Comparison of Village Forestry Planning Models Used in Laos

Prepared by

Pearmsak Makarabhirom and John Raintree
Regional Community Forestry Training Center (RECOFTC)

for

The Lao Swedish Forestry Program,
Department of Forestry, Lao PDR

Ministry of Agriculture and Forestry
Department of Forestry

1. BACKGROUND

Compared to other countries in Southeast Asia, Laos still has a large area of forestland (approximately 47% land cover). In as much as forestry and hydropower are the two main sources of foreign exchange, it is clearly in the national interest to manage the forests in a sustainable way. This is being actively addressed by the Government of Lao PDR through a range of different pilot projects as well as legal and administrative reforms.

This is a special moment in the history of forestry in Lao PDR, where it can be said to have reached a crossroads in its approach to forest management. The main events in the history of government-project partnerships leading up to this point can be briefly summarized as follows:

1979 Lao-Swedish Forestry Programme (LSFP) begins long-term, multi-component support to the forestry sector
1939 The First National Forestry Conference
1991 Adoption of a National Forestry Action Plan
1991 Development of methods for a National Forest Inventory and an approach to sustained yield forest management
1992 Adoption of sustained yield forest management in the Dong Kapho State Production Forest in Savannakhet (at a sustainable rate of about 3,000 m$^3$ per year - replacing the previous forest mining practice which peaked at a rate of 23,000 m$^3$ per year in 1991)
1994 Joint Forest Management approach introduced into Dong Kapho SPF through LSFP
1996 Adoption of a new National Forest Law which encourages participatory forestry
This development has been supported by and sometimes strongly driven by political reforms moving toward increasing decentralization of authority to the provinces and the districts, accompanied by a push for increased transparency and efficiency in government operations.

Allocation of land for village forestry purposes is done under *The Instruction on the Continuation of Implementing Land Management and Forestland Allocation* (No. 93/PM 1996) which states that provinces, districts and special zones must develop a system of forestland allocation in their own locality, following government policy and guidelines (DOF, 1997:v). The relevant legislative guidelines provide as follows:

- **Forest ownership** — The Lao national community owns the Lao forest. The state oversees the management and development of this valuable national resource.

- **Forest management** — In village forestry the state allows organized villages to manage the forest on behalf of the state, but with assistance from government agencies. Aside from village forestry, the state can also contract forest management to other juridical entities, such as state enterprises, joint ventures, collectives, and individual citizens (DOF, 1997).

There is a national programme of land allocation but guidelines and instructions for conducting forestland allocation at the district and village levels are still being developed, partly through pilot projects in the case of Village Forestry, where participatory methods of village land demarcation, allocation and land use planning are being tested.

Village Forestry has been defined in the National Village Forestry Strategy paper (2nd draft) as:

> the partnership between the state and organized villagers for the management of designated forests in order to sustain the flow of benefits, which are fairly shared by the villagers and the rest of the national community (DOF 1997: iv)

Village Forestry has been adopted as the official term in Laos to distinguish the Lao version of "community forestry." In order to distinguish project-specific usages of the term from more general usage in concert with the national concept of "Village Forestry", the term will be capitalized throughout this report whenever referring to Village Forestry in general. In any case, the national strategy document (2nd draft) states that Village Forestry must be understood: "(1) as a process rather than a predetermined output and (ii) a continuum of approaches to people-oriented forest management with different intensities in the degree of participation" (DOF 1997).

Any kind of forest can be put under village forestry, for any objective of management.

Village Forestry is said to be supportive of new government policies and programmes in that:

- It aims at sustainable use of forest resources.
- It involves local people in forest management and is based on their needs.
- Land allocation is an integral part of village forestry.
- A large part of the income from forest management remains in the villages promoting rural development and reducing rural-urban disparity. (Sophathilath 1998:75)

**Phase-wise Development of a National Strategy for Village Forestry**
The development of a national strategy for Village Forestry is envisaged as occurring in 3 phases:

- **Phase 1 1996-2000**: Piloting and system development phase wherein projects like the Joint Forest Management project of the LSFP, FOMACOP, NAWACOP and FORCAP experiment with different models on different scales of testing.

- **Phase 2 2001-2005**: Expansion phase. Village Forestry will be promoted extensively by PAFO/DAFO in the provinces where it is being piloted.

- **Phase 3 2006-2010**: Large scale implementation phase. Village forestry will be promoted so that it becomes extensively practiced in all provinces.

Apparently, the Government of Lao PDR has taken a somewhat projectized approach to the evolution of its national strategy for Village Forestry, but at the same time forestry authorities acknowledge the limitations of this approach (Sophathilath 1998:83):

> The forestry problems of Lao PDR are so complex and even overwhelming that piecemeal project-based approach is unlikely to suffice. There is no question that various types of forestry projects are needed to address the multitude of problems in the country. However, individual projects dealing with village forestry, in many cases, do not have the desired impacts because they are too small to really make a difference at a level that matters even if they would succeed. They also often lack continuity and are poorly equipped to tackle problems that are linked to complex policy, institutional, and legal issues. This applies even more to pilot and action research projects, which too often do not result in, or contribute to full-scale implementation.

Part of this strategy behind the approach in Phase I appears to be to foster a healthy spirit of competition between projects while, at the same time, insisting on inter-project cooperation and sharing of results in line with the experimental and exploratory character of this phase. It is the impression of this mission that this strategy has been fairly successful: a variety of approaches have been generated and there does appear to be, under the circumstances, a remarkable degree of cooperation between projects in the sharing of information. Ultimately, of course, the success of this strategy will depend on the demonstration of a capacity for final synthesis on the Lao side.

**TOR and Plan of this Report**

The full terms of reference for RECOFTC’s current agreement regarding support to the DOF through an arrangement with the Lao-Sweden Forestry Programme are given in Annex 1. This report addresses the following specific objective:

- To review the various methods for village forest planning developed so far in Lao PDR with particular attention to village participation, allocation of responsibilities between the government and the villages, and management objectives of the different approaches.

It is conceived, together with the parallel work on village forest inventory methods, as an initial step toward the development of a full methodology for Participatory Village Forest Planning.

In addressing this task, this report begins with a broad brush comparison of the projects relevant to Village Forestry, with particular attention to differences in project situations and objectives and consequent differences in the methodologies employed. Many projects, including NGO projects with broad rural development objectives, are relevant for consideration here, but only those with sufficient documentation have been included in the comparison tables.

This is followed by a more detailed comparison of the methodologies used by the two main proponents of Village Forestry in Lao PDR, the Joint Forest Management Project in the Lao-Sweden Forestry Programme (LSFP-JFM) and the Forest Management and Conservation Programme (FOMACOP) Forest Management Sub-programme. Information contained in reports on the different methodologies has been supplemented by interviews with project staff.

The subject of this report is actually a very large and potentially very time consuming one, particularly since
accurate readings on the realities underlying surface appearances are hard to get. One feels that one has only begun to scratch the surface of a very complex subject. In any case, any issues that come up will have to be solved by the national partners. Perhaps the utility of this report will be in uncovering questions rather than proposing answers.
Comparison of Village Forestry Planning Models Used in Laos

Prepared by

Pearmsak Makarabhirom and John Raintree
Regional Community Forestry Training Center (RECOFTC)

For

The Lao Swedish Forestry Program,
Department of Forestry, Lao PDR

Ministry of Agriculture and Forestry
Department of Forestry
Comparison of Village Forestry Planning Models Used in Laos

1. Background

Compared to other countries in Southeast Asia, Laos still has a large area of forestland (approximately 47% land cover). In as much as forestry and hydropower are the two main sources of foreign exchange, it is clearly in the national interest to manage the forests in a sustainable way. This is being actively addressed by the Government of Lao PDR through a range of different pilot projects as well as legal and administrative reforms.

This is a special moment in the history of forestry in Lao PDR, where it can be said to have reached a crossroads in its approach to forest management. The main events in the history of government-project partnerships leading up to this point can be briefly summarized as follows:

1979 Lao-Swedish Forestry Programme (LSFP) begins long-term, multi-component support to the forestry sector
1989 The First National Forestry Conference
1991 Adoption of a National Forestry Action Plan
1991 Development of methods for a National Forest Inventory and an approach to sustained yield forest management
1992 Adoption of sustained yield forest management in the Dong Kapho State Production Forest in Savannakhet (at a sustainable rate of about 3,000 m³ per year – replacing the previous forest mining practice which peaked at a rate of 23,000 m³ per year in 1991)
1994 Joint Forest Management approach introduced into Dong Kapho SPF through LSFP
1996 Adoption of a new National Forest Law which encourages participatory forestry through provisions enabling allocation of land to villagers for sustainable forest management
1996 JFM undertakes development of participatory forestry methods for villagers surrounding Dong Kapho State Production Forest
1996 FOMACOP pilot project begins, applying the international state of the art in participatory forestry through a pyramid training approach for provincial and district officers and villagers

This development has been supported by and sometimes strongly driven by political reforms moving toward increasing decentralization of authority to the provinces and the districts, accompanied by a push for increased transparency and efficiency in government operations.

Allocation of land for village forestry purposes is done under The Instruction on the Continuation of Implementing Land Management and Forestland Allocation (No. 93/PM 1996) which states that provinces, districts and special zones must develop a system of forestland allocation in their own locality, following government policy and guidelines (DOF, 1997:v). The relevant legislative guidelines provide as follows:

- **Forest ownership** -- The Lao national community owns the Lao forest. The state oversees the management and development of this valuable national resource.
- **Forest management** -- In village forestry the state allows organized villages to manage the forest on behalf of the state, but with assistance from government agencies. Aside from village forestry, the state can also contract forest management to other juridical entities, such as state enterprises, joint ventures, collectives, and individual citizens (DOF, 1997).

There is a national programme of land allocation but guidelines and instructions for conducting forestland allocation at the district and village levels are still being developed, partly through pilot projects in the case of
Village Forestry, where participatory methods of village land demarcation, allocation and land use planning are being tested.

Village Forestry has been defined in the National Village Forestry Strategy paper (2nd draft) as:

...the partnership between the state and organized villagers for the management of designated forests in order to sustain the flow of benefits, which are fairly shared by the villagers and the rest of the national community (DOF 1997:iv)

Village Forestry has been adopted as the official term in Laos to distinguish the Lao version of “community forestry.” In order to distinguish project-specific usages of the term from more general usage in concert with the national concept of “Village Forestry”, the term will be capitalized throughout this report whenever referring to Village Forestry in general. In any case, the national strategy document (2nd draft) states that Village Forestry must be understood: “(1) as a process rather than a predetermined output and (ii) a continuum of approaches to people-oriented forest management with different intensities in the degree of participation” (DOF 1997).

Any kind of forest can be put under village forestry, for any objective of management.

Village Forestry is said to be supportive of new government policies and programmes in that:

- It aims at sustainable use of forest resources.
- It involves local people in forest management and is based on their needs.
- Land allocation is an integral part of village forestry.
- A large part of the income from forest management remains in the villages promoting rural development and reducing rural-urban disparity. (Sophathilath 1998:75)

**Phase-wise Development of a National Strategy for Village Forestry**

The development of a national strategy for Village Forestry is envisaged as occurring in 3 phases:

**Phase 1** 1996-2000  
*Piloting and system development phase* wherein projects like the Joint Forest Management project of the LSFP, FOMACOP, NAWACOP and FORCAP experiment with different models on different scales of testing.

**Phase 2** 2001-2005  
*Expansion phase*. Village Forestry will be promoted extensively by PAFO/DAFO in the provinces where it is being piloted.

**Phase 3** 2006-2010  
*Large scale implementation phase*. Village forestry will be promoted so that it becomes extensively practiced in all provinces.

Apparently, the Government of Lao PDR has taken a somewhat projectized approach to the evolution of its national strategy for Village Forestry, but at the same time forestry authorities acknowledge the limitations of this approach (Sophathilath 1998:83):

The forestry problems of Lao PDR are so complex and even over-whelming that piecemeal project-based approach is unlikely to suffice. There is no question that various types of forestry projects are needed to address the multitude of problems in the country. However, individual projects dealing with village forestry, in many cases, do not have the desired impacts because they are too small to really make a difference at a level that matters even if they would succeed. They also often lack continuity and are poorly equipped to tackle problems that are linked to complex policy, institutional, and legal issues. This applies even more to pilot and action research projects, which too often do not result in, or contribute to full-scale implementation.

Part of this strategy behind the approach in Phase 1 appears to be to foster a healthy spirit of competition between projects while, at the same time, insisting on inter-project cooperation and sharing of results in line with the experimental and exploratory character of this phase. It is the impression of this mission that this strategy has been fairly successful: a variety of approaches have been generated and there does appear to be, under the circumstances, a remarkable degree of cooperation between projects in the sharing of information. Ultimately, of course, the success of this strategy will depend on the demonstration of a capacity for final synthesis on the Lao side.
TOR and Plan of this Report

The full terms of reference for RECOFTC’s current agreement regarding support to the DOF through an arrangement with the Lao-Sweden Forestry Programme are given in Annex 1. This report addresses the following specific objective:

- To review the various methods for village forest planning developed so far in Lao PDR with particular attention to village participation, allocation of responsibilities between the government and the villages, and management objectives of the different approaches.

It is conceived, together with the parallel work on village forest inventory methods, as an initial step toward the development of a full methodology for Participatory Village Forest Planning.

In addressing this task, this report begins with a broad brush comparison of the projects relevant to Village Forestry, with particular attention to differences in project situations and objectives and consequent differences in the methodologies employed. Many projects, including NGO projects with broad rural development objectives, are relevant for consideration here, but only those with sufficient documentation have been included in the comparison tables.

This is followed by a more detailed comparison of the methodologies used by the two main proponents of Village Forestry in Lao PDR, the Joint Forest Management Project in the Lao-Sweden Forestry Programme (LSFP-JFM) and the Forest Management and Conservation Programme (FOMACOP) Forest Management Sub-programme. Information contained in reports on the different methodologies has been supplemented by interviews with project staff.

The subject of this report is actually a very large and potentially very time consuming one, particularly since accurate readings on the realities underlying surface appearances are hard to get. One feels that one has only begun to scratch the surface of a very complex subject. In any case, any issues that come up will have to be solved by the national partners. Perhaps the utility of this report will be in uncovering questions rather than proposing answers.

2. Overview of Relevant Projects

The methods which are the focus of this report can only be understood in relation to the purposes for which they have been created, and such purposes can be understood only relation to the more general objectives and goals of the projects in which they are couched. A necessary precursor, therefore, to the more detailed comparison of methods is to first seek an overview of the scope and intent of the relevant projects.

To assist in this task the comparison matrix shown in Table 2 was constructed. Even a brief perusal of this table will reveal the four projects shown fall naturally into two groups:

Table 1. Primary grouping of the main Village Forestry-related projects in Lao PDR.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>RELATED PROJECTS</th>
<th>PRIMARY ORIENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LSFP-JFM &amp; FOMACOP</td>
<td>Focused on participatory approaches to the management of natural forest</td>
</tr>
</tbody>
</table>
| 2     | NAWACOP & FORCAP | Focused on participatory approaches to the rehabilitation and management of degraded watersheds mainly through:  
  - Plantation forestry & agroforestry  
  - A wide range of livelihood options as an alternative to shifting cultivation |

The similarities and contrasts between the projects shown in Table 2 speak for themselves. While a point by point rehash may not be necessary, it might be useful to point out that many of the major differences between the objectives, approaches and methodologies used by the different projects can be largely understood by reference to differences in the situations, which they are addressing. When interpreting comparisons made between the projects one should always bear respective their mandates in mind.
One of the immediate contrasts that can be drawn between the two main groups is in the nature of the environmental situations addressed: Group 1 project areas are rather heavily forested, whereas Group 2 projects are in areas of moderately to severely degraded forests which happen also to be watersheds. A second rather obvious contrast is that Group 2 projects are oriented toward a more comprehensive non-sectoral approach to livelihood and welfare issues than Group 1 projects, which are more narrowly sectoral in their focus on forest management issues. These two contrasts are linked.

It could be said that the comprehensive welfare approach is not less relevant in the well-forested areas -- but simply less urgent than in the degraded forest areas where there is an immediate need for livelihood alternatives. Not only is the threat of environmental degradation less serious in the well-forested areas but there is also greater opportunity for livelihood enhancement through improved management of existing forest resources (i.e. the approach actually taken by JFM and FOMACOP). Whereas, in the degraded watershed areas, there is both less opportunity for making a living through management of existing resources (often they have to first create new resources through a vigorous program of reforestation) but there is also a more urgent need to provide alternative livelihoods in order to prevent further degradation of the natural resource base. Nevertheless, JFM and FOMACOP may wish to learn something further about the wider variety of interventions used by NAWACOP and FORCAP. Unfortunately, most of this remains undocumented. Therefore the coverage that is possible in this report is quite limited.

It might be expected that participants in the watershed management projects -- which target social welfare objectives much more deliberately -- might receive greater benefit from their projects than participants in the two Village Forestry projects. But this is not necessarily the case. Both the JFM and FOMACOP models contain a provision for the use of timber revenues for some kind of village development. Depending on how this is ultimately used by the villagers, it might provide a better platform for sustainable, self-managed development than a comprehensive welfare project approach.
Table 2. Comparison matrix for general project overview.

<table>
<thead>
<tr>
<th>Guiding Concepts &amp; Principles</th>
<th>LSFP-JFM</th>
<th>FOMACOP</th>
<th>NAWACOP</th>
<th>FORCAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Forest Management</td>
<td>The basic concept is that forests can be best managed sustainably if they are jointly managed by foresters and the villagers who live in the area of the forest. <strong>JFM is basically a partnership concept applied to State Production Forests.</strong> It is thus one possible variant on the theme of Village Forestry as defined in the Lao PDR context. Other elements of Village Forestry (e.g. traditional subsistence use of the forest &amp; harvest of NTFPs) may be practices in forest areas outside the SPF. One of the key roles of the villagers in this partnership is protection of the forest from overexploitation (by themselves and by outsiders). The working hypothesis behind JFM is that villagers will protect the forest and assist in other forest operations only if they stand to gain from such activity. To test the practical limits of this hypothesis two models are currently on trial: 1) The first gives the village full responsibility for managing the forest, which it undertakes with the paid assistance of the district and provincial forestry staff. For its services the FD receives a fee. The remainder, after deducting the fixed royalty to the state and other expenses (e.g. local labor), goes into a village development fund. 2) In the second model the FD retain management control of the forest and villagers are hired for various management operations. After selling the logs the FD pays the villagers share into a village development fund. The state gets the same fixed royalty as in model 1.</td>
<td>“In the face of poverty and increasing population pressure, forest resources can be protected only if they contribute to meeting villagers’ basic needs and to the overall economic and social development.” <strong>“Village forestry refers to the process of villagers organising themselves and mobilising their resources and capabilities to manage the assigned forests sustainably in partnership with forestry staff.”</strong> “In addition to the technical aspects associated with forest management, special attention must be paid to <strong>organisational building</strong> and strengthening at the village and district level, as well as to <strong>entrepreneurial development</strong> of villagers.” (FMS, p.2)</td>
<td>Integrated Watershed Management Replacing the old narrow focus on soil conservation issues, with more comprehensive approach focusing on community resources management, poverty alleviation and food security. <strong>Sustainable Participatory Watershed Management</strong> Sustainable participatory watershed management defined as “the utilisation and conservation of land, water and forest resources at the community level for continuously improved livelihood.” (Inthavong et al. 1997) Concept for Village Forest Component “Village forestry must be seen as a partnership between the State and the villagers. The State owns the forest while the villagers have customary rights to exploit and manage the forests within the framework of the legal regulations. In village forestry the necessary management will be participatory, meaning that the two partners (villagers and state) share responsibilities, roles and activities according to a scheme to be developed and agreed upon. . . it seems practical that the villagers perform most day-to-day activities needed for management planning and the implementation of the management (sustainable exploitation and other measures). The State supports this and provides the supervision, administration and control needed.” (Vletter 199:32)</td>
<td>Enhancing the full participation of local people, especially the shifting cultivators living in the target area, in the whole process of <strong>Project Cycle Management</strong>, i.e. planning, implementation, monitoring, and evaluation. Promoting forest conservation and afforestation activities as well as improving the living conditions of villagers through village development action plans. Strengthening the capability of local staff, especially at District level, through on the job training and the implementation of Project activities in close collaboration with villagers; enhancing the cross-sector coordination at District level. Technical cooperation in improving the management of social forestry through promoting the active participation of local people and local government staff and through developing silvicultural techniques for <strong>the recovery of degraded forest</strong> in the watershed area.</td>
</tr>
</tbody>
</table>
### PROJECT OBJECTIVES

**Long term objective:**
- To assist the government of Lao PDR in developing models for sustainable forest management to ensure sustainable multiple-use of forest resources adjusted to the social, cultural, economic, and ecological context of the country.

**Immediate objectives:**
- To implement a partnership between the villages and the State for the management of Dong Kapho State Production Forest with Villages around Dong Kapho SPF
- To implement participatory land allocation and land-use planning in villages around Dong Kapho State production forest
- To implement participatory village planning and management of village forests around Dong Kapho SPF
- To facilitate village development in villages around Dong Kapho SPF

**Short Term (1995-2000):**
- To develop & trial pilot schemes that improve the implementation of sustainable forest management & biodiversity conservation systems
- To strengthen villagers’ and forestry staff’s capacity to implement these systems, and to seek acceptance for the developed systems as a basis for expanding their implementation
- To help develop national strategy guidelines and a legal framework to support village forestry and sustainable forest management

**Long Term (2000-2010):**
- To expand these systems beyond the pilot sites and to continually develop, test and improve other systems elsewhere.

### EXPECTED OUTCOME

**By early 2000:**
- 80 VF covering 100 villages will be under Management Contracts & VFM plans
- 50 villages will be managing forests under approved management plans
- Village development improvements completed in selected villages
- Village Forestry Handbook integrating all the VF systems, guidelines & training manuals will have been completed
- Supportive legislation & instructions for VF in place
- National Village Forestry Strategy and Programme in place

**Active community involvement in sustainable watershed management**
- Increased options for sustainable income generation
- Improved capacity to support sustainable resource management at the provincial and district levels
- Improved knowledge and use of family planning services by project beneficiaries
- Enhanced capacity for development of strategy for watershed management and implementation of land allocation

**Outputs:**
- An action plan for forest management and stabilization of shifting cultivation which will be implemented by local people and local governments at model villages in the Nam Ngum Dam Watershed Areas
- Experimental forests and nurseries to develop the technology of forest conservation and afforestation

<table>
<thead>
<tr>
<th>LSFP-JFM</th>
<th>FOMACOP</th>
<th>NAWACOP</th>
<th>FORCAP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Long term objective:</strong></td>
<td><strong>Short Term (1995-2000):</strong></td>
<td><strong>Objectives Phase II:</strong></td>
<td><strong>Overall Goal</strong></td>
</tr>
<tr>
<td>- To assist the government of Lao PDR in developing models for sustainable forest management to ensure sustainable multiple-use of forest resources adjusted to the social, cultural, economic, and ecological context of the country.</td>
<td>- To develop &amp; trial pilot schemes that improve the implementation of sustainable forest management &amp; biodiversity conservation systems</td>
<td>- To create a basis for sustainable management with active participation of the target group</td>
<td>- To contribute to the promotion of implementation of the Forest Watershed Management Plan of Lao PDR by the establishment of technical and management methods for the Forest Conservation and Afforestation in the Nam Ngum Watershed Area</td>
</tr>
<tr>
<td>- To implement a partnership between the villages and the State for the management of Dong Kapho State Production Forest with Villages around Dong Kapho SPF</td>
<td>- To strengthen villagers’ and forestry staff’s capacity to implement these systems, and to seek acceptance for the developed systems as a basis for expanding their implementation</td>
<td>- Promote gender-specific income options</td>
<td></td>
</tr>
<tr>
<td>- To implement participatory land allocation and land-use planning in villages around Dong Kapho State production forest</td>
<td>- To help develop national strategy guidelines and a legal framework to support village forestry and sustainable forest management</td>
<td>- Improve ability of district and province level institutions to implement participative, sustainable resource management</td>
<td></td>
</tr>
<tr>
<td>- To implement participatory village planning and management of village forests around Dong Kapho SPF</td>
<td>- To expand these systems beyond the pilot sites and to continually develop, test and improve other systems elsewhere.</td>
<td>- To inform the target groups about methods of family planning &amp; govt’ services</td>
<td></td>
</tr>
<tr>
<td>- To facilitate village development in villages around Dong Kapho SPF</td>
<td>- Test models for Joint Forest Management</td>
<td>- To enhance the capacity of national institutions to develop a strategy for watershed management &amp; implementation of land allocation</td>
<td></td>
</tr>
<tr>
<td><strong>Immediate objectives:</strong></td>
<td><strong>By early 2000:</strong></td>
<td><strong>Active community involvement in sustainable watershed management</strong></td>
<td></td>
</tr>
<tr>
<td>- A sustainably managed forest with enough benefits to the villagers to ensure their continued participation.</td>
<td>- 80 VF covering 100 villages will be under Management Contracts &amp; VFM plans</td>
<td><strong>Outputs:</strong></td>
<td></td>
</tr>
<tr>
<td>- Tested models for Joint Forest Management</td>
<td>- 50 villages will be managing forests under approved management plans</td>
<td>- An action plan for forest management and stabilization of shifting cultivation which will be implemented by local people and local governments at model villages in the Nam Ngum Dam Watershed Areas</td>
<td></td>
</tr>
<tr>
<td>- Villagers manage land allocated to them on the basis of an acceptable land use plan which they developed</td>
<td>- Village development improvements completed in selected villages</td>
<td>- Experimental forests and nurseries to develop the technology of forest conservation and afforestation</td>
<td></td>
</tr>
<tr>
<td>- Well-planned and managed village forests outside the SFP</td>
<td>- Village Forestry Handbook integrating all the VF systems, guidelines &amp; training manuals will have been completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Village development</td>
<td>- Supportive legislation &amp; instructions for VF in place</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- National Village Forestry Strategy and Programme in place</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PARTICIPATORY METHODS USED</td>
<td>LSFP-JFM</td>
<td>FOMACOP</td>
<td>NAWACOP</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------</td>
<td>---------</td>
<td>---------</td>
</tr>
</tbody>
</table>
| • village organizing       | • village organizing | Integrated, participatory approach to land use planning. Main activities in Phase 1  
| • delineation of village boundaries | • delineation of village boundaries | • participatory land use mapping  
| • land-use mapping         | • land-use mapping | • allocation of use rights for different land classes  
| • forest timber inventory  | • forest timber inventory | • training of extension staff  
| • NTFP assessment          | • land use planning | • initiation of various sustainable agricultural & forestry practices  
| • land use planning        |                       |                                    |

<table>
<thead>
<tr>
<th>TYPES OF INTERVENTIONS IN VILLAGES</th>
<th>Training</th>
<th>Training (pyramid approach)</th>
<th>Training</th>
<th>Training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Village organization</td>
<td>Village organization</td>
<td>Village organization</td>
<td>Village organization</td>
</tr>
<tr>
<td></td>
<td>Land use planning</td>
<td>Land use planning</td>
<td>Land use planning</td>
<td>Land use planning</td>
</tr>
<tr>
<td></td>
<td>Natural forest management</td>
<td>Natural forest management</td>
<td>Natural forest management (considered for limited areas)</td>
<td>Natural forest management (considered for limited areas)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Afforestation</td>
<td>Afforestation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agroforestry</td>
<td>Agroforestry</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agricultural systems improvement</td>
<td>Agricultural systems improvement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Alternative livelihoods &amp; income generating activities</td>
<td>Alternative livelihoods &amp; income generating activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(similar to FORCAP in scope)</td>
<td>(similar to FORCAP in scope)</td>
</tr>
</tbody>
</table>

Preparation phase “participatory development” activities included:  
• baseline & household surveys  
• Project Cycle Management workshops in 15 villages  
• pilot workshop on land use planning in 1 village  
• pilot technical trainings specific techniques for stabilizing S.C.  
• pilot testing & modification of draft village development action plans in 3 villages

- fruit tree grafting  
- livestock raising  
- medicinal herbs  
- agroforestry  
- charcoal production  
- bamboo vinegar production  
- posa hand-made paper prod.

(open-ended, no sectoral limitations in principle)
In any case, these four projects provide a window on the general situation -- which is that each village has a unique configuration of environmental and socioeconomic resources and problems that need to be addressed in a situation-specific manner. This suggests that, rather than searching for some kind of Village Forestry “Supermodel” that magically satisfied everyone’s needs, it might prove more productive to adopt a kind of “Uniform Process Approach” based on the use diagnostic keys that guide the responsible PAFO/DAFO staff through an assessment process that sorts out which elements of the different Village Forestry approaches would be appropriate to a given village situation.

The beginning part of such a diagnostic key might look something like Figure 1, accompanied, of course, by an appropriately targeted field manual. The field exercise scheduled for the second and third missions in the current RECOFTC engagement will generate experience in participatory village forestry assessment that could guide the development of such keys and process methods.

---

**Figure 1.** Diagnostic decision tree on relevant Village Forestry approaches in relation to existing project experience.
3. Comparison of Methods Used in Village Forestry Projects

The following matrix (see Table 3) gives a more detailed comparison of JFM and FOMACOP, the only two Village Forestry projects that have sufficiently well developed and documented practices to make such a comparison. As such they are the ones which have the greatest influence on the emerging paradigm for Village Forestry in Laos.

In comparing these two projects it is important to keep in mind that they operate with different mandates at very different scales of operation. The JFM subprogramme of LSFP is a small SIDA-funded experimental project (within a larger, multi-faceted programme) that has been designed as a pioneering venture into participatory forest management (the first in Lao PDR). It has a small but innovative staff and technical assistance component, which relies on direct involvement in small-scale methodological trials using a learning-by-doing approach. Considering its small size it has had a remarkable impact on the village forestry scene in Lao PDR.

FOMACOP, on the other hand, is a larger GOL/World Bank/FINNIDA/GEF-funded pilot project based on state-of-the-art methods in participatory forestry drawn from the global experience. As such, it sets the standard for participatory forestry in Lao PDR. While it continues to learn from its own experience, its main modus operandi is a pyramid approach to training (TA → PAFO → DAFO → VILLAGERS), which gives it the capacity to operate on a larger scale. Although its training approach can be described as top-down, the hallmark of the FOMACOP project is its zealous dedication to bottom-up, participatory planning and management. It is too early to judge how well this approach is being received by the Forestry Department, but it is reasonable to suspect that there could be some natural resistance to such a dramatic change in approach.

As regards the general approach taken by the two projects it would appear that FOMACOP places a greater value on local people’s participation than does JFM. No doubt part of the reason for this is the existence of a State Production Forest within the area of the JFM project would be regarded as a traditional Village Forest area. Even though it has only been under sustained yield management since 1992, the Dong Kapho SPF appears to be a valued part of the DOF’s territorial endowment. The FOMACOP area has no dedicated SPF, although it contains merchantable timber as in Dong Kapho. There are no SPF boundaries inside Village Forest lands in the FOMACOP model. All of it comes under the management of the Village Forestry Associations as they are formed.

JFM Model 1 is much closer to FOMACOP in terms of the villagers rights as managers of the forest, and quite different from Model 2 which officially recognizes the local villagers only as a kind of priority labor force. The JFM staff insists that there is very little difference between the two models in practice, and that only the formulas for benefit sharing are different. Indeed, the formulas are complicated enough for it to be far from obvious which model gives greater monetary benefits when all the costs and administrative burdens are weighed in, but discussions by this mission with villagers in Ban Nathong (Model 1 village) indicated their clear and enthusiastic preference for Model 1, which has netted the village approximately 29,000,000 kip (USD 6,900) thus far.

Another important difference between JFM and FOMACOP is in the silvicultural systems used. JFM uses a sustained yield silvicultural system based on a 50 year felling cycle, allowing an annual cut of up to 25% of the standing volume. One characteristic of this model is that it requires fewer but larger and heavier roads than the so-called “low-intensity, low-impact” logging of FOMACOP’s 5-10 year cycle, which removes fewer trees from more management areas on a more frequent basis. This system require more access “tracks” for the small self-loading logging trucks used instead of skidders in FOMACOP’s operation but fewer large heavy-duty roads. FOMACOP argues that this system ultimately causes much less disturbance than the conventional system based on the 50 year felling cycle. Indeed, they question whether the 50 yr felling cycle is really sustainable in the tropics, where the amount of logging damage done by long cycle felling systems might require an even longer recovery period. Discussions about this subject with a logging and timber marketing expert confirmed this general assessment and pointed out that most of the long term damage from the big roads in conventional long cycle logging systems comes not from the roads themselves but from the effect that these roads have forest accessibility via motor vehicles long after the logging is finished (Jim Carle, personal communication). This is a particular concern in a Village Forest area where the local inhabitants are heavily dependent on the forest as a source of supplementary food and other NTFPs and who have ample reason to fear incursion and over-exploitation of their forests by outsiders.
Table 3. Comparison of JFM and FOMACOP models for Village Forestry.

<table>
<thead>
<tr>
<th>MANAGEMENT AREA UNITS</th>
<th>JOINT FOREST MANAGEMENT (LSFP)</th>
<th>FOMACOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dong Kapho State Production Forest (9,600 ha) of which 5,900 ha is classified as State Production Forest which is divided into 3 management areas. 118 ha/yr become eligible for cutting on the 50 year felling cycle. This is divided into 3 cutting areas, one in each management area, of 28, 48 and 41 ha, respectively (proportionate to the size of the management area)</td>
<td>Village forests varying in size from 800 to 6,000 ha, which fall within the customary use territories, allocated to villages. Village forests are divided into annual harvest areas based on the allowable cut for sustained yield management.</td>
<td></td>
</tr>
</tbody>
</table>

| MANAGEMENT ORGANIZATION UNITS, BASIC RIGHTS & OBLIGATIONS | 
| Model 1 (1 village) - Joint Forest Management Board which members are elected by all families within the village for the implementation of the Forest Protection Contract and of the Dong Kapho State Production Forest Management Plan as adopted by the Forestry Department. The Ban Nathong Joint Forest Management Board is entitled to exploit and sell logs at second landing, as well as to implement its obligations in protecting forest resources, undertaking enrichment planting, and paying taxes based on the volume of exploited timber and in compliance with the regulations outline by the Ministry of Finance. The Joint Forest Management Board is composed of a committee of 13 persons:  
  • The President of the Board (Village Headman)  
  • Two Vice Presidents  
  • A staff committee of 10 members | Core Groups → VF Associations  
Core Groups are formed to start with as a practical expedient. When Villagers see the need for a more formal legal organization they may elect to form a Village Association. Current Forest Law recognizes villagers’ customary rights to forest products for household consumption but not for sale. Legal rights to harvest forest products for sale can only be acquired through a management contract. In order to sign a management contract there must be an officially recognized and registered village forestry association of some kind. | 

| Model 2 (13 villages) - Village Resource Management & Development Committee which represent the villagers in the execution of the Forest Protection Contract. The Committee will be assigned with the task of protecting the Forest lying within the village territory to prevent all acts of destruction or encroachment from outsiders and others. In addition, it will implement the Dong Kapho Forest Management Plan as adopted by the Forestry Department. (The contract also specifies the right of villagers to be employed on a priority basis in any logging operations carried out within its part of the SPF.) | Village Forestry Association which members are elected by the village, together with the Village Administration as co-signer of the Village Forest Management Contract, undertakes to manage according to a plan approved by PAFO a specified number of hectares of specified forest types, to undertake forest regeneration and improvement, and to protect it from fire, illegal logging, illegal hunting and unauthorized land uses. They must also assist the village to formulate a VF Management Plan and an Operations Plan and they have the sole right to harvest and sell timber and non-timber products at PAFO authorized sales sites, and the obligation to keep daily records of all such activities using PAFO forms submitted to DAFO each month. The VFA is comprised of 3 bodies: the Village Assembly, the Policy Committee, and the Management Committee. | 

| FOREST MANAGEMENT OBJECTIVES | 
| Sustained yield production of timber and NTFPs  
Maintenance of the ecological, conservation and protection capacity of the forest  
Involvement of the local people in management | According to the FOMACOP staff, the objectives of forest management depend on what the villagers themselves decide. The guidelines used to train PAFO/DAFO staff on how to facilitate the development of a VF Management Plan require the objectives section of the Plan to:  
• describe the forest resources of the village  
• show what products and services these forest resources can provide to the residents of the village and the rest of the country  
• show how the forest resources of the village will be managed to provide these products and services  
• demonstrate that the forest management will be beneficial to all concerned and sustainable in perpetuity  
In the training manual on procedures for PAFO approval of the Plan it is stated that “The specifications for each activity must conform to sound forest management practices.” |
There isn’t much said about participation in the available project literature beyond the idea that JFM is a “partnership” between the villagers and the government. The basic principle seems to be that there should be sufficient local participation to ensure adequate commitment to forest protection (the villager contract is called a forest “protection” contract rather than a forest “management” contract). The two models currently being tested appear to be designed to test how little participation is required to achieve a desirable level of forest protection. Thus, the principle underlying the approach appears to be forest-centered rather than people-centered. This must be seen in the light of the JFM project being organized around a State Production Forest.

The project staff maintain that there is little difference in practice between the level of participation in Model 1 (villagers as managers) and Model 2 (villagers as contracted labor). They say the activities are virtually the same, only the formulas for benefit sharing are different. In discussion with Villagers in the Model 1 village of Nathong the members of the JFMB stated a clear preference for Model 1, but some JFM staff say that not all villages would express the same preference. It may be too soon to get an accurate reading on this important variable, but at this point it would appear that villagers prefer Model 1 (the direct management model which is more similar to the FOMACOP model).

According to FOMACOP project promotional literature (n.d. p.2):
- villagers organise & mobilise themselves for management partnership with forestry staff
- villagers have an active decision-making role
- villagers are involved in all aspects of planning & implementation
- villagers make key decisions on benefit sharing, monitoring & evaluation
- state forestry staff provide technical assistance, train and assist villagers in generating and assessing the different options
- but the villagers themselves make the final decision within the given regulatory framework

FOMACOP’s Village Forestry concept applies to all kinds of forest and does not recognize a State Production Forest area within the project area.

**Application Principle:** “Whoever manages decides. Whoever decides plans. Whoever plans collects the needed information.”

It is important to note that Village Forest Management Plans must be approved by PAFO and that the training manual on these procedures gives a flowchart which instructs PAFO/DAFO to send the plan back to the VFA until it meets certain specifications (e.g. accurate maps, conformity to sound forest management practices, proper calculation of the annual allowable cut).

<table>
<thead>
<tr>
<th>FORMULAS FOR BENEFIT SHARING</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village Net Benefit = sale of logs -(royalties + other taxes + logging labor + log transportation + district forestry development fee)</td>
<td></td>
<td>PAFO Net Benefit = sale of logs -(royalties + other taxes + logging fee + log transportation + district forestry development fee)</td>
</tr>
<tr>
<td>Distribution of net benefit to village after expenses is as follows:</td>
<td></td>
<td>Distribution of net benefit to PAFO after expenses is as follows:</td>
</tr>
<tr>
<td>• 10% Forest Protection Fee</td>
<td>• 10% Forest Protection Fund ( of which 30% goes to rangers for forest control activities &amp; Dong Bang administration expenses; 70% as village development fund/protection fee in villages where no logging is taking place)</td>
<td></td>
</tr>
<tr>
<td>• 30% Administration/Forest Operations (pre-logging, tree marking &amp; post-logging surveys; scaling of logs, demarcation of the SPF border, seed collection, nursery/enrichment planting, sale of logs, JFM board salary, hospitality, stationery &amp; equipment)</td>
<td>• 30% Forest Improvement Fund (pre-logging, tree marking &amp; post-logging surveys; demarcation of the SPF border, seed collection, nursery, planting, hollow tree fees, others)</td>
<td></td>
</tr>
<tr>
<td>• 60% Village Development Activities (village development activities, extension services from DAFO)</td>
<td>• 60% Provincial Emergency Fund (drought/flood emergency, building construction &amp; maintenance)</td>
<td></td>
</tr>
</tbody>
</table>

Source: Manivong & Muraille (1998)
| **SILVICULTURAL SYSTEM** | Sustainable forest management on a 50-year felling Cutting regime:  
- AAC = NHF/50 = 118 ha/yr  
- Minimum of 36 healthy commercial trees to be left in residual stand  
- Cut not > 25% of standing volume  
- Trees DBH>MMD (???)  
- Select marketable damaged or dead trees with DBH>40 cm  
- Exclude trees located within 100 m from rivers & 50 m from streams  
- Minimum 15 m between selected trees  
- 2 trees may be selected if growing in a cluster of 3-5 trees within 10 m circle  
- Exclude resin-tapped trees < 100 cm DBH | **Sustainable forest management through low-intensity, low-impact logging on a 5-10 year cycle (in practice usually 10 years)**  
- villagers decide the exact length of the cycle based on forest conditions Cutting regime:  
- Annual Allowable Cut in area of MC ha on cycle of CC years determined by formulas:  
  - AAC (live) = MCxAxCC  
  - AAC (dead) = MCxBxCC where A & B from table for different forest types  
- minimum 25 m between selected trees  
- selection of tree from a clump of trees preferred  
- exclude trees located within 30 m of a stream  
- must be at least 10 acceptable seed trees in the 1 ha area surrounding the selected tree |
| **INVENTORY AND PLANNING METHODS USED** |  
- forest management inventory (every 10 years)  
- village boundary demarcation  
- land-use planning  
- villager forest planning (outside state forest) – under development  
- timber harvesting plans (every 5 years)  
- pre-logging survey (1-2 years before logging)  
- tree marking survey  
- annual forest operations plans  
- NTFP diagnostic survey |  
- village boundary demarcation and land use mapping  
- forest inventory  
- land-use planning  
- forest management plan  
- pre-harvest inventory & tree marking  
- annual operations planning  
- post-harvest inventory |
| **NTFP ASSESSMENT & MANAGEMENT METHODS** | Steps followed in assessing NTFPs using the draft methodology tested in 1 village:  
1. Sketch map of village lands & forests  
2. Reconciling sketch map with topographic maps & aerial photos  
3. Listing & ranking of NTFPs by men & women separately  
4. Semi-structured diagnostic interviews  
5. Reconnaissance walks  
6. Preparation of maps  
7. Report on village forest categories & utilization (Muraille & Manivong 1998) This methodology was developed recently to correct for the earlier lack of attention to NTFPs and as a practical alternative to the quantitatively biased methods of timber inventory. Diagnosis of problems is considered more important than counting NTFPs (an impossible task in any case). The Project still has to develop a process by which the villagers can take management decisions based on the diagnostic assessment. | There is no attempt to develop a quantitative method for inventory of NTFPs. Instead, VFAs are encouraged to monitor collection rates of NTFPs. If rate is on a declining trend, VFA may:  
- set limits on collection  
- suspend collection  

The approach is made possible by an article in the Village Forest Management Contract which requires the Village Forestry Association to keep daily records of all timber and non-timber forest products harvested for sale. It is difficult to see how this could be done if the contract did not vest full management responsibility with the Village Forestry Association. In addition, all Village Forest Management Plans include a section on village rules for the use, monitoring or use, and protection of NTFP resources. |
The straightforward non-quantitative approach to incorporation of village management decision-making on NTFPs appears to be an effective way of handling NTFPs in Village Forestry Management Plans. This could be standard practice in all village forestry projects that vest management in the hands of the villagers. Beyond this the JFM project in Savannakhet has conducted initial field tests of a participatory methodology for NTFP assessment. Although the method was not developed until long after land allocation in the test village, the procedures developed are recommend for use at the time of the land allocation process. The method is comprised of the following steps (Muraille and Manivong 1998):

1. Sketch mapping of village lands & forests
2. Reconciling sketch map with topographic maps & aerial photos
3. Listing & ranking of NTFPs by men & women separately
4. Semi-structured diagnostic interviews about NTFP usage, availability, etc.
5. Reconnaissance walks
6. Preparation of maps
7. Report on village forest categories & utilization

It is envisaged that this information will be used:

- To facilitate the understanding of the local forest situation by the land allocation team and the district forestry staff
- To assist villagers in making decisions on the management of village forest lands
- To allow the forestry staff to gain a practical down-to-earth knowledge of village realities while building rapport with the villagers

The JFM project is less specific about how the information generated by this exercise could be used by the villagers to help them improve the management of Village Forests. However, they do suggest that the information might be used to:

- Decide on more in-depth participatory inventory of forest resources in certain zones
- Exploring the availability of an NTFP that the villagers sell for profit (e.g. an inventory of the number, dimensions, location and collection practices of *Dipterocarpus alatus*)

This appears to be a good beginning but it needs to go a little further before it can be said to have helped the villagers to manage their forests better. Collecting information is not enough. What is needed for lasting effect is to institutionalize a procedure by which this information is *processed into a management decision*. The current methodology, which includes a diagnostic assessment of the status of important NTFPs, has done much to clarify the content of the needed information. Further work should focus more on the process by which the information could be transformed by the villagers into a management decision.

This is what FOMACOP appears to have in mind, i.e. to recommend to the villagers to do practical monitoring of *NTFP harvest rates* and, if the harvest is declining over time, to then either:

- set limits on allowable harvests, or
- suspend harvesting until the resource has returned to harvestable levels.

We will present the case in the issues section of this report that this kind of minimalist approach to facilitation of local management of NTFPs may in fact be *quite enough* for projects to do, in as much as there may be serious risks associated with more ambitious approaches to NTFP monitoring (see section following).

Beyond merely monitoring NTFP harvest levels, a more proactive approach that seeks to domesticate and cultivate NTFPs would certainly appear to be justified, if for no other reason than that this would remove it from danger of extinction due to overexploitation. There is a growing recognition that the time has come to put more effort into the domestication of suitable NTFPs (Peters 1994, Foppes and Ketphanh 1998, Raintree 1998a, b). What everyone appears to be waiting for is acceptable methodology and overall approach. NTFPs may be a traditional focus of efforts among villagers but most foresters are somewhat at a loss as to how to deal with them. It is not so clear what an “acceptable methodology” would look like in the case of NTFPs.

The DOF/IUCN/NTFP Project in Laos was set up to deal with just such questions as this (Ketphanh and Foppes 1998). They have developed a fair amount of information on the subject and a practical in-house RRA methodology for rapid NTFP assessment that they use in their own work. They have also commissioned consultant reports on more quantitative methods of NTFP inventory and baseline monitoring.
(McKone 1997) but they say that they do not currently have a method which they are ready to release for use by others, although their in-house RRA method might be just what people need for practical participatory work. As regards the domestication issue, however, they have taken a more proactive stance (Foppes et al. 1997, Foppes and Ketphanh 1998).

4. Issues for Discussion

As a complement to the comparison of different project approaches, this section seeks to highlight certain general issues emerging from this review.

**Biophysical information and socioeconomic information**

Thus far most of the methodological effort has been concerned with obtaining the biophysical information necessary to manage forests, but comparatively little attention has been given to the requisite socioeconomic information. Oh, every project has the obligatory “socioeconomic information” gathering exercise, but it is not clear what is done with this information after it is collected, and there is little to suggest that the information collected has much direct bearing on management issues. The kind of social information that does have a direct bearing on how the forest is managed and that needs to be much better understood than it is at present is information about:

- indigenous systems of forest resource classification and management
- traditional social groups and their decision-making authorities and capabilities
- customary tenure rules governing traditional use-rights in land and forest resources
- gender differences in knowledge and use of forest resources
- economic strategies & household livelihood systems
- classification of different livelihood systems found in a village (agricultural, forest-related and other)
- diagnostic assessment of the needs and opportunities of different livelihood systems and social groups
- the villagers own assessments of what their most important problems are, what strategies they use in overcoming these problems, their own perception of possible solutions, and the opportunities they themselves would like to pursue

The upcoming field exercise on participatory forest assessment and inventory will venture into these areas and explore which dimensions of village social life are most important for forest management planning.

**Quantitative methods vs. local participation**

There is a serious tradeoff here that has not been accorded due recognition and discussion. Simply stated the issue is this:

> It is a well known fact in educational circles in Laos that numeracy skills are exceedingly low in the rural areas. Most villagers do not use quantitative methods to any significant extent in their thinking. They have other ways of arriving at decisions. In the long term, numeracy training is no doubt a good thing. In the short to medium term, however, to insist on substituting quantitative methods in place of the traditional decision-making processes is to risk losing the villagers’ genuine participation in the planning process and substituting it by a low quality “token participation” in processes that are foreign to their way of thinking.

In dealing with issues like this the key question about a methodology designed to gather and process information is: Whose information is it? Whose thinking process is it designed to influence? Whose decisions is it supporting?

If village participation in planning and managing is truly the goal, then most of the information gathering and decision-making processes must be done in ways in which they can actually participate. Many quantitative methods used in forestry are simply not very relevant to their thinking processes and not very feasible without outside help. Such methods might still be needed for some purposes, e.g. sustained yield logging calculations because “sustained yield” is not something tangible. The only way to see it is to calculate it.
The main thing is not to simply carry on a “blind preference” for quantitative methods and not to overburden the villagers with tasks that are foreign to their way of thinking, but rather to seek always to balance this kind of activity with decision-making processes which make sense to them and in which a majority of villagers can fully participate.

The reticence of some Lao Theung communities to join in whole-heartedly may be simply a continuation of their long standing struggle to preserve their own way of life. Who is to say that their survival instincts are wrong? They are able to survive in circumstances most modern people would find impossible. If we want to encourage their participation we need to acknowledge the foundations on which such participation can be built. Certainly nothing lasting can be built on some “black box” quantitative methods that outsiders use to support their own sense of security. We need to understand a lot more about how the villagers themselves think, and how they reach decisions among themselves. It is we who must participate in that.

When assessing the tradeoff between quantitative methods and local participation it is important to keep in mind the criterion of “appropriate precision.” When we look at our own use of quantitative methods we find that quantification is usually only a step toward the real information that we use to make a decision. Most often before we can take a decision we need to convert the numbers into some kind of “yes” or “no” reading which allows us to make a judgement on whether, for example, a resource is above or below acceptable stocking levels for harvesting, etc. If it is possible to arrive at the “yes/no” information required for the decision without going through the preliminary numerical steps, well then nothing is lost in terms of our ability to make decisions and manage things effectively.

We contend that this is precisely the situation with much of the management-related information that is needed in village forestry planning. For example, in the case of NTFPs (see below) villagers can make an assessment, based on many years of intimate familiarity with a particular resource, whether that resource is in danger of being over-exploited or not and then decide on an appropriate management response without having to use laborious quantitative methods that are too foreign to have any meaning for them.

More generally, the usual approach is to conduct surveys about a natural resource using copious amounts of local labor in order to gather enough information to allow the outside analyst to draw a conclusion about whether or not a problem exists. An alternative is simply to ask the local inhabitants whether or not there is a problem. A sensitive elicitation of this kind of information is sometimes a better and more relevant guide to what the problems are – and it is almost always cheaper. Moreover, when the local people’s participation is a goal of the project, it becomes a matter of priority to ask the people about their own assessment of “the problem.”

For sustainable timber harvest it would seem that there is no currently accepted substitute for laborious quantitative methods of forest inventory, pre-logging survey, and tree-marking (but see Gilmour and Fisher 1991 for the beginnings of an alternative approach). For management of NTFP’s, however, it is clearly a different matter. Local people are the ones who know these resources best and for most management purposes it is sufficient to simply ask them for their assessment of whether or not the resource is declining over time. If the analysis is done in terms which they understand, it then becomes possible to ask/expect them to make the relevant management decisions. Such processes are likely to be far more sustainable that the conventional survey-and-decide-by-outsiders approach.

**Information methods vs. process methods**

When we think of “methods” most often we think of information gathering methods. We do this more or less automatically because this is the way we have been trained. But it isn’t always what is needed. For participatory forest management by villages we should be concentrating more on process methods. Information-gathering methodologies are purely instrumental. At the end of the day it will be more important that appropriate decision-making processes are in place in the village that enables them to actively manage their resource based on local information sources and thinking styles.

For outsiders to successfully facilitate the development of effective village level management processes it is not really necessary for the facilitator to have a detailed understanding of the content of those processes. Just like to facilitate a fair and successful election process it is not necessary to understand why each person votes the way they do.
All Village Forestry projects in Laos can cite cases where they have successfully applied exactly this kind of approach, but there seems to remain a lingering doubt about whether they are doing enough, whether in fact they might still need to “beef up” their methodology with more precise quantitative information-gathering methods. Our advice is that they should be confident about giving process methods a pre-eminent place over information-gathering methods whenever the main purpose is to facilitate sustainable village participation in management.

**The special case of NTFPs**

Much of what is said above has a direct bearing on how projects should deal with NTFPs. The prevailing idea among projects in Laos seems to be that NTFPs must have methodologies similar to those used for sustainable timber management. However, it is the considered opinion of this mission that such methods are: a) often *not possible*, b) *not necessary* for NTFPs and that, in fact, they might be c) *counter-productive* to the aim of sustainable management and, in some cases, even d) *harmful* to the interests of villages who depend on NTFPs far more than they do on timber products. The arguments supporting these points can be presented most easily in table form:

Table 4. Why rigorously quantitative methods may not be advisable for NTFPs.

<table>
<thead>
<tr>
<th>Not possible</th>
<th>Not necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experts are still struggling with the issue of how to deal with an inventory task that is <em>orders of magnitude</em> more difficult than timber inventory work. How do you count such a large number of often small and ephemeral species which are so widely scattered and which may appear only at certain times of the year? The consensus thus far appears to be that there are no easy answers to these questions (Carter 1996).</td>
<td>Because there is no established tradition of quantitative methods for NTFPs, foresters need not feel under pressure to use methods similar to those used for timber inventories. Indigenous management of NTFPs is, however, a long established tradition among tribal communities who live in the forest and depend heavily on NTFPs for food, other subsistence needs and supplementary cash income. The methods they use are not highly quantitative. In any case, the most important assessment to make is whether or not the NTFP stocks are declining in quantity or quality, and these determinations can be made by monitoring off-take using simple methods. On the basis of participatory diagnostic methods (like those used by JFM in recent trials) Village Forestry associations can make their own assessments and decide to restrict or suspend harvesting until the stocks come back (as taught by FOMACOP) or even undertake domestication of certain species (as recommended by the DOF/IUCN/NTFP Project).</td>
</tr>
</tbody>
</table>
Possibly counter-productive

By forcing villagers to adopt quantitative methods they don’t understand and that are completely foreign to their own style of decision-making, it might actually destroy the possibility of using practical assessment and decision-making procedures that make sense to villagers and empower them to take greater responsibility for managing the NTFPs in their forests. Such approaches are likely to be more sustainable in the long run.

Potentially harmful to villagers

NTFPs represent one of the few remaining areas where villagers can exercise freedom in pursuing their own livelihood strategies without interference from outsiders. The acknowledged experts on NTFPs are the villagers themselves. It is arrogant for well-meaning outsiders, who know so little about the traditional resource management strategies of villagers, to assume that they can do better at managing these resources which they do not understand.

It could be argued that the reason that NTFPs stocks are not already completely depleted is that their location is unknown to everyone except the local villagers. One of the worst outcomes that could happen is that detailed inventories of local NTFP stocks might become known to rapacious traders outside the community who then move in (often armed) and exhaust the resource in a relatively short time. This is a very real possibility if detailed inventories of NTFP stocks become a matter of public record. It would be a great disservice to the villagers to let this happen and there is no reason to take this risk since such information is not needed for management.

**Issues concerning participation**

How participatory is Village Forestry? How participatory should it be? Whose participation are we talking about anyway? These are the kinds of questions that must be asked and answered when assessing the degree of participation achieved by the different Village Forestry approaches.

A general framework for gauging the degree of participation achieved by a project has been described by Phantanousy and Bonita (1997) in discussing what they call the “spectrum of participation”:

At one end, the role of the local people is merely to supply labor in implementing state-drawn forest management plans. At the middle of the spectrum, the local people are empowered to make many of the management decisions, but the forestry staff retains the responsibility for making technical decisions, based on the notion that these are beyond the capability of the local people who are not technically trained. Village forestry in Laos falls at the other end of the spectrum where the following message applies:

*Whoever manages decides. Whoever decides plans. Whoever plans collects the needed information.*

This memorable statement is, obviously, an idealization. It sets a clear framework for gauging participation but it is not an accurate description of the actual practice in Village Forestry in Laos. The statement was made in the context of describing the FOMACOP project, and while it may reflect the goal of that project, it is doubtful whether as a statement of actual current practice it is true of any of the Village Forestry pilot projects in Laos. Indeed, some FOMACOP advisors acknowledge that the reality is actually different from the rhetoric espoused in some of the project literature. Thus, while they still have not given up on the idea of training villagers to be able to apply the quantitative methods needed for sustained yield timber management, they do acknowledge that this has been the most difficult thing for the villagers to learn. They intend to repeat the instruction in the hope that the villagers will pick it up eventually. Another area of effort is in making it easier to apply the quantitative methods through the development of easy-to-use computerized fill-in-the-blank forms. A good idea for PAFO/DAFO, another magical “black box” for the villagers.

While the aim of training villagers to their full capability is commendable, it seems pertinent to ask if it is really necessary. Do the villagers have to be able to perform all forestry tasks themselves? Consider the example of farm forestry in Vermont.

In the rural areas of Vermont there is a lot of small-scale private forestry by farmers and other rural landholders. There is no need to discuss “participatory” forestry because there is no problem with participation. Getting the benefits from the forest that you own and manage is not an issue. There is also no perceived need to train all forest owner-managers in all aspects of technical forestry operations. In fact, most
of the forest owners in Vermont do not want to become professional foresters. They do not want, nor do they need, to learn all the techniques of forest inventory, the use of volume tables, etc., required to manage their forests on a sustained-yield basis. Why? Because they can, and routinely do, hire the assistance of consulting foresters to take care of all this technically specialized stuff.

Why couldn’t the government foresters of Laos operate more or less as “consulting foresters” to local Village Forestry Associations. This is actually not far from the reality of what they now do in all models of village forestry except JFM 2. In the participatory models, the villagers as vested managers of the Village Forest estate are in a supervisory role, but professional foresters are needed to perform or assist the villagers to perform numerous technical tasks for which they have been trained. Ideally villagers should get the technical services they need and foresters are given due respect for their technical expertise and fair compensation for their services. Why should it be more complicated than this?

There could be other alternatives, of course. Village entrepreneurs could also be trained to provide the services of “consulting foresters”. It has been pointed out that the reality of the education of DAFO staff is such that they do not come already equipped with the requisite technical forestry skills and are not really much better qualified for technical training than many villagers. So why not train selected villagers in the special skills of foresters? That is certainly possible. Also, the official salaries of government foresters are abysmal, and one could argue that as long as this situation persists there will be temptations to continue the longstanding unofficial economy of corruption that is necessary for these officers to survive economically. Why not bring it all up on top of the table by acknowledging the important role played by well-trained forestry professionals and using part of the village forestry proceeds to pay them openly and adequately for their services (and perhaps also to upgrade their training). As mentioned before, this is not in any fundamental way different from what is already envisaged in FOMACOP and JFM Model 1. Perhaps it just needs to be more explicitly acknowledged and the pay scales adjusted to reflect a reasonable level of compensation.

Some guidance on this question in the Lao PDR context is found the Village Forestry Strategy paper (2nd draft) in relation to the objectives of Village Forestry vis-a-vis the participation of different stakeholders (DOF:11):

- **Villagers.** To allow villagers to enjoy their customary rights in meeting their subsistence needs, and to enhance their general well-being and socio-economic development by allowing them to benefit from sustainable forest management, as well as from other income and livelihood opportunities.

- **State**
  - **National and provincial governments.** To sustain the flow of revenues from forest products, notably timber, which are needed to finance national and provincial economic development
  - **State forestry enterprises.** To sustain the flow of raw materials for their forest-based industries.
  - **Forestry staff.** To pursue a worthwhile and meaningful career in the state’s forestry sector.

- **Private forestry enterprises.** To sustain the flow of raw materials for their forest-based industries.

- **The rest of the national community.** To get an equitable share of the forest wealth in the form of improved infrastructures and services, which are financed from government revenues such as from timber or hydropower.

**Conclusions**

Although very substantial progress has been made by the main Village Forestry projects in developing models for their particular situations, none of them can be said to be fully satisfactory as a general model for Village Forestry in Laos. Each of the methods tested thus far has its strengths and its weaknesses and each has been tailored for a particular area of application.

**Can there be a “General Model” for Village Forestry?**

We doubt it. In fact to initiate a quest for the “Supermodel” would probably be counter-productive. A better option might be to simply acknowledge that the situation is diverse and that different approaches will be needed in different areas. That does not mean that there cannot be a general process, i.e. a common
methodology for diagnostic assessment of each VF situation in order to identify what is needed. There could also be a shared consensus on the possible range of responses (technical and institutional), and, dare I say it, a menu of Village Forestry Options. Needless to say, such instruments would have to be open-ended and evolving if they are to stay abreast innovations arising from the grass roots of Village Forestry in Laos.

The issue concerning the JFM models is not really whether they can become general models for Village Forestry in Laos, but whether general models of Village Forestry should be modified along the lines of the JFM models to accommodate State Production Forests. There appears to be no simple answer to this question of policy.

Taking a longer view, the different projects display a kind of leap-frog movement in more or less the same general direction. Thus LSFP has created scope for FOMACOP to come in with a much larger package of resources and take a bold policy initiative. The fast-moving environment of change in Lao PDR tends to leave older projects looking slightly obsolete, but LSFP’s dynamism is deep-rooted and it continues to generate important lessons from which others continue to learn.

**Consulting Foresters**

It may be time to leap-frog to the most sensible end-game position (based on the implicit eventual model of forestry staff acting as “consulting foresters” to villagers). This would involve greater and more focused attention to the training needs of both villagers and foresters in their respective roles as forest managers and technical advisors.
REFERENCES


FOMACOP. 1996. Toward improved forest inventory in Lao PDR. DOF/FOMACOP. Vientiane.


FOMACOP. 1998. Training course on procedures for registering village forestry associations, approving village forest management plans, and signing village forest management contracts. DOF/FOMACOP. Vientiane

FOMACOP. 1997 Training course on village organizing, boundary demarcation, and land-use mapping. DOF/FOMACOP. Vientiane

FOMACOP. 1997. Training course on basic core group operations and participatory forest inventory. DOF/FOMACOP. Vientiane

FOMACOP. 1997. Training course on village land-use planning and assessing options for instituting village forestry organizations. DOF/FOMACOP. Vientiane

FOMACOP. 1997. Training course on village forest management systems and formation of the village forestry organization. DOF/FOMACOP. Vientiane

FOMACOP. 1997. Training course on village forest regeneration, improvement, and protection, and cost-benefit sharing in village forestry organizations. DOF/FOMACOP. Vientiane.

FOMACOP. 1997. Training course on village forest management planning and village forestry organization by-laws. DOF/FOMACOP. Vientiane

FOMACOP. 1998. Training course on pre-harvest inventory, village forest management contract, and registration of the village forestry organization. DOF/FOMACOP. Vientiane

FOMACOP. 1998. Training course on planning the annual operations of a village forest management area. DOF/FOMACOP. Vientiane

FORCAP. N.d. The Forest Conservation and Afforestation Project. FORCAP. Vientiane.


Joint Forest Management Unit. N.d. Forest protection contract model 1. JFM Unit. Provincial Forestry Section. Savannakhet

Joint Forest Management Unit. N.d. Forest protection contract model 2. JFM Unit. Provincial Forestry Section. Savannakhet


Lehmann, Lutz. 1998. Thoughts about the possible role of tree nurseries with the concept of NAWACOP. NAWACOP. Vientiane.


Phantanousy and Bonita (1997 whoever manages


Annex 1. Terms of Reference

**General objective:**
To assist the DoF, the Forestry Section of Savannakhet Province, and the concerned DAFOs to develop a method for village forest planning in JFM villages. (translate to Lao)

**First mission: 4 weeks**

**Objective 1:** To review the various methods for village forest planning developed so far in Lao PDR with a particular attention to village participation, allocation of responsibilities between the government and the village, and management objectives of the different approaches.

**Output:** Comprehensive report comparing the various methods for village forest planning.

**Objective 2:** To propose options for inventorying village forests in Ban Xienglekhok that can be immediately implemented in the JFM framework with the available staff resources.

**Outputs:** Report including
- Several methods for village forest inventory with various level of people’s participation and for various management objectives.
- Field manual for conducting village forest inventory (including guidelines, instructions, and forms).
- Allocation of responsibilities for inventory between the government and the village.

At the end of the first mission, a method for participatory inventory of village forests is selected by the DoF and the PFO in Savannakhet. The selected method is implemented in Ban Xienglekhok and data gathered and made ready when the second part of the mission starts.

**Second mission: 8 weeks**

**Objective 3:** To develop a participatory method for village forest planning in JFM villages.

**Outputs:**
- Critical assessment of forest data collected
- Reviewed method for participatory village forest inventory and reviewed field manual
- Participatory village forests management plans for the various forests identified in Ban Xienglekhok
- Field manual presenting the method for developing participatory village forest management plans.

**Objective 4:** To disseminate information on village forest planning for JFM

**Outputs:**
- Meeting with villagers in Ban Xienglekhok for critical review of methods and plan
- Meeting in Savannakhet presenting the month mission work and results to district and provincial representatives.
- Mission report

**Condition of JFM agreements:**
- JFM is being tested in 14 villages around Dong Kapho state production forest.
- 3 villages are under specific agreement with the government to implement JFM models with agreements
- DAFO shall assist villagers carrying out land use planning outside SPF
- Identify village forests and working out management plans

**Conditions**

Service Duration: 12 weeks (90 working days), Mid October to the end of January 1999, 2 periods (4 weeks and 8 weeks)

Article 9 ‘Forest Management’ consists of survey, inventory and collection of statistics and information about forests, the classification and registration of forest types, the identification and delineation of forest and forest land boundaries, the development of forest use plans, the issuing of forest regulations, the allocation of forest and forest land use and the provision of technical guidance and recommendations.

Article 10 Survey Inventory, Classification of Forest Types and Delineation of Forest Boundaries: The Government delegates the MoAF responsibilities to coordinate with concerned agencies and local authorities in the survey, inventory and collection of information about forests throughout the country. This activity is for the purpose of classifying forest types, identifying and delineating forest boundaries, and monitoring changes in the status of forest, forest land and the environment. The classification of forest types and the identification and delineation of forest boundaries, and areas depends on the location, condition and importance of the forest resources and forest land, which differs in each geographical region of the country.

Article 11: The formulation of Use & Management Plans for Forest and Forest Land: The government determines an overall management plan for the use of forest and forest land…

Local administrative authorities formulate management and use plans for forest land, based on the government’s overall plan and local conditions, in their area of jurisdiction. These plans are submitted for approval to higher levels of government authority.

Article 12. The Allocation of Forest and Forest Land to Local Administrative Authorities for Management and Use:

Following the inventory, classification and delineation of forest and forest land, the government allocates rights of forest management and use to local administrative authorities. These rights are passed down from province and prefecture to the districts, and then by the districts to the villages which assume responsibility. Provinces, prefecture, districts and villages which border one another should participate in, and collectively recognize, the allocation of forest and forest land.

Article 13. The Allocation of Forest and Forest Land to Individuals and Organizations for Management and Use:

The state grants rights to use degraded forest and barren land to individuals and organisations, for the purpose of planting trees or regenerating forest, depending on their capacity in terms of labor and capital…

It is forbidden for individuals or organisations to use well developed natural forest or fallow forest, which can regenerate naturally, for tree planting.

Article 14. Conversion of Forest and Forest Land:

It is forbidden to convert forest and forest land, managed by the government or allocated by the government to individuals or organizations for possession and use, from its determined purpose.

When necessary, in the public interest, it is possible to convert forest and forest land. However, prior approval of responsible authorities is required…

Section III: Regulations for the Use of Forest and Forest Land

Part 1: Harvesting of Timber and Forest Produce

Article 25. The Harvesting of Timber and other Forest Produce:

The harvest of timber and other forest produce can proceed only in surveyed and inventoried production forest areas for which there is a forest management plan. Pre-logging surveys are required and logging operations must aim at a sustainable yield on the basis of a logging rotation system.

Logging activities must operate in accordance with the following regulations:
- use of a selection cutting system, clear cut is prohibited except where necessary
- only properly marked trees are cut …
- maximum use of cut trees
- felling of trees in accordance with technical recommendations.
- Tree felling must minimise damage to surrounding trees, not cause negative impacts on the environment, soil erosion or the reduction of water availabilities.
- Following logging the logged area must be maintained and/or replanted.

The harvesting of other forest products such as mushrooms, roots, tubers, shoots, leaves, flowers, bark, resins, gums must be carried out according to specific regulations issued by concerned agencies.

**Article 30. Customary Use of Forest and Forest Land:**

The customary use of forest, forest land is the use of forest, forest land and forest produce which has been practised for a long period and is recognised by society and/or law.

Customary use includes the collection of non-prohibited wood for fences and fuel, the collection of forest produce, hunting and fishing of non-prohibited species for household consumption and other uses following custom. Customary use should not damage forest or forest resources or affect the rights or benefits of individuals or organisations.

The customary use of forest, forest land and forest produce must be in accordance with village regulations on forest and forest land which the village authority has determined, consistent with the special circumstances of the village in each stage of its development, and in accordance with Article 63 of this law.

**Part 5: The Protection and Conservation of Forest:**

**Article 41**… In protection forest the following activities are prohibited: shifting cultivation, felling and burning trees or forest, removing trees, cutting firewood, raising animals, constructing houses or any other infrastructure and conducting other activities including the extraction of soil, stones or minerals, hunting or gathering of prohibited forest produce.

**Article 42: The Protection and Conservation of Conservation Forest:**

… It is necessary to protect and conserve conservation forest and to divide conservation forest into total protection zones, controlled management zones, and corridor zones.

**Article 47: The Forest and Forest Resource Development Fund**

*In order to ensure the effective protection and conservation of forest, forest land and forest resources, the state declares the establishment of the Forest and Forest Resource Development Fund and …*

The Forest and Forest Resource Development Fund is used only for forestry activities such as the protection and conservation of protection or conservation forest, tree planting and forest regeneration to protect and conserve watersheds, the environment and wildlife. It can also be used for the dissemination of forestry policy, law, regulations, technical inputs for forestry, and the protection and conservation of watersheds, the environment and other things related to forest and forest resources.

The organization, management and operation of the Forest and Forest resource Development Fund will be conducted under specific regulations.

*See also articles 59-63 on rights & responsibilities of different actors*
ANNEX 3. Comparison of roles, rights & responsibilities in JFM contracts for Models 1 and 2 (LSFP).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
<td>“To encourage the participation of the population living around Dong Kapho to the sustainable management and protection of forests to ensure that the State Forest Production area is managed and used in a sustainable manner by the population who benefits from such participation.”</td>
<td>“To encourage the participation of the multi-ethnic population living around Dong Kapho to the sustainable management and protection of forests to ensure that the State Forest Production area is managed and used in a sustainable manner by the population who benefits from such participation.”</td>
</tr>
<tr>
<td><strong>Signatories for gov’t</strong></td>
<td>PAFO, DAFO</td>
<td>PAFO, DAFO</td>
</tr>
<tr>
<td><strong>Signatories for village</strong></td>
<td>Village Joint Forest Management Board (JFMB)</td>
<td>Village Resource Management &amp; Development Committee (RMDC)</td>
</tr>
<tr>
<td><strong>1st Contract Party (“The Contractor”)</strong></td>
<td>Savannakhet Province (represented by PAFO)</td>
<td>Savannakhet Province (represented by PAFO)</td>
</tr>
<tr>
<td></td>
<td>Responsible for the organization &amp; implementation of all field activities aimed at ensuring the sustainable protection and management of Dong Kapho State Production Forest through planning and supervising implementation, <strong>collecting taxes</strong> in compliance with the regulations enacted by the Min. of Finance, and controlling of all activities within the State Production Forest.</td>
<td>Responsible for the organization &amp; implementation of all field activities aimed at ensuring the sustainable protection and management of Dong Kapho State Production Forest through planning and supervising implementation, <strong>collecting royalties from log buyers, taxes from the village recruited for logging, and other taxes</strong> in compliance with the regulations enacted by the Ministry of Finance, and controlling all activities within the State Production Forest.</td>
</tr>
<tr>
<td><strong>2nd Contract Party</strong></td>
<td>Phin District (represented by DAFO)</td>
<td>District (represented by DAFO)</td>
</tr>
<tr>
<td></td>
<td>Support Ban Nathong efforts by promoting forestry and training activities in order to build up the capacity of the village to implement this Forest Protection Contract in forest areas inside and outside the State Production Forest.</td>
<td>Support Ban . . . through forestry and training activities in order to build up the capacity of the village to implement the Forest Protection Contract in forest areas outside the State Production Forest and within the Forest area under the village’s responsibility in a similar sustainable manner as protected in the whole of the State Production Forest.</td>
</tr>
<tr>
<td><strong>3rd Contract Party</strong></td>
<td>Ban Nathong</td>
<td>Ban . . .</td>
</tr>
<tr>
<td></td>
<td>The population of Ban Nathong will establish a Joint Forest Management Board which members are elected by all families within the village for the implementation of this Contract and of the Dong Kapho State Production Forest Management Plan as adopted by the Forestry Department. The Ban Nathong Joint Forest Management Board is entitled to exploit and sell logs at second landing, as well as to implement its obligations in protecting forest resources, undertaking enrichment planting, and paying taxes based on the volume of exploited timber and in compliance with the regulations outline by the Ministry of Finance. The Ban Nathong Joint Forest Management Board is composed of a committee of 13 persons: • The President of the Board • Two Vice Presidents • A staff committee of 10 members</td>
<td>It will establish a Village Resource Management &amp; Development Committee within the village to represent its villagers in the execution of this Contract. The Committee within the village to represent its villagers in the execution of this Contract. The Committee will be assigned with the task of protecting the Forest lying within the village territory to prevent all acts of destruction or encroachment from outsiders and others. In addition, it will implement the Dong Kapho Forest Management Plan as adopted by the Forestry Department.</td>
</tr>
</tbody>
</table>
PAFO

On behalf of the Gov’t and under the guidance of the Province Governor, is responsible for the management, protection, production, monitoring and control of the implementation of the Dong Kapho State Production Forest Management Plan as adopted by the Forestry Department.

Will appoint and assign forestry officers (Rangers) to the Dong Bang field office as its representatives for all field activities related to the Dong Kapho State Production Forest.

Will support and acknowledge the establishment of the JFMB by Ban Nathong’s population as its representative for the execution of the Contract in line with Dong Kapho State Production Forest Management Plan.

Will assist the villagers in protecting the Forest, and more specifically in preventing encroachments from external elements or organizations upon JFMB’s request.

Will jointly with JFMB, develop and agree on forest management guidelines, and selection of cutting and planting areas for implementation by JFMB.

Will, jointly with JFMB, undertake pre-logging survey, tree marking survey and outline cutting regime (regulations on tree felling) to be applied in the annual cut area within 1-2 years prior to actual exploitation. In outlining the cutting regime, PAFO will consult with JFMB on certain issues, such as cutting Diptorocarpus alatus (Namanyang) trees from which resin is being collected and other non-commercial and degraded tree species.

Will issue instructions pertaining to logging and planting to JFMB on an annual basis. Such instructions will include a map of the logging area (1/5,000 scale) and alignments of marked trees with indications on their locations, information on marked trees (tree species, number, volume), map of degraded forest where enrichment planting will be conducted, as well as instructions on tree species and quantity of seedlings to be grown in JFMB’s nursery.

Will assist in planning logging operations, such as the selection of logging yards, road and logging tracts system planning. PAFO may also grant an authorization on JFMB’s request for permission to cut additional trees > 20 cm diameter . . . in connection with this.

Will monitor and supervise the implementation of the Forest management plan by JFMB after logging has taken place and will conduct a post-logging inspection and an inspection of reforested areas.

Will coordinate with DAFO and JFMB in undertaking a marketing survey for logs and branches sales and issue exploitation permits to JFMB.

PAFO, with the participation of JFMB, will monitor the measurement, stamping and grading of logs, based on the principles outlined by MAF. And will issue permits to JFMB for the removal of logs from second landing in accordance with Article 26 of the Forestry Law.

Will invite representatives of the Forestry Department, the Provincial Forestry Section, DAFO and JFMB to participate in consultative meetings to review the

PAFO:

On behalf of the Gov’t and under the guidance of the Province Governor, is responsible for the management, protection, production, monitoring and control of the implementation of the Dong Kapho State Production Forest Management Plan as adopted by the Forestry Department.

Will appoint and assign permanent forestry officers (Rangers) to the Dong Bang field office as its representatives for all field activities related to the Dong Kapho State Production Forest.

With PAFO will jointly be responsible for marking the border between the State Production Forest and village territory with labor assistance form the population of Ban . . . and will then certify and acknowledge the area of the Production Forest under the village’s responsibility. Will support the establishment of the Village Resource & Development Committee to implement the actual protection of the areas of the production forest (map of the production forest area under the village’s responsibility).

The permanent forestry officers (Rangers) will supervise the protection activities performed by the villagers. They will report to PAFO for decision on eventual penalties, sanctions in the case of encroachment upon the Forest.

PAFO and DAFO will be jointly responsible for surveys mentioned in the State Production Forest Management Plan, such as pre-logging surveys, tree marking surveys. They will outline the cutting regime (regulations on tree felling) in annual cutting areas prior to any actual exploitation.

PAFO & DAFO will jointly be responsible for logging in annual cutting areas for which villagers of Ban . . . will be recruited. In addition both agencies will coordinate the inspection of stumps in view of avoiding felling damages or cutting of unmarked trees. Simultaneously, a survey will be conducted for the evaluation of natural regeneration in cutting areas for further management.

Will request the Log Sale Committee to sell exploited logs from second landing and collect royalties form buyers and taxes from the village authorized to exploit wood, and remit such taxes to the budge in accordance with the regulations outline by the Ministry of Finance. In addition PAFO will establish a Production Forest Protection Fund, a Production Forest Improvement Fund and a District Forest Development Fund.

The Production Forest Protection Fund will be managed by PAFO:

70% equitably distributed among villages around Dong Kapho where no revenues are generated from logging

30% remitted to the Dong Bang field office to support the Forest protection
<table>
<thead>
<tr>
<th>Forest management once a year.</th>
<th>activities and the field office’s administration costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Will outline regulations on hunting and non-timber forest products collection in Dong Kapho State Production Forest relevant to JFMB to ensure sustainable management of the Forest.</td>
<td>• The District Forest Development Fund is established in order to distribute revenues generated from logging for socio-economic development among villages which do not benefit directly from the State Production Forest management within the district or to address emergency situations, except in urgent cases. Supplied by 5% of the royalties from the sale of logs. The fund will be managed &amp; used by DAFO with regular reports on its status. Any disbursement will require approval from the District Governor and PAFO.</td>
</tr>
<tr>
<td>• Will monitor this Contract’s implementation by JFMB, and will monitor and record the evolution of the Forest conditions in each plot on an annual basis.</td>
<td>• Will issue village level regulations related to hunting and non-timber forest products collection in the Forest to ensure its sustainable use.</td>
</tr>
<tr>
<td>• Will monitor JFMB implementation of its fiscal obligations based on the volume of exploited logs according to records from logs grading.</td>
<td>• Will consider canceling the rights to exploit timber in case the village would fail to implement its responsibilities in line with the Contract.</td>
</tr>
<tr>
<td>• Will establish common funds such as the Production Forest Protection Fund and the District Forest Development Fund.</td>
<td>• Will issue village level regulations related to hunting and non-timber forest products collection in the Forest to ensure its sustainable use.</td>
</tr>
<tr>
<td>• Production Forest Protection Fund is established to facilitate the Forest protection, the prevention of negative impacts liable to affect the sustainability of the Forest management. It is supplied by 10% of net revenues. (Net revenue = total revenue from the sale of logs – (royalties + labor costs for logging, road clearing and transportation + duties + remittances to the District Forest Development Fund))</td>
<td>• Will consider canceling the rights to exploit timber in case the village would fail to implement its responsibilities in line with the Contract.</td>
</tr>
<tr>
<td>• The Production Forest Protection Fund will be managed by PAFO:</td>
<td>• Will consider canceling the rights to exploit timber in case the village would fail to implement its responsibilities in line with the Contract.</td>
</tr>
<tr>
<td>• 70% equitably distributed among villages around Dong Kapho where no revenues are generated from logging</td>
<td>• Will issue village level regulations related to hunting and non-timber forest products collection in the Forest to ensure its sustainable use.</td>
</tr>
<tr>
<td>• 30% remitted to the Dong Bang field office to support the Forest protection activities and the field office’s administration costs</td>
<td>• Will consider canceling the rights to exploit timber in case the village would fail to implement its responsibilities in line with the Contract.</td>
</tr>
<tr>
<td>• The District Forest Development Fund is established in order to distribute revenues generated from logging for socio-economic development among villages which do not benefit directly from the State Production Forest management within the district or to address emergency situation. Supplied by 5% of the royalties from the sale of logs. The fund will be managed &amp; used by DAFO with regular reports on its status.</td>
<td>• Will consider canceling the rights to exploit timber in case the village would fail to implement its responsibilities in line with the Contract.</td>
</tr>
<tr>
<td>• Will consider canceling the rights to implement the Forest management plan in consultation with DAFO and with the agreement of the District Governor in case JFMB is unable to implement this Contract.</td>
<td>• Will consider canceling the rights to exploit timber in case the village would fail to implement its responsibilities in line with the Contract.</td>
</tr>
</tbody>
</table>
| PAFO (continued) | Will coordinate with DAFO and JFMB in undertaking a marketing survey for logs and branches sales and issue exploitation permits to JFMB.  
PAFO, with the participation of JFMB, will monitor the measurement, stamping and grading of logs, based on the principles outlined by MAF. And will issue permits to JFMB for the removal of logs from second landing in accordance with Article 26 of the Forestry Law.  
Will invite representatives of the Forestry Department, the Provincial Forestry Section, DAFO and JFMB to participate in consultative meetings to review the Forest management once a year.  
Will outline regulations on hunting and non-timber forest products collection in Dong Kapho State Production Forest relevant to JFMB to ensure sustainable management of the Forest.  
Will monitor this Contract’s implementation by JFMB, and will monitor and record the evolution of the Forest conditions in each plot on an annual basis.  
Will monitor JFMB implementation of its fiscal obligations based on the volume of exploited logs according to records from logs grading.  
Will establish common funds such as the Production Forest Protection Fund and the District Forest Development Fund.  
Production Forest Protection Fund is established to facilitate the Forest protection, the prevention of negative impacts liable to affect the sustainability of the Forest management. It is supplied by 10% of net revenues. (Net revenue = total revenue from the sale of logs – (royalties + labor costs for logging, road clearing and transportation + duties + remittances to the District Forest Development Fund))  
The Production Forest Protection Fund will be managed by PAFO:  
70% equitably distributed among villages around Dong Kapho where no revenues are generated from logging  
30% remitted to the Dong Bang field office to support the Forest protection activities and the field office’s administration costs  
The District Forest Development Fund is established in order to distribute revenues generated from logging for socio-economic development among villages which do not benefit directly from the State Production Forest management within the district or to address emergency situations, except in urgent cases. Supplied by 5% of the royalties from the sale of logs. The fund will be managed & used by DAFO with regular reports on its status. Any disbursement will require approval from the District Governor and PAFO.  
Will issue village level regulations related to hunting and non-timber forest products collection in the Forest to ensure its sustainable use.  
Will consider canceling the rights to exploit timber in case the village would fail to implement its responsibilities in line with the Contract. | Will outline regulations on hunting and non-timber forest products collection in Dong Kapho State Production Forest relevant to JFMB to ensure sustainable management of the Forest.  
Will monitor this Contract’s implementation by JFMB, and will monitor and record the evolution of the Forest conditions in each plot on an annual basis.  
Will monitor JFMB implementation of its fiscal obligations based on the volume of exploited logs according to records from logs grading.  
Will establish common funds such as the Production Forest Protection Fund and the District Forest Development Fund.  
Production Forest Protection Fund is established to facilitate the Forest protection, the prevention of negative impacts liable to affect the sustainability of the Forest management. It is supplied by 10% of net revenues. (Net revenue = total revenue from the sale of logs – (royalties + labor costs for logging, road clearing and transportation + duties + remittances to the District Forest Development Fund))  
The Production Forest Protection Fund will be managed by PAFO:  
70% equitably distributed among villages around Dong Kapho where no revenues are generated from logging  
30% remitted to the Dong Bang field office to support the Forest protection activities and the field office’s administration costs  
The District Forest Development Fund is established in order to distribute revenues generated from logging for socio-economic development among villages which do not benefit directly from the State Production Forest management within the district or to address emergency situations, except in urgent cases. Supplied by 5% of the royalties from the sale of logs. The fund will be managed & used by DAFO with regular reports on its status. Any disbursement will require approval from the District Governor and PAFO.  
Will issue village level regulations related to hunting and non-timber forest products collection in the Forest to ensure its sustainable use.  
Will consider canceling the rights to exploit timber in case the village would fail to implement its responsibilities in line with the Contract. |
<table>
<thead>
<tr>
<th>DAFO</th>
<th>DAFO</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Will work closely with JFMB in order to support the implementation of the provisions of the Forest Protection Contract, while promoting and guiding village development.</td>
<td>• Will administer and monitor the implementation of the Contract signed with the village, will administer trustful relations with the villagers and the Village Resource Management &amp; Development Committee in view of supporting the Committee in implementing the Forest Protection Contract and developing the village.</td>
</tr>
<tr>
<td>• Will appoint JFMB members based on the results of general elections by the village assembly to manage the protection of the forests, water sources, wildlife and the environment as provided under the Forest management plan.</td>
<td>• DAFO will determine or plan training for the Village Resource Management &amp; Development Committee. It will identify and provide extension services on various forestry aspects.</td>
</tr>
<tr>
<td>• Will encourage JFMB to recruit an external auditor to audit its accounts and distribution of revenues at the end of each financial year, in view of improving JFMB’s accounting and finance.</td>
<td>• DAFO will provide special attention in monitoring and supporting villages in establishing a nursery, seed multiplication and enrichment planting in due time with the seasons on an annual basis and as planned. In relations with the Forest regeneration, DAFO will outline detailed plantation plan and forest improvement plant (cutting hollow and degraded marked trees) in view of requesting a budget from the Dong Kapho Improvement “Fund with PAFO.</td>
</tr>
<tr>
<td>• Will be responsible for advising the JFMB executive and management council by providing support with its own resources or by requesting assistance from other parties.</td>
<td>• Will coordinate and provide assistance to the village in planning village development, forest protection, land use and land allocation with the village and the management of forest outside the State Production Forest.</td>
</tr>
<tr>
<td>• Will provide the necessary training and technical advice to JFMB, such as in nursery, reforestation, logging, marketing, accounting and other matters.</td>
<td>• Will monitor the implementation of the Contract signed with the village and field activities on a permanent basis. And will implement in accordance with the Forest management plan, instructions and notices from PAFO, and submit monthly, quarterly and annual progress reports to PAFO.</td>
</tr>
<tr>
<td>• Will provide assistance to JFMB in planning land use and land allocation outside the State Production Forest, delineating the village forests, designing and planning for the management of these forests, and in planning the village development.</td>
<td>• Jointly with PAFO will coordinate the implementation of the activities as prescribed under Articles 10, 11 and 15 of this Contract.</td>
</tr>
<tr>
<td>• Will authorize JFMB to use plots of land along Road 9 as log yards, subject to the approval of PAFO.</td>
<td>• Will coordinate and provide assistance to the village in planning land use and land allocation with the village and the management of forest outside the State Production Forest.</td>
</tr>
<tr>
<td>• Will monitor the implementation of this Contract by JFMB and all field activities on a permanent basis. Will implement in accordance with the Forrest management plan, instructions and notices form PAFO and submit monthly, quarterly and annual progress reports to PAFO.</td>
<td>• Will monitor the implementation of the Contract signed with the village and field activities on a permanent basis. And will implement in accordance with the Forest management plan, instructions and notices from PAFO, and submit monthly, quarterly and annually progress reports to PAFO and relevant authorities.</td>
</tr>
<tr>
<td>• Jointly with PAFO will coordinate the implementation of the activities as prescribed under Articles 10, 11 and 15 of this Contract.</td>
<td></td>
</tr>
</tbody>
</table>
The Village

- Will be responsible for the Forest protection by preventing forest fires, restricting encroachment upon the Forest, controlling livestock grazing within the Forest, preventing wood poaching, illegal hunting and other acts affecting the Forest sustainability.
- Will implement the State Production/Forest Management Plan, outline regulations and organize all families to participate to the Forest Protection. In case of encroachment by outsiders, JFMB will first request assistance from Dong Bang forestry officers (Rangers). JFMB will outline and improve internal regulations for the protection of all forests belonging to the population of Ban Nathong.
- JFMB will be entitled to exploit wood, on the basis of annual instructions from PAFO alone for the purpose of restricting damage during exploitation. Such exploitation will be performed with caution and automobile transportation by road and paths will be specifically approved during the dry season only. JFMB will also be entitled to collect non-timber forest products, make customary use of timber and other rights as provided by law within the Forest under its management.
- JFMB will be entitled to cut trees market by PAFO only. Nevertheless during the clearance of logging tracks and log yards, a number of trees over 20 cm diameter may be cut out. In such case, JFMB will submit the matter to PAFO in view of surveying and marking trees to be cut.
- JFMB will be entitled to sell extracted logs to sawmills and companies for domestic market. The market study for the sale of logs will be performed in coordination with PAFO & DAFO. JFMB may process a number of branches and logs within the village with handsaws for the villager’s own use, for the production of commodities. JFMB will request PAFO to grade logs at second landing and its members will assist in this task.
- JFMB will delineate the borders between the village and the Forest areas lying within the village’s management area. JFMB will recruit villagers to clear logging tracks in the cutting area and to maintain access roads to the annual cutting areas.
- JFMB will pay royalties and other taxes as agreed under the Contract to the Government in full and in accordance with the Government’s regulations. Fiscal obligations will have to be fully paid prior to receiving any removal permit. Royalties, income tax, commercial tax, remittance to the District Forest Development Fund and others as required by the regulations will be paid in due time from the receipt of a permit for the removal of logs from second landing.
- Members of JFMB will receive salaries from JFMB and will conduct its operations similarly as a business enterprise based on work plan, budget plan, an accounting system, operating bank accounts, reports, auditing and others. JFMB members will be trained and advised on work procedures where competence is deemed insufficient by DAFO in view of ensuring the Contracts’ efficient implementation. JFMB will keep appropriate records of its activities. It will recruit an auditor form external auditing committee once a year to improve its accounting and financial system.
- JFMB will strictly implement its obligations towards the Government in seed planning land use and land allocation, village development, village forests.

The Village

- Provided the cutting areas is located within its area of responsibility, the village has the right to be recruited by PAFO to exploit wood and manage and protect the Forest on an annual exploitation period basis.
- Provided the village Forest area is not included in the annual cutting plans, the village will be compensated by PAFO from the Forest Protection Fund as provided under Article 13. However, the village will ensure the Forest efficient protection and actively implement its obligations, such as:
  - Protection from any encroachment into the areas of the Forest in view of land clearing for cultivation or any other purposes.
  - Prevention of wood poaching and illegal hunting (both from villagers and outsiders).
  - Prevention of forest fires. In such case, villagers will be organized to extinguish it in due time. Any extended forest fire will be urgently reported to PAFO and DAFO within 24 hours.
- Provided the village’s production forest area is included in the annual cutting area, the village will receive the following benefits form PAFO:
  - Logging fees (logging related service fees), which will be calculated on the basis of the cubic meters of extracted timber. The logging fee rate (Kips/cubic meter) will be agreed on a annual basis according to fluctuations in logs markets and the inflation.
  - Funds from the Forest Improvement Fund and Forest Protection Fund as provided under Article 13 and 14.
- Provided the village’s production forest area is included in the annual cutting area, the village will take special care to nursery activities, plantation and improvement. These activities are obligations of the village. Fees for plantation and nursery activities will be based on general principles outline by PAFO.
- The village entitled to conduct logging will take special care in felling all surveyed and marked hollow, degraded, and trees not accepted by the market. All these trees must be extracted to improve the Forrest as prescribed under the management plan.
- When recruited for annual logging, the village will remit taxes to the Government according to the exploited volume and the regulations outlined by the Ministry of Finance.
- The village will extend cooperation and actively participate to forestry activities, such as seed gathering, nursery activities, enrichment planting and others as required by PAFO and DA”F”O. The village will receive fees accordingly.
- The village will work jointly with DAFO in participatory activities such as in administrating fund use and fund allotment, village development, village forests.
collections, nursery and enrichment planting, or forestry regeneration and improvement as provided in periodical plans. JFMB will actively counter any negative and threatening act to the Forest sustainability. It will urgently report any modification within or outside its areas of responsibility to DAFO and PAFO.

- **JFMB will actively perform its obligations in protecting the production forest and ensure the following:**
  - Protection from any encroachment into the areas of the Forest in view of land clearing for cultivation or any other purposes
  - Prevention of wood poaching and illegal hunting (both from villagers and outsiders)
  - Prevention of forest fires. In such case, villagers will be organized to extinguish it in due time. Any extended forest fire will be urgently reported to PAFO and DAFO within 24 hours.
  - JFMB will work jointly with DAFO in participatory activities, such as planning land-use and land allocation, village development, village forestry management and others as organized by DAFO in the village.
  - JFMB will be entitled to collect non-timber forest products, make customary use of timber and hunt within the State Production Forest based on general rules and regulations periodically notified by PAFO.
  - All forestry activity performed in Ban Nathong will be the responsibility of JFMB in terms of budget, inclusive of service fees (food and fuel allowances) for PAFO and DAFO staff which will become payable only when conducting field activities as described under the management plan and extension tasks requested by JFMB. Any cost in monitoring, which is the responsibility of PAFO and DAFO, will be taken in charge by the relevant organization.
  - The payment of service fees to PAFO and DAFO staff will be properly recorded by JFMB by clearly mentioning the staff’s names, performed tasks, duration, names of participating villages and expended budget to facilitate financial control by the auditing team.
  - Ban Nathong village assembly will elect the JFMB which will be composed of 13 members with the following distribution of responsibilities:
    - President – overall responsibilities, organization and implementation of the village pilot Forest management plan, acting as a link between the villagers and the District and Province administrative authorities.
    - 1st Vice President – in charge of field activities, including organization and planning, such as village development, forest management, wood exploitation (as well as planting and nursery), pre-logging survey, tree marking survey and other relevant forestry activities.
    - 2nd Vice President – in charge of administration and finance
    - In addition, the Board of Administration will include 10 members whose role will be to assist in the administration of JFMB as follows:
      - 5 members in charge of exploitation activities
      - 3 members in charge of forest protection
    - The Village Resource Management & Development Committee will keep books and records on the use of funds received by the village. It will establish monthly, quarterly and annual statements of expenditures. In addition, the village will keep proper records of non-timber forest products collected and wildlife hunted from the Forest and report to Dong Bang field officers (Rangers) based on the Province’s reporting regulations.
    - The village will organize Village Forestry Volunteers to monitor forest protection activities. The appointed Village Forestry Volunteers will be active and trusted by the villagers and the members of the Village Resource Management & Development Committee. The village will actively counter all negative and threatening acts to the national resources and economy.
    - The funds for village development will be the remaining portion of the total revenues generated from all sources (logging fees, Dong Kapho Protection Fund, Dong Kapho Improvement Fund) after the deduction of the following expenditures:
      - Labor fees for logging and tracks clearing paid to villagers
      - Costs for the transportation of logs from first to second landing (service provider).
      - Administration costs of the Village Resource Management & Development Committee.
      - Costs of various groups within the village (according to the villagers decision)
      - Costs in protecting the production forest.
      - Costs of plantation.
    - The distribution of revenues from logging fees and other service fees will be decided by the villagers, except for transportation fees from first to second landing which will be agreed with the service provider on an annual basis.
• 2 members in charge of finance and marketing
• JFMB election procedures will be the same as for the election of the village headman and such election will be based on the village administrative organization. The village headman will be automatically considered as the President, whereas other positions will be filled on the basis of democratic election supervised by an election committee and witnessed by DAFO and PAFO. The outgoing Board will present a report of its activities and JFMB statement of profit and loss to its members.
• JFMB will manage the village various funds. Any disbursement of such funds will be based on the joint approval of all its members and acknowledged by DAFO.
• The village will organize Village Forestry Volunteers within the village itself to monitor forest protection activities. The appointed Village Forestry Volunteer will be active and trusted by villagers and members of the JFMB. The village will actively counter all negative and threatening acts to national resources and economy.
• JFMB net annual revenues generated from the implementation of the production forest management plan will be distributed as follows:
  • 60% for village development
  • 30% for administration costs and forestry activities performed by JFMB
  • 10% will be remitted to the Forest Protection Fund as provided under Article 22