few specific gender activities at field level. However, a number of features that promote a 'gender and development' approach are being incorporated, including:

- Use of and requests for sex-desegregated data in reports or policy papers,
- Social and gender issues as factors in developing describing and disseminating methods and manuals.
- Monitoring the impact of interventions on women and men respectively,
- Wherever possible attaining gender balance in teams,
- Insistence on due consideration of gender in the selection of candidates for training and study visit opportunities,
- The providing of training in gender awareness and social and gender analysis for NAFRI staff and provincial planning staff in collaboration with the Gender and Development Unit.

- The appointment of a team member as a 'Gender Focal Person' with the responsibility to enhance gender sensitivity at all stages of the planning process.

6. MONITORING AND EVALUATION METHODS

Monitoring and evaluation is a defined step of PRONAM (see above).

It could be stressed that *monitoring* of the activities and the NR situation should be carried out jointly by Province/Districts/NR users. (Refer to LSFP Approach to Monitoring)

Feed-back information from the monitoring should reach; the NR users to help improve their planning and implementation; the Provincial Government as input to the NR analysis/strategic planning for updating of policy, strategy and guidelines; and the central NR policy making unit for updating of the national NR policy and strategies.

The aim should be to use tailor made monitoring for specific activities rather than a complex system for monitoring. This will allow ownership and understanding on the level where the activity is performed.

7. EVALUATION AND RECOMMENDATIONS

Generally there is no lack of NR and socioeconomic data in the provinces but rather a lack of methodology and capacity to analyze and use all existing information.

The PRONAM process is a framework, or set of methods, for co-ordinated, integrated activities/steps that will help the province manage it's NR and improve the socioeconomic situation, particularly in the villages.

- The 'home' location of the PRONAM process has to be at an inter-sectoral level, close to the Governor's Office from where the provincial NR policy guidelines are issued. It is suggested that there should be a PRONAM Unit in the Department of Planning. In the Governor's Office, the Vice-Governor responsible for NR should be in charge of PRONAM.
- The main actors in PRONAM are (1) *the provincial government*, being the owner and controller of the NR on behalf of the State, and (2) *the users* of the NR. The users could be from the private sector (individuals, villages, private enterprises etc.) as well as the government sector (state enterprises and government projects). In Lao PDR the government sector is to a high degree directly involved in the use/exploitation of the country's NR. In other countries, farmers and the private sector may be more dominant NR users. In such countries, the Government has only the more limited role of setting up policy for use of NR and to monitor its use.
- At the provincial level, there are several sector departments/divisions technically/administratively involved in the use of the NR. We may call these 'PRONAM stakeholder departments". Of these, agriculture (including irrigation, livestock and fishery) and forestry are the biggest followed by energy, infrastructure, mining and tourism. The stakeholder departments should cooperate and use the PRONAM process together, with the Planning Department/PRONAM Unit as a facilitator and secretariat. PRONAM decisions will be taken by the Governor's Office.
- In the field, the villagers are the dominant direct users of the NR. About 80 % of the population in Lao PDR live in villages in rural areas. These people live close to the NR and are heavily dependent on them for their subsistence and socioeconomic development. The average villager may spend half of the day using the NR (for agriculture, collecting wood and NTFP, fetching water, fishing and hunting), and he/she gets substantial part of the family's income from them. Therefore the villagers should play an important role in the sustainable NR management, and the *village* should be an important basic management unit in PRONAM.
- The districts have an important intermediate position between the Provincial Government and the NR users. They are involved in (1) NR planning (top-down), (2) implementation of NR projects (acting as NR user), (3) providing extension support to villagers, and (4) monitoring and controlling NR field activities. At district level, the top-down policy/strategy and strategic NR planning will meet the bottom-up operational NR planning. These need to be negotiated. The PRONAM process should further study and elaborate the role of the District in the provincial NR management system.
- It is important that the national NR policies, strategies and guidelines are general and broad enough to give room for PRONAM to develop NR policy and strategies more adapted to the particular provincial situation. At the same time, the provincial NR policy, strategies and guidelines should give enough room to the NR users to take initiatives and undertake bottom-up planning, considering their very local, diverse

situation. If the central NR policies, strategies and guidelines are too detailed and tight, the scope of PRONAM and bottom-up planning will be very limited. This principle should also be reflected in the NR classification systems used. The NR classification at national and provincial levels should be wider and more general, while the classification at village and farm levels should be more detailed and locally adapted. Nevertheless the local classification should be possible to accommodate within the wider national classification.

- The PRONAM system should be facilitated by participation/co-operation, communication/dialogue, transparency and partnership. Particularly important are inter-sector co-operation and the involvement of the villagers through partnership agreements/contracts.

8. ADDITIONAL SUPPORTING DOCUMENTATION

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9. GLOSSARY OF TERMS AND ACRONYMS

DAFO	D istrict A griculture and F orestry O ffice
DFRC	D ivision of F orest R esources C onservation
DoF	D epartment of F orestry
EIA	E nvironmental I mpact A ssessments
FIPC	F orest I nventory and P lanning C entre
GIS	G eographic I nformation S ystem
IUCN	T he W orld C onservation U nion
JFM	J oint F orest M anagement
LSFP	L ao S wedish F orestry P rogramme
LUP&LA	L and U se P lanning and L and A llocation
MAF	M inistry of A griculture and F orestry
NAFRI	N ational A gricultural and F orestry R esearch I nstitute
NBCA	N ational B io-diversity C onservation A rea
NR	N atural R esources
NRM	N atural R esources M anagement
PAFO	P rovincial A griculture and F orestry O ffice
PRONAM	P rovincial N atural R esources M anagement
Sida	S wedish I nternational D evelopment C o-operation A gency
SIM	S atellite I mage M aps
STEA	S cience T echnology and E nvironment A gency
WCPA	W orld C ommission on P rotected A reas
WHC	W orld H eritage C onvention