Land Use Planning and Land Allocation
Government Policy, LSFP Approach and Progress in Savannakhet

A paper presented at the LSFP Meeting in Savannakhet -15th to 16th December 1998

1. Background

The depletion of forest areas in Laos has gradually accelerated in the last three decades despite the acceptance of international principles for designing and reshaping national forest management policies. Forested area has diminished from 16 million hectares (about 70% of national territory) in 1965 to 14 million hectares (about 60%) in 1970 (Myers, 1980). More recently the results of a Nation-wide Reconnaissance Survey indicated that the area covered by forest is only 11 million hectares or 47% of the land area (Lao-Swedish Forestry Co-operation Program, 1992).

It is estimated in the Nation-wide Survey that the decrease of forest is estimated about 70,000 hectares per annum. The decline is taking place through out the country but is more serious in the northern and central regions than in the south. Area of forest cover is largest in the southern region (67%) and lowest in the northern region (22%).

The major causes of forest destruction in Laos are upland shifting cultivation (estimated loss of 100,000 hectares of forest annually), uncontrolled commercial logging operations (in the late 1980s and early 1990s there was a pronounced 3 to 4 fold increase in the production of round wood timber), inappropriate harvesting techniques (felling was poorly controlled), large scale dam construction (in the order of 150,000 hectares), wood based energy consumption and forest fires (estimated 100,000 hectares annually).

2. Forest Policy: History and Transformation

The majority of initiatives which impact on present forest management have been taken in the last decade or so. Forestry policy has developed and been transformed in three phases. Initiatives were taken subsequent to the introduction of the New Economic Mechanism in 1985, the First National Forest Conference of May 1989 and the approval of the Tropical Forestry Action Plan in September 1991.

1975-1985

Forests were regarded as a source of raw materials for domestic utilisation and for the export economy. Forest functions such as stream watershed protection, prevention of soil erosion, wildlife habitats, and environmental protection were recognised. The main forestry targets were:

- the exploitation of forest resources and non-forest products for building the economy
- raising public awareness about forest resources utilisation, protection, management and reforestation
- increasing forest cover in the northern region

1986-1990
During this period forestry policy started to address the protection functions as well as production values. Forest areas were classified into protection (7 million hectares) and commercial (5 million hectares). The northern region was recognised as mainly a protection area for watersheds, wildlife and soil conservation while in the south the emphasis was on production. Forests along national borders were declared as protection forests. Tree planting programs in local communities were initiated, the relocation of shifting cultivators was commenced and improvement in logging techniques was addressed.

Following the First National Forest Conference in 1989, four main strategies were adopted:

- shifting cultivation stabilisation and land allocation to shifting cultivators.
- protection, rehabilitation and forest plantation increase.
- the utilisation of forest resources and a wood industry based on sustainable forest exploitation.
- human resource development and research.

1990 - present

The Tropical Forestry Action Plan adopted in September 1991 made four sets of strategy recommendations concerning institutional development, conservation of ecosystems, forest and agricultural land use and forest based industrial development. The GoL adopted six forest management strategies in 1991 and several management objectives which are presented in Appendix 1.

Of the strategies and objectives in the Action Plan the following have had the most direct bearing on the development of forest-land allocation policy and implementation programs:

**Strategies**

1. A plan to reduce and to eventually halt shifting cultivation practices through a program of land allocation to rural communities.
2. Watershed protection, prevention of soil erosion, environmental protection and the protection of biological genetic resources.
3. Forest planting, rehabilitation and natural regeneration.

**Objectives**

- To implement programs of forest management and conservation including the development of a protected area system.
- To emphasise community mobilisation and the provision of incentives to communities for resource management, including the development of a clear system of use rights and local land use management.
- To control deforestation by providing shifting cultivation alternatives.

**3. Government Forest and Land Allocation Policy.**

Policy development and preparation of a legal framework for the management and utilisation of forest-land resources accelerated following the first National Forestry Conference in May 1989 and the adoption of a Tropical Forest Action Plan in 1991. Since then there has been rapid progress particularly since 1992 when the Decree No 99 on Land established the right of possession and use of land based on the forest land allocation policies and programs of the MAF.
3.1 **Land Allocation Policy and Procedure Development**

The earlier policies on land use planning (LUP) and allocation (LA) were founded on the containment and eventual elimination of shifting cultivation. The “thinking” on land allocation in the early 1990s indicated a strong forest protection objective. This arose from the concern of the Government of Laos (GOL) for the accelerating decrease in forest cover which was attributed firstly to shifting cultivation practices and secondly to inappropriate timber logging practices which, until a change in policy and the introduction of the temporary logging ban in 1991 (Decree 67, August 1991), were under the control of provincial authorities.

The “Plan to the Year 2000 for Stabilizing Shifting Cultivation (by Providing Permanent Occupations)”, excerpts of which are presented in Appendix 2, exemplifies the policy, the cornerstone of which was to convert shifting land use practices to permanent land use practices. The land allocation program was envisaged as an instrument to facilitate the occupation and development of permanent land use by providing identifiable parcels of agricultural land on which farming would be undertaken.

The provincial and district agricultural and forestry offices in the northern provinces of Sayabouly and Luang Prabang became active in forest-land allocation, particularly agricultural land allocation, and developed procedures based on limiting shifting cultivation areas to families in the mountainous areas in line with the thinking of the day. These approaches and procedures were initially heralded as being very successful because the area of shifting cultivation land or farm fallow land within village management areas was being reduced (which offered the possibility for an increase in regenerating forest land), which was satisfying policy objectives.

The procedures developed by the authorities in Sayabouly Province required that families being allocated agricultural land identify the particular crops which they proposed to plant on each plot of land each year. These land uses were recorded on the Land Use Certificates issued when the land was allocated. The aim of this approach was to restrict the planting of upland rice the name of which is synonymous with shifting cultivation, ie “hay” means “upland rice”. Upland rice was deemed an undesirable land use because it was the cause of shifting cultivation. Farmers were encouraged to choose alternate crops instead of upland rice.

These alternate land use approaches were elaborated in a document called Instructions for Alternate Permanent Occupations for Upland Farmers in Sayabouly Province, No 345/GSB, 1995 which provided guidelines for 13 alternatives to upland rice.

These procedures were inflexible, generally non-participatory and aimed at limiting the amount of agricultural land available to families so that the area of shifting cultivation could be decreased. The land use certificates and contracts were perceived as controlling instruments as they placed constraints on land use selections which families could make. There was little consideration for the characteristics of particular farming systems used by farmers, the model having been developed in Paklay District. Farming there is undertaken on undulating land with favourable soils and with access to markets for commercial crops. Although the model was not particularly appropriate for steeply sloping mountainous areas, it was being applied in those areas.

3.2 **Land Allocation Policy and Procedure Transition**
The period of policy and procedure transition starting in about 1993. Various decrees and directives were issued from that time. This created an enabling policy and legal framework for the development of improved procedures and methods in LUP and LA. The policy and procedure transition is characterised by three key initiatives:

- model and method development activity
- the adoption of participatory policies
- a decentralisation approach to forest-land management

### 3.2.1 Model and Method Development

In 1995 the donor community, through rural development projects, was invited by the Government of Laos (GOL) to test various LUP and LA models. This indicated a GOL concern about the prescriptive approaches which had been applied until that time and represented a start to more flexible and participatory thinking.

Following pilot LUP and LA endeavours, instructions and directives were issued in 1996 by government authorities on forest and land allocation which were designed to accelerate the effort of the program. Instruction 03/PM from the Prime Minister’s Office on the expansion of land management and land and forest allocation was augmented by Directive 822/MAF on land and forest allocation for management and use from the Ministry of Agriculture and Forestry (MAF).

The latter contained a set of implementation procedures and recommendations for forest and land allocation which evolved from pilot method development work in the Lao Swedish Forestry Program (LSFP). Part of this Directive stated that land allocation must be implemented “with a clear understanding of the area’s ecological system and it’s biological conditions, in addition to a firm understanding of the experience related to the efficient agro-forestry systems of the multi-ethnic population, in combination with new technologies”. These statements reflect a serious recognition by government of the importance of flexibility in forest and land allocation which did not exist three years previously.

From 1996 a number of donor Projects became active in programs related to forest and land allocation. Model and method development activity was undertaken in a diverse number of locations and contributed to improving forest-land allocation procedures for different agro-ecological situations including subsistence farming, commercial agro-forestry and village production forestry systems. This resulted in initiatives such as village forestry (FORMACOP) and joint forest management (LSFP) between provincial/district governments and rural communities in which participatory approaches play a major role.

During this period, staff training shifted to participatory and community oriented approaches, including rapid rural appraisal, participatory rural appraisal, needs assessments and related tools to facilitate community involvement and participation in land use decision making and forest management.

### 3.2.2 The Adoption of Participatory Approaches

In the context of forest resource management at village level participation means the involvement of villagers in decision making concerning the management and use of forest-land resources within their management areas or village boundaries.

The policy regarding participation is reflected in several legal instruments including:
Decree No. 99 on Land (1992), establishing the right of land possession and use based on the forest land allocation policies and programs of the MAF. Decision No. 429/MAF on managing forestry resources at village level (1992), establishing the rights of villagers to manage and use forests to improve their living conditions under certain conditions and rules established by the village administration. Decree No. 102/PM on organisation and administration of the village (1993), describes the roles and responsibilities of the village organisation in forest-land management.

Decree 169/PM on the management and use of forest land (1993), established the right of tenure and use of forests and forest land, property rights to trees and forests planted and the rights to forest usage in accordance with the customs of the villagers. Decree No. 186/PM on forest land allocation for forestry plantations aimed to promote tree planting, and regenerate and protect forests in order to enrich forest areas.

In 1996 a ministerial Approval/Decision No. 0054/MAF on customary rights and the use of forestry resources was issued. The rights recognised by this decision include the right to harvest forest products for household needs, as specified in the village agreement, the right to harvest for sale in sustainable volumes such types of forest products specified in the district contract, the right to hunt non-protected animals and to fish by legal means and the right to use degraded forest land or barren land in approved land use management areas with the agreement of the forest and land allocation committee.

This Decision enables the village committee to formulate specific village forest resource regulations which is a major initiative in facilitating village participation in forest resource management.

The procedures developed for LUP and LA embody the provisions of these decrees and decisions. The eight stage process for LUP and LA adopted by the GOL in 1996 advocates the participation of villagers throughout the process commencing from the time preparations are made in the village for the LUP and LA exercise with district staff until the land use certificates for agricultural parcels are issued to families and the village forest and agricultural land management agreements are jointly acknowledged by the village LUP and LA committee and the District Administration.

For a summary of the eight step LUP and LA process please refer to Appendix 3.

The methods and practices described in the Manual on Participatory Land Use Planning and Land Allocation ((officially adopted by the Department of Forestry (DOF) in May 1998 as a hand book for implementation of the LUP and LA program)) are based on participatory principles. The aim is that the intent and spirit of the relevant legislation is introduced and practised at the operational level.

### 3.2.3 A Decentralisation Approach to Forest-Land Management

In 1998 the GOL adopted a “focal site” approach to forest and land management (Pravongviengkham 1998). The purpose is to address the complexities of upland livelihood and socio-cultural systems through a decentralised approach to rural development. This approach recognises that improvements to livelihood systems within existing settlements is a more sustainable and more socially acceptable alternative.

The National Leading Committee for Decentralised Rural Development has the role to ensure concerted interventions to “focal areas”. The sustainable use of forest land is the corner stone strategy. The recently formed National Program for Shifting Cultivation Stabilisation
(NPSCS) is the agency responsible for the implementation of the policy. Promoting improved land use planning with the institutions at provincial, district and village level is a critical task for this agency. Given the limited human resources available, a training of trainers program has been initiated (Ministerial Decision 1220/AF/DP-98 on the Terms of Reference for the NPSCS) aimed at improving land use planning and extension capability in all Provinces.

This training activity is being assisted by the LSFP sub-program for LUP, wherein one course was recently conducted (1997/98) and three more training courses will be conducted in 1998/99 at regional agriculture and forestry centres. The strategy is that the LUP and LA models and methods which the LSFP is developing are disseminated through the NPSCS to provincial and district level via the training of trainers program. To the present, this mainly focused on the procedures, methods and practices within the eight stage process of LUP and LA which the GOL has adopted.

In the future, the scope of such training will be adapted to include appropriate LUP and LA methods for focal areas and National Biodiversity Conservation Areas (NBCAs), land registration procedures and methods at district level (for securing valuable land allocation data), monitoring and evaluation procedures and methods for LUP and LA programs.

This is resulting in a gradual relocation of focus towards the “land use planning” instead of “land allocation” aspects of forest and agricultural management as was the case previously.

4. Lao Swedish Forestry Program Approaches

4.1 Brief History of LUP and LA Model Development Activity

The LSFP commenced LUP and LA model and method development activity in 1993/94 when the Shifting Cultivation Sub-program of LSFP Phase 3, on request from the Department of Forestry, conducted some pilot activity on LUP and LA in seven villages adjacent to Thong Khan Research Centre. This was augmented by a short term input conducted in the village of Nam Phak in Xieng Ngeun District where participatory approaches were first tested in some detail, (Alton February 1993).

In 1995 towards the close of Phase 3 another short term input was undertaken in Hong Sa District of Sayabouly in conjunction with District staff. This work centred on Nam Thap village and was a follow up to the work undertaken at Nam Phak. It was undertaken with a group of staff from several forestry units in Vientiane under the supervision of the SFA component of LSFP. Some initial LUP and LA procedures and methods were described which became the basis for continuing work in LSFP Phase 4. The results of this work may be found in the report “Interim Report on Participatory Land Use Management and Planning”, Short Term Input, 18th May to 17th July, P.R. Jones, July 1995.

In Phase 4 a specific LUP and LA component within the LUP Sub-program was created to undertake model and method development activities. Field activity commenced in early 1996 and has continued until the present time.

4.2 “Procedures and Method” Development Work Undertaken in LSFP Phase 4.

Methodology
The LUP component is staffed by a small unit based in NOFIP in Vientiane. In the past the unit has had an establishment of 3 Lao staff and 1 adviser. The centrally based unit selects target villages in target districts each year in consultation with provincial and district PFO and DAFO staff. Field exercises are conducted in each village with local level implementation teams and villagers. The field exercises are preceded by short orientation training courses for the implementing team. Work is conducted in different regions (north, central and south) and different situations (regular village, JFM village, NBCA village) with different agro-social settings (different ethnic groups and farming systems) so that variations in experiences are gained.

The experiences are used to formulate and document procedures, methods and practices (models) which, in the past, have been presented to DOF for consideration. Adjustments are made as necessary and the models produced in manual or handbook form. Companion booklets are also produced which provide more detail on methods and practices performed during LUP and LA.

**Models Produced and Documented**

**The models produced to date are:**


**Models in Process**

1. Procedures and Methods for Registration of Land Temporary Land Use Certificates

2. Procedures and Methods for Land Allocation Monitoring and Evaluation

**Technical Booklets Prepared to Date**


2. Technical Booklet 2: Preparation of Village Forest and Agricultural Land Management Agreements - October 1998

**Technical Booklets In Preparation**


**Training Methods and Progress**

Three types of training are undertaken by the LUP component: formal courses, orientation or on-the-job training courses and practical field exercises.
The formal courses have generally been for LUP and LA program supervisors at provincial and district levels, members of the DOF LUP and LA Support Unit and Regional Training Centre staff. These are “training for trainers” events.

The orientation or on-the-job courses are generally for LUP and LA implementing personnel at provincial and district levels and also include Training Centre staff when conducted in close-by Districts. These training sessions are aimed at preparing staff for the field activities which follow in the target villages. These are “what to do” training events.

The field exercises provide practical experience and skill development for provincial, district and Training Centre staff in working with villagers to undertaken participatory LUP and LA. The field work is aimed at reinforcing the subject matter covered in the orientation training. These are “how to do” training events.

Formal Courses

Courses of 3 to 5 days duration have been conducted for central level staff on:
- Participatory Land Use Planning and Land Allocation (4)
- Survey Methods (1)

Courses of 3 to 4 days duration have been conducted at provincial training venues:
- Participatory Land Use Planning and Land Allocation (3)

Orientation or On-the-Job Training Courses

Courses of 1 to 3 days duration have been conducted for provincial, district and Training Centre staff prior to village method development exercises on:
- Participatory Land Use Planning and Land Allocation (10)

Practical Field Exercises

Training exercises of 12 to 25 days duration in method development villages (17)
Follow-up training exercises of 5-10 days duration in method development villages (3)

4.3 “Approaches” Development Work Being Undertaken in LSFP Phase 4

[a] Integrated Village Planning

The component has been involved in integrated or joint orientation training and field exercises with other sub-programs or units, notably JFM, Conservation, Extension and Shifting Cultivation and the Gender Unit. The aims of these exercises are to:
- Test procedures and methods for integrated planning at village level.
- Demonstrate the merging of the processes and procedures of LUP and LA with the processes and procedures of Extension and Village Development
- Secure continuity in extension activity after LUP and LA.

Three such exercises have been conducted in: Xieng Le Kok, Alouay Kham Noy and Na Vene.

[b] LUP and LA in Joint Forest Management (JFM) Villages

Under the JFM program there are objectives for*:
1. Implementing a partnership between the villages around the State Production Forest (SPF) and the State for the management of Dong Kapoh SPF
2. To implement participatory land use planning and land allocation in villages around Dong Kapoh SPF
3. To implement participatory village planning and management of village forests in villages around Dong Kapoh SPF
4. To facilitate village development in villages around Dong Kapoh SPF

(* Joint Forest Management, Savannakhet Province, 1997)

The LUP component has concerned itself with facilitating the achievement of Objective 2 and to a lesser extent Objective 3. It has assisted the JFM component in conducting LUP and LA exercises in demonstration villages in respect of the forest areas or land use zones outside those already included in the commercial forest production plan. The exercises aimed to start a process of LUP and LA in the Dong Kapoh villages which the staff of Phin and Phalansay Districts would continue in future years using their own resources. Work has been undertaken in 3 villages, Xieng Le Kok, Alouay Kham Noy and Ban Nalay. In the two former villages, the LUP and LA was done as part of integrated village exercises with the aim of assisting with the achievement of Objective 3.

The Districts of Phin and Phalansay now have plans in hand to complete the LUP and LA in the remaining villages by the year 2000.

[c] LUP and LA in NBCAs

The GOL has a priority for completion of LUP and LA in NBCAs as soon as possible. The LUP component is contributing to this aim by joining with the Conservation sub-program in conducting demonstration LUP and LA exercises in NBCA villages. The aims are:
• to provide conservation staff with training so they can continue the work in other NBCA villages
• to development models which are appropriate for the accelerated completion of LUP and LA in NBCAs
• to develop models which are appropriate for LUP and LA in the different classes of NBCA villages, ie, Type 1: enclave villages, Type 2: villages whose boundaries overlap those of the NBCA, Type 3: villages adjacent to the NBCA, and Type 4: villages distant from but using the NBCA.

To date work has been done in two villages of Phou Xang He NBCA, Kout Khen (Type 4), and Ban Nalay (Type 2), and one cluster of villages in Nam Puie NBCA, the Ban Na Vene cluster (Type 1).

[d] Options for LUP and LA

LUP and LA is undertaken in a range of agro-social and agro-ecological areas in which the farming systems are substantially different. While the process and procedures for LUP and LA can remain much the same for each of these situations, there needs to be adaptions within the process and procedures to accommodate the different situations. The earlier activity of LUP and LA in northern provinces as described in 3.1 above did not incorporate adaptions into the process which may lead to unsustainable land use in the longer term as land use becomes more regular on allocated parcels of land.

The LUP component has made proposals which recommend that LUP Options should be used by implementing staff in harmony with the situation or farming system encountered.
The options are explained in Discussion Paper, LUP 2: Options for Forest-Land Use Planning and Land Allocation, July 1998. There are three options described:

1. The current practice; completing the first 6 stages in the 8 step process in one exercise

2. A split stage procedure which concentrates first on village boundary delineation, forest-land use zoning and interim village agreement preparation in numbers of villages so as to accelerate the rate of completion. (appropriate for NBCAs)

3. A split stage procedure which introduces land use planning and village development planning before agricultural land allocation to families. (appropriate for Focal Areas with mountainous terrain and complex farming systems).

Option 3 introduces the activities of preparing a village land use plan and preparing a village development plan.

When the term land use planning is used in practice it usually means planning for the allocation of agricultural land only. This is so because planning methodologies have still not been properly developed for: village conservation forest management, village natural production forest management, village plantation forest management, and village utilisation forest management.

Therefore, in looking to the future, it is appropriate to include a village land use plan activity or step which covers all the forest and agricultural land uses. In addition, by using integrated planning methods, which various Projects are also testing and developing, a village development plan activity or step could be introduced into the overall process.

Thus LUP and LA as it is known at present would eventually be subsumed into a village land use and development planning process.

Options 2 and Option 3 are summarised in Appendix 4.

[e] District Land Registration and LUP and LA Information Management Procedures

The national LUP and LA program is generating large amounts of valuable data including land use planning data, land allocation data, village boundary agreements, village forest and agricultural land management agreements, maps etc. This is in danger of being compromised or completely lost because appropriate recording, storage or retrieval systems at district level or provincial levels do not exist.

The LUP component has started piloting and demonstrating two systems at DAFO offices aimed at addressing this weakness:

- A Land Registration System (for Temporary Land Use Certificates)
- A LUP and LA Information Storage and Management System (for the other LUP and LA information)

The initial work on the former has been started in No 10 village in Xieng Ngeun village and will be continued by the central core team with district and provincial staff in 1989/99.

Draft Guidelines for the Storage and Management of LUP and LA data have been prepared and will be introduced to the staff at district level during future monitoring and evaluation visits undertaken by the M and E members of the central core team.
Monitoring and Evaluation of LUP and LA

Criteria, purposes and types of monitoring and evaluation on LUP and LA programs have been identified and procedures and methods are being developed with the assistance of an Associate Expert who joined the sub-program in mid July 1998. The purposes of the monitoring effort are:

1. To monitor the impact of LUP and LA on families who have been allocated agricultural land and village communities who have assumed the responsibility for the management of village forest areas.

2. To monitor the degree of adoption of improved LUP and LA practices by District staff.

3. To monitor the level of staff knowledge and skills on a range of procedures and methods used in LUP and LA.

4. To monitor the capability and commitment of the village LUP and LA committees to manage the LUP and LA activity in villages.

5. To monitor the quality of LUP and LA reporting procedures.

To date information has been collected in target villages in northern and southern Districts using both group and family interviews and discussion sessions with both villagers and staff. The information from the southern target areas has been analysed and reports prepared for consideration. The information on this activity has recently been collated into a document named: “Status Report - Progress in Monitoring and Evaluation of the Land Use Planning and Land Allocation Activities, November 1998”, which includes:

- the purposes of the monitoring
- the types of monitoring being undertaken
- the methods used to undertake the monitoring
- the reports showing the initial results of the first round of monitoring

5. LUP and LA Progress in Savannakhet Province

The LUP component has assisted the LUP and LA program through formal, orientation and on-the-job training courses and exercises in five villages during 1996, 1997 and 1998. The training accomplished in the target or model building villages was as follows:

<table>
<thead>
<tr>
<th>Village</th>
<th>District</th>
<th>Year</th>
<th>Training</th>
<th>Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khut Kaen</td>
<td>Atsaphone</td>
<td>1995/96</td>
<td>Orientation 3 days</td>
<td>NBCA buffer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>On-the-job 15 days</td>
<td></td>
</tr>
<tr>
<td>Xieng Le Kok</td>
<td>Phalansay</td>
<td>1996/97</td>
<td>Orientation 4 days</td>
<td>JFM/VDP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>On-the-job 15 days</td>
<td></td>
</tr>
<tr>
<td>Kanin</td>
<td>Phin</td>
<td>1997/98</td>
<td>On-the-job 5 days</td>
<td>Normal Village</td>
</tr>
<tr>
<td>Alouay/Phin</td>
<td>Phalansay</td>
<td>1997/98</td>
<td>Formal 5 days</td>
<td>JFM/VDP</td>
</tr>
<tr>
<td>Kham Noy</td>
<td></td>
<td></td>
<td>On-the-job 21 days</td>
<td></td>
</tr>
</tbody>
</table>

11
Nalay * Phalansay 1997/98 On-the-job 17 days JFM/NBCA

* Formal training was combined for Alouay/Kham Noy and Nalay at Xepon TC

At Kout Kaen, Provincial, District, LUP, JFM and Conservation participated.
At Xieng Le Kok, Provincial, District, LUP, JFM, Xepon Centre, and Extension participated.
At Kanin, District, LUP and Extension participated.
At Alouay/Kham Noy, Provincial, District, Xepon TC, LUP, JFM, Conservation and Extension participated.
At Nalay, Provincial, District, Xepon TC, LUP, JFM, Conservation participated.

Monitoring and evaluation activities have been undertaken in each of these villages except Kanin which is planned for the near future. In addition monitoring visits have been made to Song Hong (Atsaphone District), Nathong (Phin District) and Dong Savan in Phalansay District.

Strategies

1. A plan to reduce and to eventually halt shifting cultivation practices through a program of land allocation to rural communities.
2. Watershed protection, prevention of soil erosion, environmental protection and the protection of biological genetic resources.
3. Forest planting, rehabilitation and natural regeneration.
4. Rational utilisation of forest resources.
5. Research and studies on flora and fauna species
6. Reorganisation and strengthening of the forest sector to manage forests.

Objectives

- To change the emphasis from forest extraction to sustainable development.
- For the GoL to provide forest regulatory services at national level.
- To institute a new system of natural resource planning and management.
- To institute national jurisdiction by the DoF over forest resources.
- To implement programs of forest management and conservation including the development of a protected area system.
- To replace the concession system by a contract system providing incentives for sustainable yield management.
- To reform the post harvest marketing, pricing and taxation systems to maximise capture of rents by government from sustainable forest management.
- To emphasise community mobilisation and the provision of incentives to communities for resource management, including the development of a clear system of use rights and local land use management.
- To control deforestation by providing shifting cultivation alternatives.

Appendix 2: Excerpts from The “Plan to the Year 2000 for Stabilising Shifting Cultivation (by Providing Permanent Occupations)”.

Forest Situation

Since 1941, about 5.3 million ha of forest has been lost, which caused the reduction of the forest cover from 70% in 1940 to 47% in 1981. In 1940, the forest area was 16.5 million ha and in 1981 the forest area remaining was only 11.2 million ha.

Forest/Land Use Type:

1. Current forest: 11,166,900 ha (47.1%)
   - Dipterocarp Forest 1,206,400 ha
   - Lower dry evergreen 85,500 ha
   - Lower mixed deciduous 864,500 ha
   - Upper mixed deciduous 7,449,400 ha
   - Gallery Forest 87,500 ha
   - Coniferous forest 132,200 ha
   - Mixed needle and broad leafed 280,500 ha

2. Potential forest: 8,949,000 ha (37.7%)
3. Other wooded areas: 1,444,400 ha (6%)
4. Permanent agricultural areas: 849,500 ha (3.5%)
5. Other land use: 1,269,500 ha (5.3%)

The main causes of forest destruction are:

- Slash and burn cultivation
- Forest fires
- Indiscriminate logging

Objectives

The objectives of the plan for stabilising shifting cultivation are to:

- improve the living standard of the hill people through the adoption of permanent land use systems for which the government will allocate adequate land to each family for agricultural production.
- stabilise shifting cultivation and stop the indiscriminate logging operations which are the most critical issues now, and regenerate the forest so as to protect the environment and enhance the sustainable use of forest.
- create co-operation and friendship among the ethnic groups and gradually reduce the economic gap between the urban and rural areas through the improvement of infrastructure, the socio-economic situation and education in the rural areas.

Strategy for Stabilising Shifting Cultivation

To fulfill the stated objectives, the strategy should reflect the socio-economic, cultural and topographical situation of each locality. The strategy is therefore to link the stabilisation of shifting to the rural development which focuses on the adoption of permanent occupations.
This approach will not only provide the food sufficiency to the rural people but also improve the socio-economic and cultural situation in each locality.

Based on the general guideline of the government, the stabilisation of shifting cultivation will be achieved by the adoption by the shifting cultivators of rice paddy cultivation and other permanent occupations such as animal husbandry, fish culture, commercial tree planting and cash crop growing.

In general, the stabilisation of shifting cultivation will avoid the relocation of the population except for the people who practise shifting cultivation in the water source forests, in conservation forest and in densely forested areas. The relocated people should be resettled in the area where permanent occupations could be arranged. Necessary arrangements should be made for land allocation before they are relocated to the new areas. Infrastructure such as irrigation systems should be developed to facilitate relocation, and families would be supplied with rice for consumption while they wait for production from allocated land.

**Output**

Based on the prevailing area conditions, financial capacity and available human resources, the government has set targets, from now to the year 2000, for the adoption by 160 000 families or about 900 000 people covering 73% of the total shifting cultivation families, four main permanent occupations. These are broken down as follows:

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of families</th>
</tr>
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<tbody>
<tr>
<td>Rice paddy</td>
<td>80 000</td>
</tr>
<tr>
<td>Animal husbandry and fish culture</td>
<td>20 280</td>
</tr>
<tr>
<td>Commercial tree planting</td>
<td>40 000</td>
</tr>
<tr>
<td>Other agricultural crops</td>
<td>19 720</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>160 000</strong></td>
</tr>
</tbody>
</table>

**Number of Families per Region**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>No. families</th>
<th>Northern</th>
<th>Central</th>
<th>Southern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice paddy</td>
<td>80 000</td>
<td>65 000</td>
<td>12 000</td>
<td>3 000</td>
</tr>
<tr>
<td>Animal husbandry and fish culture</td>
<td>20 280</td>
<td>12 030</td>
<td>4 750</td>
<td>3 500</td>
</tr>
<tr>
<td>Commercial trees</td>
<td>40 000</td>
<td>21 480</td>
<td>15 400</td>
<td>3 120</td>
</tr>
<tr>
<td>Other crops</td>
<td>19 720</td>
<td>7 888</td>
<td>6 902</td>
<td>4 930</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>160 000</strong></td>
<td><strong>106 398</strong></td>
<td><strong>39 052</strong></td>
<td><strong>14 550</strong></td>
</tr>
</tbody>
</table>

**Potential for Arranging Permanent Occupations for Shifting Cultivators**

Based on the statistical data, in the whole country there are areas of about 9 992 000 ha on which the proposed permanent agricultural developments could be undertaken. This areas available are located in the three regions as follows:

<table>
<thead>
<tr>
<th>Area for rice paddy</th>
<th>63 000</th>
<th>499 000</th>
<th>109 000</th>
<th>671 000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area for tree planting</td>
<td>5 174 000</td>
<td>1 428 000</td>
<td>631 000</td>
<td>7233 000</td>
</tr>
<tr>
<td>Grass land for animal grazing</td>
<td>368 000</td>
<td>326 000</td>
<td>110 000</td>
<td>804 000</td>
</tr>
<tr>
<td>Area for agricultural crops</td>
<td>234 000</td>
<td>696 000</td>
<td>355 000</td>
<td>1 285 000</td>
</tr>
</tbody>
</table>

**Extension Plan to Support the Permanent Agricultural Developments.**
The strategy mentioned above indicates that the stabilisation of shifting cultivation will be undertaken by the shifting cultivators by developing permanent agricultural occupations such as rice paddy, animal husbandry, commercial tree planting and cash crop production. The government will launch an incentive and extension program to support the shifting cultivators in establishing and sustaining their new permanent farming activities to reduce the possibilities that they will return to shifting cultivation practices. These incentives are as follows:

1. Supply of food during the establishment phase.
2. Construction of small scale irrigation systems.
3. Construction of access roads to the development areas.
4. Provision of social services such as education and public health care.
5. Extension and training.

**Extension and Training**

For the effective and technically sound implementation of the new occupation program, the government will establish an extension unit which will provide training and technical advice to the farmers on the various technologies. The unit will consists of 3 teams as follows:

- Motivation teams
- Land and forest allocation teams
- Technical extension team

At the provincial level, a shifting cultivation stabilisation team, which consists of staff from different disciplines, will be formed. This team is under the direct guidance of the Provincial Governor. The responsibility of the team is to do planning, extension training and land and forest allocation exercises in target areas.

**Select Integrated Development Areas**

This program will be implemented by provinces and districts. The provincial authority, in cooperation with the district, will select the areas which might be either a group of villages or a whole district. Each area will have its own plan which will reflect the socio-economic situation of the area itself, and the plan of the district and province.

Through-out the country 77 areas have been selected for the integrated development program. In each area, the four main permanent agricultural development activities will be implemented. In addition, the government will invest in infrastructure development so as to support the adoption of the permanent developments.
Appendix 3: A Summary of the Eight Step Process of LUP and LA

Stage 1: Preparation for Implementing LUP and LA Activities:
   a) Staff Training and Preparation
   b) Villager Consultation and Preparation

Stage 2: Village Boundary Survey, Land Use Zoning, Forest Surveys and Land Use Mapping

Stage 3: Data Collection and Analysis

Stage 4: Land Use Planning and Land Allocation

Stage 5: Agricultural Field Measurement

Stage 6: Preparation of Forest and Agricultural Agreements and Transferring Rights to Villagers

Stage 7: Land Use Management Extension

Stage 8: Monitoring and Evaluation

The 8 stages have been divided into four groups to indicate that the stages of LUP and LA may be carried out in phases depending on circumstances.
Appendix 4: Options for Land Use Planning and Land Allocation

OPTION 2

This option has the following parts:

Part 1: and when villagers understand and can manage the forest-land agreement
- preparation of staff and villagers
- village boundary
- forest-land use zones
- data collection and analysis
- proposed land use mapping
- forest-land management agreement
- start land management extension

Part 2: and following immediately after the issue of agricultural land use certificates
- preparation for agricultural land allocation
- agricultural land allocation
- agricultural land measurement
- issue of agricultural land use certificates

Part 3:
- continuation of land use management extension
- monitoring and evaluation
**OPTION 3**

This option has the following parts:

<table>
<thead>
<tr>
<th>Part 1:</th>
</tr>
</thead>
</table>
| • staff and villager preparation  
• village boundary  
• forest-land use zoning  
• data collection and analysis  
• proposed land use mapping  
• forest-land management agreement |

and when villagers understand and are able to manage the forest-land agreement,

<table>
<thead>
<tr>
<th>Part 2:</th>
</tr>
</thead>
</table>
| • village land use plan  
• village development plan  
• implementation of extension and development activities in the land use plan and the village development plan |

and at a time when villagers understand and can manage the village land use plan and village development plan,

<table>
<thead>
<tr>
<th>Part 3:</th>
</tr>
</thead>
</table>
| • preparation for agricultural land allocation  
• agricultural land allocation  
• agricultural land measurement  
• issue agricultural land use certificates |

and closely following the allocation of agricultural land,

<table>
<thead>
<tr>
<th>Part 4:</th>
</tr>
</thead>
</table>
| • continuation of land use management extension  
• monitoring and evaluation |