YANG MAO COMMUNE PEOPLE'S COMMITTEE

TUL VILLAGE

# 5 YEAR COMMUNITY FOREST MANAGEMENT PLAN 2008 - 2012

# TUL VILLAGE


**July, 2008**

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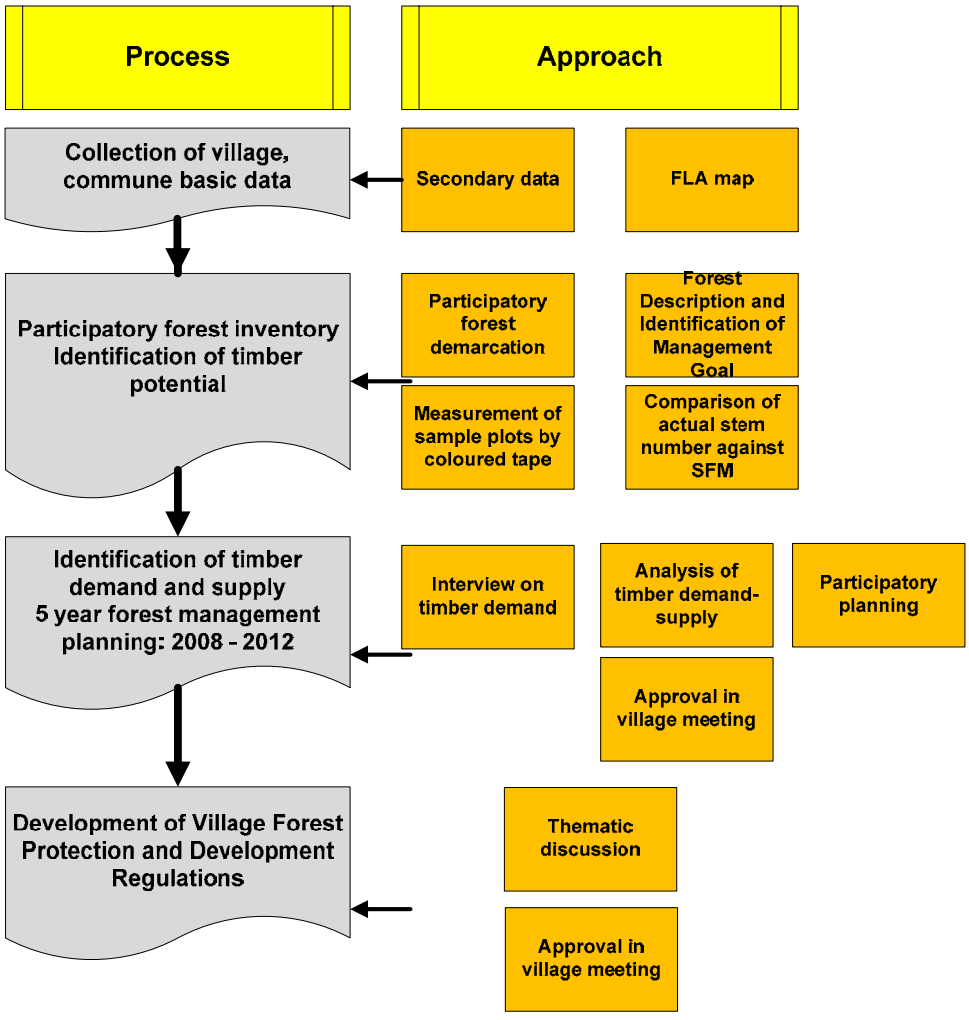
## 1. Introduction

As continuation of the efforts to identify a practical benefit sharing mechanism in community forest management, Dak Lak PPC has issued a Decision numbered 2010/UBND-NL on 29/5/2008 allowing another pilot on the benefit sharing mechanism at request of DARD in the Official Letter No. 325/SNNNT dated 10/4/2008. Following this decision, on 24/6/2008 Krông Bông PC organized a meeting with relevant sections of the district, province and RDDL representatives to agree on the implementing steps in Tul village, Yang Mao commune.

In this context, trainings on CFM planning and Village Forest Protection & Development Regulations (VFPDR) were organized for Tul village community between 06th and 14th of July, 2008.

A 5-year community forest management plan was developed for a time period from 2008 – 2012.

The process involved the participatory approach where villagers had chances to participate directly in forest inventory, resource assessment and management planning, stem number measurement with application of coloured tape and sustainable forest model in order to identify the timber potential of forests. The process and approach of CFM planning and VFPDR development is described in the following diagram. (See the work plan in the annexes)




During the planning process, apart from the participation of villagers, it also involved the support of RDDL, DARD and consultant team (PhD. Bảo Huy, PhD. Võ Hùng, Mr. Hoàng

Trọng Khánh) and trainees of the CFM training who came from FDD, Krong Bong district Economic Section, Environment Section, District Forest Protection unit, Yang Mao CPC and Tul Village Forest management Board. (See list of participants in annexes)

## 2. General situation of Tul village

Tul village is situated in Yang Mao commune of Krông Bông district, Dak lak province. The residential area of the village is close to the commune center. Yang Mao commune is 37 km from the district center to the south-east. The natural area of the commune is 40,172 ha, comprising 11 villages with 8 EM villages.

1st village meeting on CFM

Tul village has 70 households; 61 households of M'nong ethnics, and 9 Kinh households. There are total 462 persons in the village: 389 male; 173 female. Workforce is 227 persons.

The local villagers practice mainly wet rice cultivation with two crops in a year and other short–rotation crops in addition. The paddy fields are distributed streams nearby the village and some are found on old upland fields. The people have difficult economic situation, highly relying on forests. The knowledge level is low.

The household wealth ranking results in 48 poor households, accounting for 69%. This implies the very poor conditions of local people. Most of poor households have limited farming land. Therefore, forest land allocation and CFM planning would be a good basis to involve the poor households with restricted farming land to forest production and income generation from forestry.

In the village 56 households have electricity, mainly used for living not yet for production.

The irrigation system in the village is concreted.

Drinking water is also a problem for many households, especially in dry season.

## 3. Objectives of 5 year forest management plan

The forest management plan of Tul village is developed with the objectives defined as follows:

- Support the community to sustainably manage 964 ha of natural forest and forest land
- Protect watershed area
- Provide sustainable supply of forest products and step-wise improvement of livelihood of local villagers.

## 4. Assessment of forest resource and timber potential in 5 years

### 4.1 Blocking, naming, local status, management goal, measurement

14 forest blocks in the compartment 1204 are allocated to the community. The blocks are demarcated, labeled with local names, identified their management goals, measured by the villagers themselves. Total area of 14 blocks is 964 ha. These blocks are located in the area earmarked as production forests.

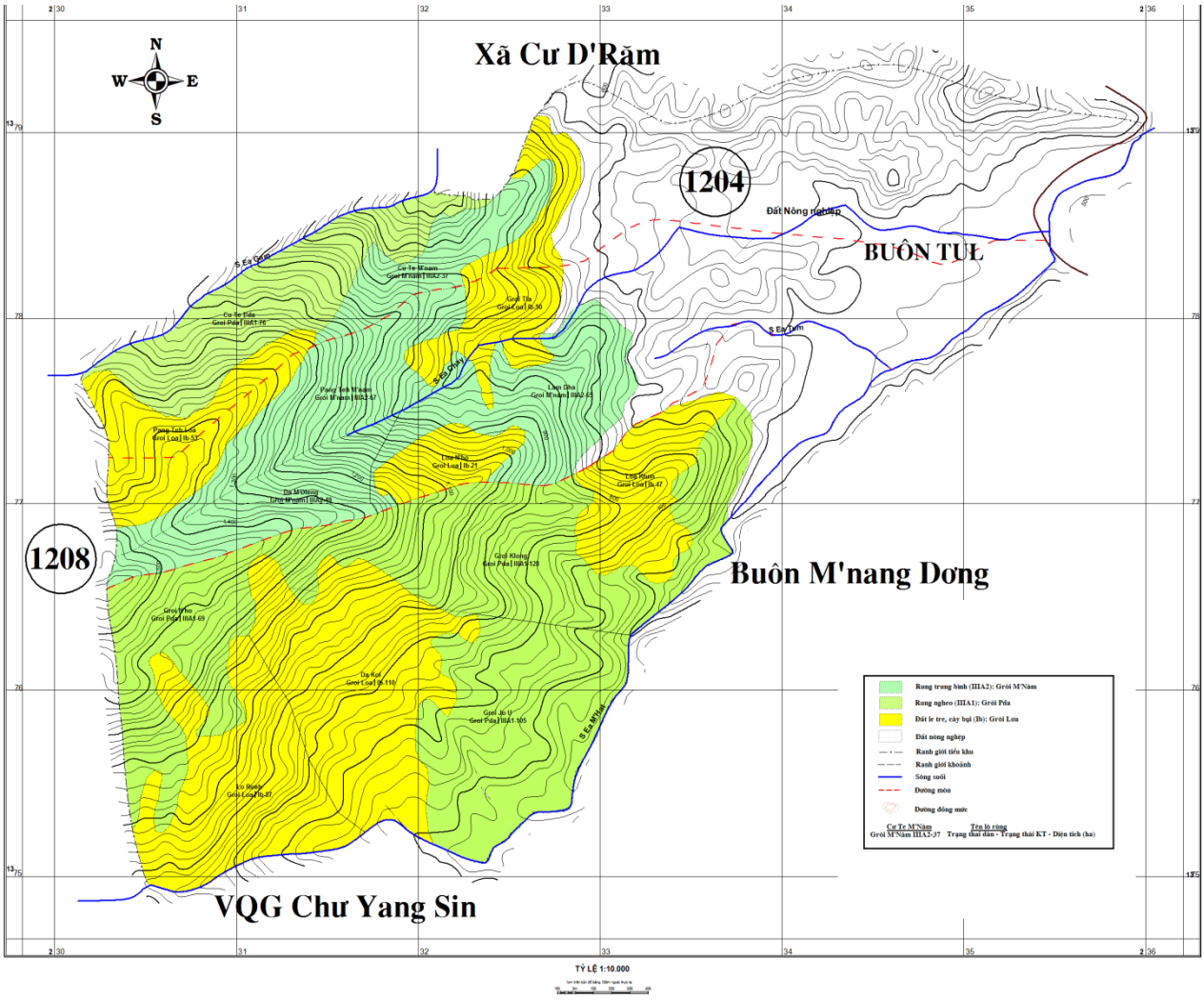
**Area and status of Tul village forests**

| No. | Forest status | | Number of blocks | Area (ha) |
|---|---|---|---|---|
| | Technical | Local | | |
| 1 | Medium - IIIA2 | Grôi M'Nâm | 4 | 218 |
| 2 | Poor - IIIA1 | Grôi Pda | 4 | 378 |
| 3 | Brush, bamboo - Ib | Grôi Lơa | 6 | 368 |
| | **Total** | | **14** | **964** |

**Characteristics and management goals of Tul village forests**

| No | Compartment | Local name of block | Status | | Area (ha) | Management goal | Forest planning |
|---|---|---|---|---|---|---|---|
| | | | Technical | Local | | | |
| 1 | 1240 | Cư Tê M'nâm | IIIA2 | Grôi M'Nâm | 37 | Big timber and NTFP | Production forest |
| 2 | | Păng Teh M'Nâm | IIIA2 | Grôi M'Nâm | 67 | Big timber and NTFP | |
| 3 | | Dă M'Diêng | IIIA2 | Grôi M'Nâm | 49 | Big timber and NTFP | |
| 4 | | Lâm Dhă | IIIA2 | Grôi M'Nâm | 65 | Big timber and NTFP | |
| 5 | | Cư Tê Pda | IIIA1 | Grôi Pda | 76 | Big timber and NTFP | |
| 6 | | Păng Teh Lơa | Ib | Grôi Lơa | 53 | Big timber and NTFP | |
| 7 | | Grôi Tlă | Ib | Grôi Lơa | 50 | Small and medium-sized timber | |
| 8 | | Lơa N'Hô | Ib | Grôi Lơa | 21 | Small and medium-sized timber | |
| 9 | | Grôi N'Hô | IIIA1 | Grôi Pda | 69 | Big timber and NTFP | |
| 10 | | Grôi Klông | IIIA1 | Grôi Pda | 128 | Big timber and NTFP | |
| 11 | | Lơa Ktum | Ib | Grôi Lơa | 47 | Small and medium-sized timber | |
| 12 | | Lỡ Reuh | Ib | Grôi Lơa | 87 | Small and medium-sized timber | |
| 13 | | Dă Kơi | Ib | Grôi Lơa | 110 | Small and medium-sized timber | |
| 14 | | Grôi Jơ U | IIIA1 | Grôi Pda | 105 | Watershed protection | |
| **Total** | | | | | **964** | | |

# COMMUNITY FOREST MAP OF TUL VILLAGE




## 4.2 Block description

14 blocks are described, with 4 blocks in $IIIA_2$ status (Grôi M'Nâm) including: Cư Tê M'Nâm, Păng Teh M'Nâm, Dă M'Diêng, Lâm Dhă; 4 blocks in $IIIA_1$ status (Grôi Pđa): Cư Tê Pđa, Grôi N'Hô, Grôi Klông and Grôi Jơ ũ; 6 blocks in Ic status, with bamboo (Grôi Lơa): Grôi Tlă, Păng Teh Lơa, Lơa N'Hô, Lơa Ktum, Dă Kơi and block of Lỗ Ruch. In parallel with description, problems, opportunities and solutions are also identified for each block. The outcome is presented in the annexes.

Farmers participate in block description and discussion on management goals

### 4.3 Assessment of timber potential of blocks

Of the total 14 blocks, through discussion, 4 blocks with timber potential in the next 5 years are identified, they are Cư tê M'Nâm, Păng Teh M'Nâm, Dă M'Diêng and Lâm Dha, therefore forest inventory is conducted in these 4 blocks. The participatory inventory method is applied; stem numbers are measured in sample plots with 500$m^2$ each. Farmers are instructed how to measure trees with coloured diameter classes on the basis of sustainable forest model (SFM). This is a basis for identification of tree number in each diameter class per ha and per block to be harvested in the next 5 years.

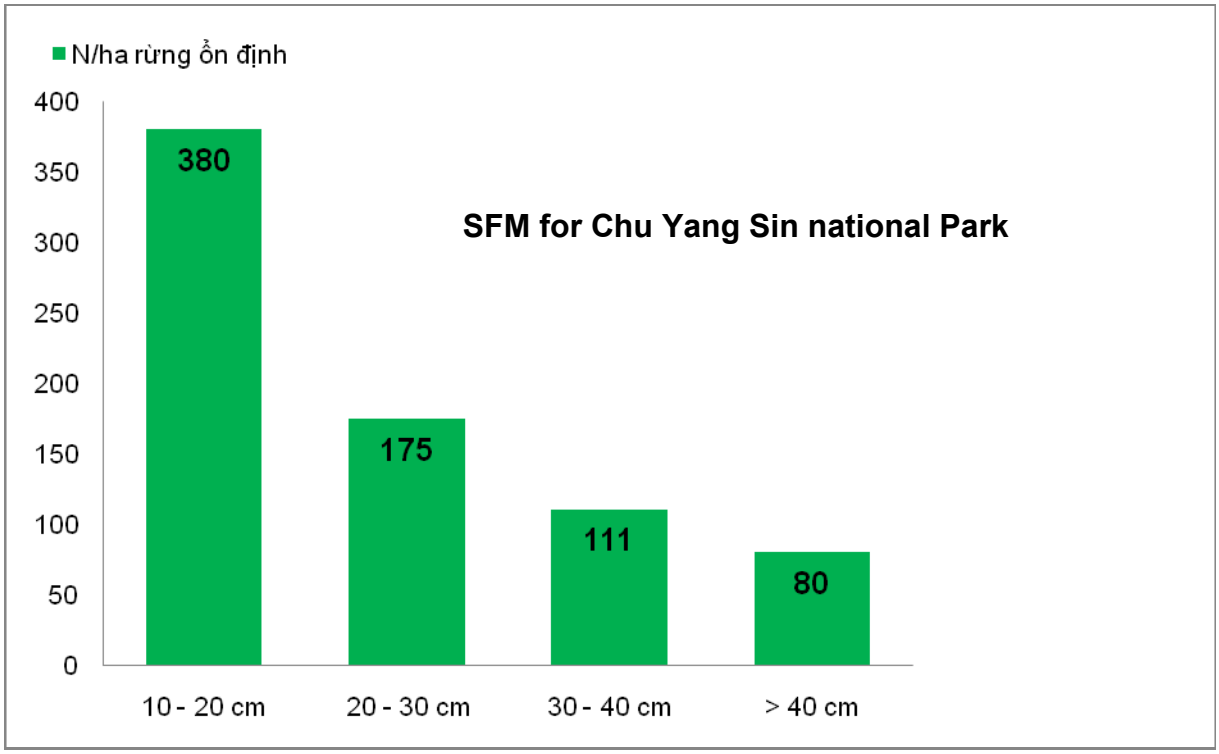
**Coloured diameter classes**

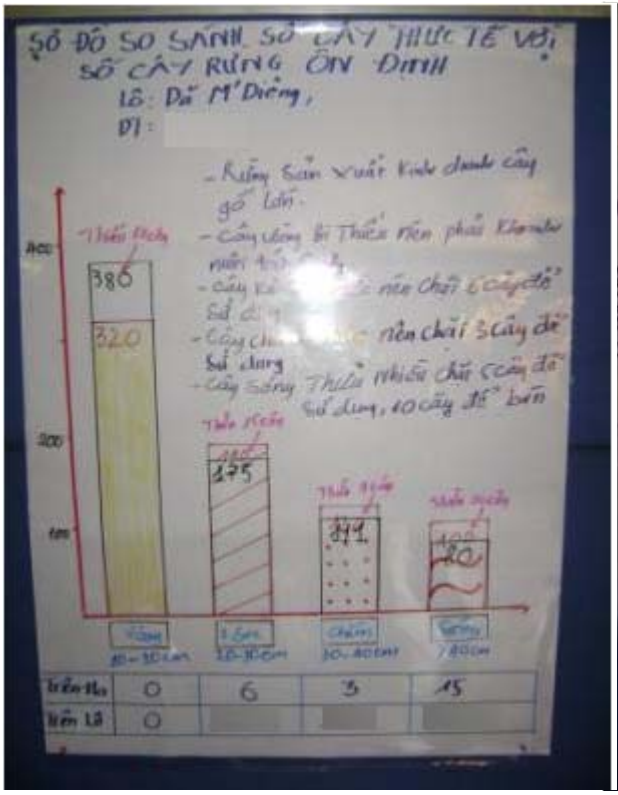
| Yellow | Stripes | Dots | Wave |
|---|---|---|---|
| 10 - 20cm | 21 - 30cm | 31 - 40cm | > 40cm |

**Stem number distribution in diameter classes of 4 blocks**

| No | Block name | Area (ha) | Stem number/ ha | Stem number in dia. classes/ha | | | | Stem number/block | Stem number in dia. classes/block | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Yellow | Stripes | Dots | Wave | | Yellow | Stripes | Dots | Wave |
| 1 | Cư Tê M'Nâm | 37 | 630 | 292 | 166 | 56 | 116 | 23,310 | 10,804 | 6,142 | 2,072 | 4,292 |
| 2 | Păng Teh M'Nâm | 67 | 715 | 340 | 160 | 82 | 133 | 47,905 | 22,780 | 10,720 | 5,494 | 8,911 |
| 3 | Dă M'Diêng | 49 | 730 | 320 | 190 | 120 | 100 | 35,770 | 15,680 | 9,310 | 5,880 | 4,900 |
| 4 | Lâm Phă | 65 | 530 | 250 | 115 | 90 | 75 | 34,450 | 16,250 | 7,475 | 5,850 | 4,875 |

Actual stem number/ha in each diameter class of one block is compared against the SFM to identify the potential supply of timber in 5 years. Sustainable Forest Model is a basis to assure to sustainability of forest stand during the management process, therefore the actual stem number distribution is compared against the SFM to identify the number of harvestable trees in each diameter class while the sustainability is still guaranteed. If the actual stem number/ha of a block is higher than that of the SFM then the surplus can be harvested; otherwise it should be tended and cared more without any harvesting. In addition, the deficiency in some diameter classes can be compensated by the reduction of trees to be harvested in other classes with surplus.


N/ha rừng ổn định
400
350
300
250
200
150
100
50
0
380
175
111
80
10 - 20 cm
20 - 30 cm
30 - 40 cm
> 40 cm
SFM for Chu Yang Sin national Park


SỐ ĐỒ SO SÁNH SỐ CÂY THỰC TẾ VỚI
SỐ CÂY RỪNG ỔN ĐỊNH
LÔ: Dã M'Diêng,
ĐT:
380
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175
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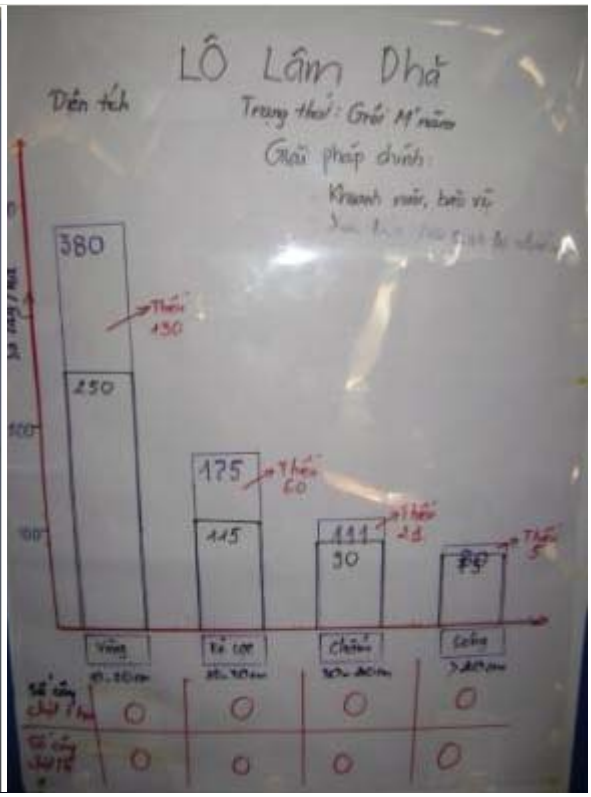
6
3
15


LÔ Lâm Dhă
Diện tích
Trạng thái: Giải M'nâm
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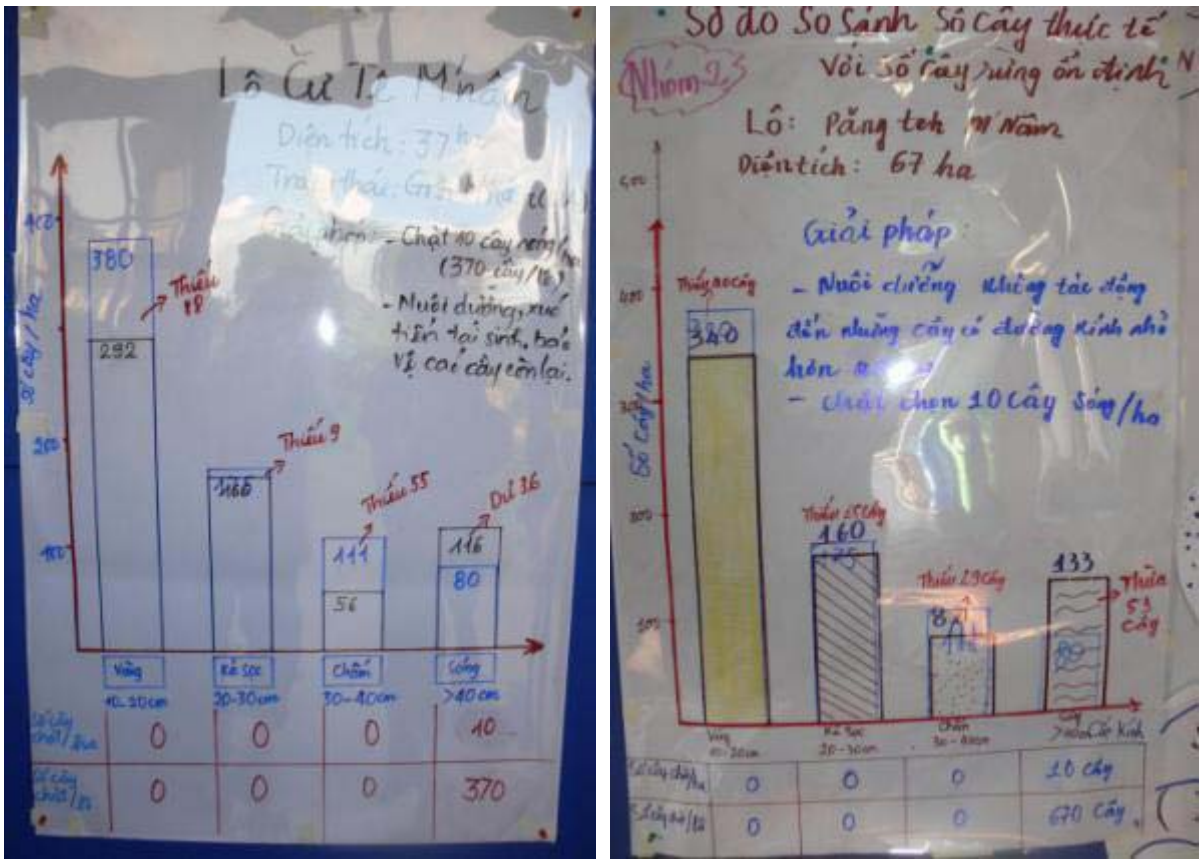



*Comparison of actual stem number distribution in each block against SFM*

Based on this comparison and the identified stem number/ha and stem number/block, under the technical support of the consultants, villagers discussed the specific silvicultural measures to be applied in each block. Of the 4 assessed forest blocks, 3 have potential to supply timber in the next 5 years, i.e. Cư Tê M'Nâm, Păng Teh M'Nâm and Dă M'Diêng, the remaining block named as Lâm Dha has insufficient stem number in diameter classes as compared with SFM.

**Potential stem number of 3 blocks in 5 years and proposed measures for each block**

| Block | Area (ha) | Measure | Dia. colour | Measured trees /ha | Harvestable trees/ha | Harvestable trees/block |
|---|---|---|---|---|---|---|
| Cư Tê M'Nâm | 37 | - Selective cutting of 10 trees in wave class/ha, retaining trees as source for propagation<br>- Promotion of natural regeneration, protection of standing trees. | Yellow | 292 | 0 | 0 |
| | | | Stripes | 166 | 0 | 0 |
| | | | Dots | 56 | 0 | 0 |
| | | | Wave | 116 | 10 | 370 |
| Păng Teh M'Nâm | 67 | - Selective cutting of 10 trees in wave class/ha, retaining trees as source for propagation<br>- Forest protection | Yellow | 300 | 0 | 0 |
| | | | Stripes | 160 | 0 | 0 |
| | | | Dots | 82 | 0 | 0 |
| | | | Wave | 133 | 10 | 670 |
| Dăng MDiêng | 49 | - Selective cutting in 3 classes of stripes, dots and wave<br>- Forest protection | Yellow | 320 | 0 | 0 |
| | | | Stripes | 190 | 6 | 294 |
| | | | Dots | 120 | 3 | 147 |
| | | | Wave | 100 | 15 | 735 |
| **Total** | **153** | | **Yellow** | | | **0** |
| | | | **Stripes** | | | **294** |
| | | | **Dots** | | | **147** |
| | | | **Wave** | | | **1775** |

## 5. Timber demand of Tul village in 5 year and demand-supply balance

Farmers involve in assessment of timber needs

The assessment of community demand showed that villagers were in need of timber for making house, kitchen, warehouse, cowshed, grave, coffin, etc.

Key villagers together with technical experts discussed and identified timber need of the village for own consumption in 5 years.

**Timber demand of Tul village in 5 years 2008 – 2012**

| Product | Coloured dia. class | Unit requirements | Annual village requirements | Total for 5 years | Remark |
|---|---|---|---|---|---|
| Living house | Dots | 4 | 12 | 60 | 3/year |
| | Wave | 5 | 15 | 75 | |
| Kitchen | Yellow | 10 | 30 | 150 | 3/year |
| | Stripes | 4 | 12 | 60 | |
| | Dots | 2 | 6 | 30 | |
| Field shed | Yellow | 8 | 80 | 400 | 10/year |
| Cowshed | Yellow | 19 | 76 | 380 | 4/year |
| Pig-sty | Yellow | 6 | 30 | 150 | 5/year |
| Grave | Yellow | 4 | | 4 | For whole village |
| | Stripes | 1 | | 1 | |
| Coffin | Wave | 1 | | 3 | 3 in 5 years |
| Bench | Wave | 1 | | 1 | 1 in 5 years |
| **Total** | **Yellow** | | | **1084** | |
| | **Stripes** | | | **61** | |
| | **Dots** | | | **90** | |
| | **Wave** | | | **79** | |

Note:

- Timber for housing: Pinus kesiya, Lithocarpus, Michelia balansae
- Coffin: Michelia balansae

**Specific requirements for 1 house:**

| Specification | Quantity | Coloured dia.class | | |
|---|---|---|---|---|
| | | Colour | Quantity | Length (m) |
| Main column 5m | 8 | Dots | 4 | 6 – 13 |
| Transverse beam | 12 | Wave | 1 | 10 – 12 |
| Vertical beam 8m | 8 | Wave | 0.5 | 10 – 12 |
| Rafter 4,5m | 8 | Wave | 0.5 | 10 – 12 |
| Floor girder & wall girder 2,5m | 48 | Wave | 0.5 | 10 – 12 |
| Plank for floor 5m | 100 | Wave | 1 | 10 – 12 |
| Plank for wall 2,5m | 250 | Wave | 1 | 10 – 12 |
| Purlin 2,5m | 42 | Wave | 0.5 | 10 – 12 |
| Doors and others | Salvage | Wave | | |
| **Total** | | **Dots** | **4** | |
| | | **Wave** | **5** | |

The following timber demand-supply balance of Tul village is based on the identified harvestable stem number of 3 out of 4 inventoried blocks, including: Cư Tê M'Nâm, Păng Teh M'Nâm, Dă M'Diêng and the assessment of village timber demand in 5 year.

**Demand-supply balance of Tul village in 5 years: 2008 – 2012**

| Block | Harvestable trees per diameter class in 5 years | | | |
|---|---|---|---|---|
| | Yellow (10-20 cm) | Stripes (20-30 cm) | Dots (30-40 cm) | Wave (>40 cm) |
| Cư Tê M'Nâm | 0 | 0 | 0 | 370 |
| Păng Teh M'nâm | 0 | 0 | 0 | 670 |
| Dă M'Diêng | 0 | 294 | 147 | 735 |
| **Total potential supply of 3 blocks in 5 years** | **0** | **294** | **147** | **1775** |
| | | | | |
| **Total demand of village in 5 years** | **1084** | **61** | **90** | **79** |
| **Demand-supply balance** | **minus 1.084** | **surplus 233** | **surplus 57** | **surplus 1696** |
| **Own consumption harvesting in 5 years** | **0** | **294** (61 + 233 (in lieu of 466 yellow trees)) | **147** (90 + 57 (in lieu of 228 yellow trees)) | **99** (79 + 20 (in lieu of 390 yellow trees)) |
| **Commercial harvesting in 5 years** | **0** | **0** | **0** | **1676** |
| **Average own consumption harvest in 1 year** | **0** | **59** | **30** | **20** |
| **Average commercial harvest in 1 year** | **0** | **0** | **0** | **335** |

*Note:*

- *1 stripe tree in lieu of 2 yellow trees*
- *1 dot in lieu of 4 yellows*
- *1 wave in lieu of 20 yellows*

The demand-supply balance shows that there is insufficient number of yellow trees in all blocks, while harvestable trees are available in other 3 classes of stripes, dots, wave, and most of the blocks have surplus trees in wave class which implies a quite mature forest stand. The supply potential of these 3 blocks meets the requirements of own consumption and even for commercial use of the community in 5 years. However, during the management, the community should use more trees in stripes, dots, wave classes in lieu of yellow trees as there is deficiency in this class. The commercial harvesting should take out the wave trees that the forests can supply after fulfilling the requirements of own consumption, in order to avoid a too mature forest stand and promote the development of regenerated trees and under-storey trees which are still insufficient.

## 6. 5 year forest management plan of Tul village 2008 – 2012

The 5-year forest management plan of the community is developed on the basis of the previous discussions on:

- Management goals of blocks, including analysis of problems, opportunities, measures for each block.
- Comparison Diagram of stem number distribution against SFM.
- Assessment of timber demand of community and demand-supply balance

The plan is developed following the principles of:

i) Forest protection
ii) Forest development: new planting and forest enrichment
iii) Forest utilization: Own consumption and commercial harvesting.

The forest protection plan focuses on the implementation organization of 14 blocks and development of the village forest protection and development regulations

The forest development plan includes the activities of forest planting on some bare land areas with acacia species and forest enrichment with indigenous species of pinus kesiya, Hopea odorata in poor forests, after harvesting. In average, 10 – 15 ha forest planting and 1.500 trees forest enrichment are conducted annually.

Village meeting to approve 5 year management plan

In the harvesting plan, selective cutting will be applied in 3 blocks in 5 years (2008 – 2012). The number of trees to be cut per diameter class is identified to meet the own consumption requirements of the community in 5 years 2008 – 2012, if there is any surplus then, the community is allowed to harvest for commercial use in order to build up the village fund and share the benefits from forests among involved households.

Harvesting for own consumption in 5 years is conducted in 3 blocks of Cư Tê M'Nâm, Păng Teh M'Nâm and Dă M'Diêng; annually 59 stripes trees (20 – 30cm), 30 dots (30 – 40cm) and 20 wave trees (> 40cm) are cut. Every year, the community holds a meeting to select 3 households for building new house, the selected households should make an application for timber harvesting which shall be approved by VFMB and CPC. The households should organize the harvesting themselves under the supervision VFMB and on-site forest protection officers.

In the next 5 years, the commercial harvesting is carried out in 3 blocks of Cư Tê M'Nâm, Păng Teh M'Nâm and Dă M'Diêng, cutting trees in Wave class (>40cm), total trees to be harvested in 5 years is 1675. The harvesting plan for commercial use is conducted in two times:

- 1st time in 2008 with 940 trees per wave diameter class in 2 blocks of Cư Tê M'Nâm, Păng Teh M'Nâm
- 2nd time in 2011 with 735 trees per wave diameter class in Dă M'Diêng block

The commercial harvesting will be a general activity of the whole village with technical support of RDDL project and Krông Bông district working group. The revenue from timber selling will be shared following the mechanism as defined in the village forest protection and development regulations.

**Table 1: FOREST PROTECTION PLAN OF TUL VILLAGE**

| No. | Activity | Description | block/location | Time frame | | | | | Finance | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2008 | 2009 | 2010 | 2011 | 2012 | Budget (VND) | Source |
| 1 | - Setting up forest protection groups<br>- Forest patrolling | - Establish 05 groups; 10 member each including 1 head and 1 vice head<br>- Conduct forest patrol bimonthly as assigned by the head or vice head of VFMB<br>- 10 persons in 1 patrol, split in 2 teams to 2 directions | On total 14 blocks | x | x | x | x | x | - 300.000/patrol<br>- Timesheet as basis for compensation of protection labour (compensation should be the same or higher the cost of a local man-day) | Village forest development fund |
| 2 | Forest fire prevention sign Board (No fire) | - 2 flat iron boards: 30cm x 40 cm<br>- Put in high, visible place | At the entrance road to blocks of Grôi Tlă; Lơa Ktum | x | | | | | 100.000 x 2 = 200.000đ | Supported by RDDL<br>Or village forest development fund |
| 3 | Sign Board of Tul village forest<br>Village forest map | - Concreted 84cm x 120cm; 2 poles 1,5m high: 2 boards (1 sign board and 1 map) | At the crossroad near the way to waterfall | | x | | | | 5.000.000 x 2 = 10.000.000đ | Supported by RDDL<br>Or village forest development fund |
| 4 | VFPDR board | - 1 flat iron board at the entrance of village, with 02 poles 3 m high; size: 1,5m x 2m<br>- 1 Mica board of same specification placed in the community house | | x | | | | | 2.000.000đ | Supported by RDDL<br>Or village forest development fund |
| 5 | Dissemination | - Via loud speaker: in cooperation with CPC and FPU<br>- Village meeting: incorporated in village meetings | | x | x | x | x | x | 100.000đ/month | Village forest development fund |

Note: when the Village forest development fund is available, the community will buy some equipment for forest patrol: hammock, rain coat, shoes; …

**Table 2: FOREST DEVELOPMENT PLAN OF TUL VILLAGE**

| No. | Compartment | Sub-Compartment | Block | Area ( ha) | Planning years | | | | | Description | Finance | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2008 | 2009 | 2010 | 2011 | 2012 | | Budget | Source |
| **1) Plating Acacia forest** | | | | | | | | | | | | |
| | 1204 | | Grôi Tlă | 25 | | 10 | | 15 | | Plant acacia, at intensity of 1666 trees / ha.<br><br>Assigning tasks to households | Use village forest development fund to buy seedlings, fertilizers or integrated with other national programs<br><br>Households contribute labour to clear vegetation, dig holes, plant trees, enrich forest, take care of forest. | |
| | | | Lơa Ktum | 25 | | | 10 | | 15 | | | |
| **Total new planting area** | | | | **50** | **0** | **10** | **10** | **15** | **15** | | | |
| **2) Forest enrichment with Pinus kesiya and Hopea Odorata** | | | | | | | | | | | | |
| | 1204 | | Cư Tê M'Nâm | 37 | | 555 trees | | | | Replant 2 species of indigenous trees: Pinus kesiya and Hopea Odorata in open gaps after selective cutting, 15 trees/ha<br><br>Organize the work in groups. | | |
| | | | Păng Teh M'Nâm | 67 | | 1005 trees | | | | | | |
| **Total area/tree number of enrichment** | | | | **104** | | **1560 trees** | | | | | | |

## Table 3: HARVESTING PLAN FOR OWN CONSUMPTION OF TUL VILLAGE IN 2008 - 2012

| Activity | Description | Compartment | Block | Block area (ha) | Dia. Colour | Tree to be cut in 5 years | Trees to be cut per year | | | | | Finance | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 2008 | 2009 | 2010 | 2011 | 2012 | Budget | Source |
| Selective cutting | Households to be selected by the community for harvesting timber for housing. 3 households per year<br><br>Households make application, VMFM and CPC approve.<br><br>Households organize the harvesting in the year under supervision of VFMB and Commune FP officer | 1204 | Cư Tê M'Nâm | 37 | Wave | **20** | 20 | | | | | Households organize the harvesting | |
| | | | Păng Teh M'Nâm | 67 | Wave | **80** | 0 | 20 | 20 | 20 | 20 | | |
| | | | Dă M'Diêng | 49 | Stripes | **295** | 59 | 59 | 59 | 59 | 59 | | |
| | | | | | Dots | **150** | 30 | 30 | 30 | 30 | 30 | | |
| **Total trees to be cut** | | | | | **Stripes** | **295** | 59 | 59 | 59 | 59 | 59 | | |
| | | | | | **Dots** | **150** | 30 | 30 | 30 | 30 | 30 | | |
| | | | | | **Wave** | **100** | 20 | 20 | 20 | 20 | 20 | | |

**Table 4: HARVESTING PLAN FOR COMMERCIAL USE OF TUL VILLAGE IN 2008 - 2012**

| Activity | Description | Compartment | Block | Block area (ha) | Dia. Colour | Tree to be cut in 5 years | Trees to be cut per year | | | | | Finance | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 2008 | 2009 | 2010 | 2011 | 2012 | Budget | Source |
| Selective cutting | VFMB organizes tree selection and marking according to silvicultural guidelines, marking trees with paint.<br>Making harvesting plan and application for harvest permit.<br>Contract for timber cutting and skidding<br>Community monitor and clean forest.<br>Community makes timber list and FPU hammers.<br>VFMB organize timber auction with support of CPC.<br>Benefit sharing | 1204 | Cư Tê M'Nâm | 37 | wave | **350** | 350 | | | | | Community organizes with technical support of RDDL<br>VFMB keeps timesheet and pay the involving villagers from the revenue of timber selling.<br>Cost for harvesting and skidding contract is from the sold timber value | |
| | | | Păng Teh M'Nâm | 67 | Wave | **590** | 590 | | | | | | |
| | | | Dă M'Diêng | 49 | Wave | **735** | | | | 735 | | | |
| **Total trees to be cut** | | | | | **Wave** | **1675** | 940 | | | 735 | | | |

## 7. Implementing organization and benefit sharing in community

### 7.1 Assignment of forest protection activities

| No. | Activity | Responsibility | |
|---|---|---|---|
| | | Household | VFMB |
| 1 | **Forest protection** | - Combine forest patrol with work on upland fields.<br>- Actively involve in forest protection with VFMB.<br>- Not to let fire spread to forest when burning upland fields.<br>- Notice any stranger entering forests. | - organize propaganda on forest protection, fire prevention.<br>- Mobilize villagers to participate in regular forest patrol.<br>- Timekeeping of participation in forest protection.<br>- Notice any stranger entering forests. |
| 2 | **Forest development** | - Protection of planted forests.<br>- Households contribute their labour in forest planting and enrichment<br>- Households are responsible for taking care the planted and enriched forests | - mobilize households in forest planting and enrichment.<br>- liaise with CPC to find out the source of seedlings.<br>- Keep records of number of planted trees of HHs. |
| 3 | **Forest utilization** | - HHs involve in tree selection.<br>- make application for timber harvesting<br>- organize the harvesting themselves if for their own consumption.<br>- Participate in tree selection and forest cleaning | - send person to tree selection<br>- verify the application for harvesting before submission to CPC.<br>- Coordinate, monitor & evaluate the utilization of forest. |
| 4 | **Benefit sharing** | - take part in all village meetings.<br>- harvest timber for own consumption with right amount and species.<br>- Follow the benefit sharing stated in VFPDR. | - Cooperate with CPC to organize timber auction.<br>- Supervise commercial and own consumption harvest.<br>- Manage village forest development fund<br>- Verify demand for own consumption timber in village.<br>- share benefits according to VFPDR. |

-

### 7.2 Benefit sharing

***i) Benefit sharing in harvesting for own consumption:***

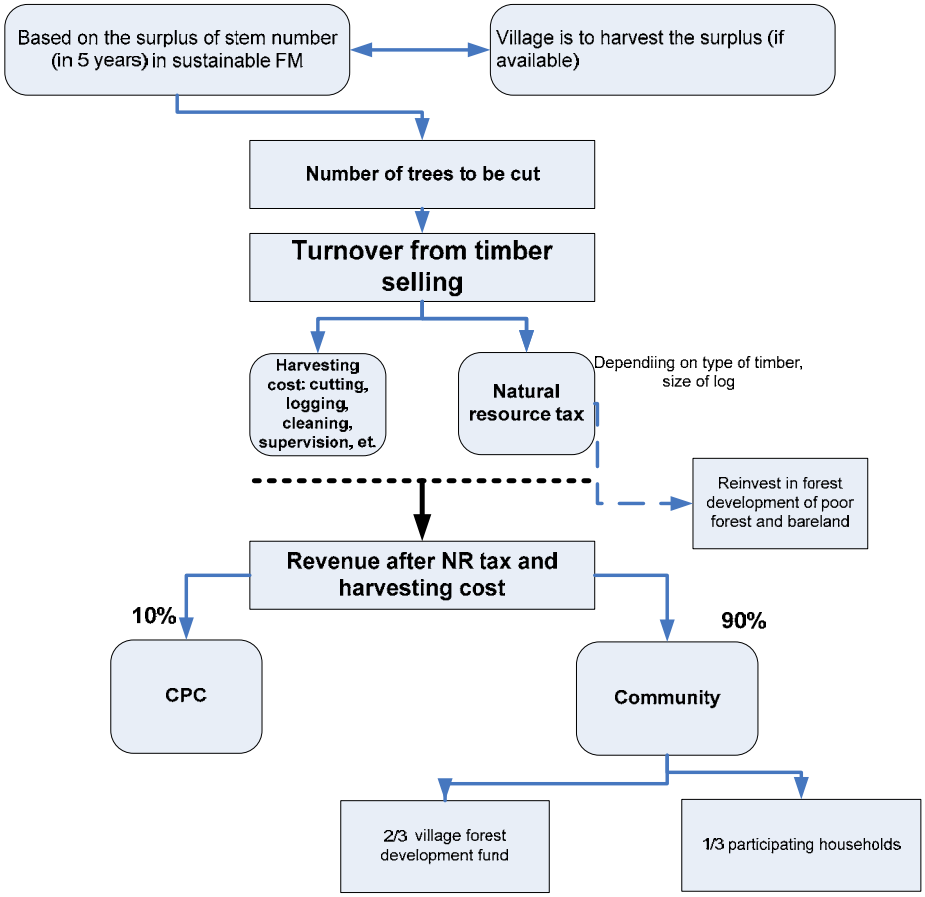
Own consumption harvesting households are selected by the community annually. They should cut the right amount of timber, in the right diameter class, at the right location as per the approved plan.

***ii) Benefit sharing in harvesting for commercial use:***

The commercial timber is harvested by the community as per the approved plan, granted harvesting permit; the benefits are shared in community as follows:

The revenue from timber selling, after deducting the harvesting cost (cutting, logging, forest cleaning, supervision, transportation) and natural resource tax, is shared:

- 10% remitted to CPC for forest management and protection
- 90% is for the community, shared as:
  - 2/3 for village forest development fund
  - 1/3 left for involved households in the village




*Benefit sharing in harvesting for commercial use in CFM*

### 7.3 Management of village forest development fund

Implemented according to the VFPDRs, detailing:

The village forest development fund is built up from the commercial harvesting of timber and other forest production activities of the community.

***i) Utilization of village forest management fund:*** used for general activities in forest management and protection, including:

- Compensation for members of VFMB, head and vice head of forest protection groups and participating households in forest management activities, such as: harvesting, forest cleaning, supervision, forest patrol, management. In which pay for VFMB and group' head or vice-head is 1.3 and 1.1 times respectively of that for households.
- Formulation of signboards on forest protection, management

- Purchase of clothes, materials for forest patrolling.
- Purchase of forest tree seedlings for afforestation and forest enrichment.
- Purchase of equipment for forest production
- Other activities relating to forest protection and management
- Awarding.

***ii) Management of village forest management fund:***

- A bank account is opened in name of Tul Village Forest Management Board with VFMB head as account holder. Two signatures are required, VFMB head and village cashier.
- Cash withdrawal should be approved in the village meeting, with a transparent expenditure plan and having agreement of CPC.
- VFMB head is responsible for the fund expenditures, with a cashier.
- All expenditures should be recorded carefully, enclosed with receipts.
- Village meeting is organized biannually for financial disclosure with participation of CPC representative.

## 8. Conclusion, recommendation

**Conclusion**

The 5 year forest management plan of Tul village is developed on the basis of assessment of forest resource and community demand. The outcome of this assessment shows that timber potential is sufficient to meet the requirements for own consumption and even for commercial purpose as an opportunity for income generation of households and development of the village fund. The forests are managed sustainably with a 5 year plan, involving all villagers in forest protection, development and utilization of forest products.

With the supports from local authorities, relevant organizations, the community is capable to carry out forest protection and development in the next 5 years as per the developed plan.

**Recommendations**

The follow-up steps are required to support the community in plan implementation and subsequent benefit sharing:

- DPC to approve the VFPDRs and 5 year forest management plan, commercial timber harvesting plan in 5 years and 2008.
- CPC to approve the forest management plan 2008
- The community to carry out the VFPDRs and the plans

**Representative of district Working Group** **Representative of VFMB of Tul village**

## 9. Annexes

**Annex 1: Block summary form**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Village name** | **Tul** | **Block name (Local, technical)** | **Cư Tê M'nâm** | **Sub-compartment** | | **Compartment** | **1204** | **Area(ha)** | **37** |
| **Status (Local, technical)** | **$IIIA_2$ (Grôi M'Nâm)** | **3 main species** | **manglieta, Schima superba, Lithocarpus, sp** | **Canopy coverage of sample plots** | **medium** | **Management goals** | **Havest big timber for housing and commercial use** | | |

| **Distinction** | **Species** | Timber potential | **Yellow 10 – 19,9** | | **Stripes 20 – 29,9** | | **Dots 30 – 40** | | **Wave >40cm** | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total in all plots | Total per ha and block | Total in all plots | Total per ha and block | Total in all plots | Total per ha and block | Total in all plots | Total per ha and block |
| Timber species(*) | **manglieta, Schima superba, sp** | ☺ | 146 | 292/10.804 | 83 | 116/6.142 | 28 | 56/2.072 | 58 | 116/4.292 |
| Non-timber species | | ☹ | | | | | | | | |
| **Total per ha and block** | | | | **292/10.804** | | **116/6.142** | | **56/2.072** | | **116/4.292** |

Date: 15/07/2008 Recored by: Group 1.

**Annex 1(Cont.): Block summary form**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Village name** | **Tul** | **Block name (Local, technical)** | **Păng Teh M'nâm** | **Sub-compartment** | | **Compartment** | **1204** | **Area (ha)** | **67** |
| **Status (Local, technical)** | **$IIIA_2$ (Grôi M'Nâm)** | **3 main species** | **manglieta, Schima superba, Lithocarpus, sp** | **Canopy coverage of sample plots** | **medium** | **Management goals** | **Havest big timber for housing and commercial use** | | |

| **Distinction** | **Species** | Timber potential | **Yellow 10 – 19,9** | | **Stripes 20 – 29,9** | | **Dots 30 – 40** | | **Wave >40cm** | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total in all plots | Total per ha and block | Total in all plots | Total per ha and block | Total in all plots | Total per ha and block | Total in all plots | Total per ha and block |
| Timber species(*) | **manglieta, Schima superba, sp** | ☺ | 157 | 340/22.780 | 74 | 160/10.720 | 37 | 82/5.494 | 60 | 113/8.911 |
| Non-timber species | | ☹ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total per ha and block** | | | | **340/22.780** | | **160/10.720** | | **82/5.494** | | **113/8.911** |

Date: 15/07/2008 Recorded by: Group 2

**Annex 1(Cont.): Block summary form**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Village name** | **Tul** | **Block name (Local, technical)** | **Dă M'Diêng** | **Sub-compartment** | **6** | **Compartment** | **1204** | **Area (ha)** | **49** |
| **Status (Local, technical)** | **$IIIA_2$ (Grôi M'Nâm)** | **3 main species** | **manglieta, Schima superba, sp** | **Canopy coverage of sample plots** | **medium** | **Management goals** | **Havest big timber for housing and commercial use** | | |

| **Distinction** | **Species** | Timber potential | **Yellow 10 – 19,9** | | **Stripes 20 – 29,9** | | **Dots 30 – 40** | | **Wave >40cm** | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total in all plots | Total per ha and block | Total in all plots | Total per ha and block | Total in all plots | Total per ha and block | Total in all plots | Total per ha and block |
| Timber species(*) | **manglieta, Schima superba, sp** | ☺ | 32 | 320/17.600 | 19 | 190/10.450 | 12 | 120/6.600 | 10 | 100/5.500 |
| Non-timber species | | ☹ | | | | | | | | |
| **Total per ha and block** | | | | **320/15.680** | | **190/9.310** | | **120/5.880** | | **100/4.900** |

Date: 15/07/2008 Recorded by: Group 3

**Annex 1(Cont.): Block summary form**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Village name** | **Tul** | **Block name (Local, technical)** | **Lâm Dhă** | **Sub-compartment** | **6** | **Compartment** | **1204** | **Area (ha)** | **65** |
| **Status (Local, technical)** | **$IIIA_2$ (Grôi M'Nâm** | **3 main species** | **manglieta, Schima superba, sp** | **Canopy coverage of sample plots** | **medium** | **Management goals** | **Havest big timber** | | |

| **Distinction** | **Species** | Timber potential | **Yellow 10 – 19,9** | | **Stripes 20 – 29,9** | | **Dots 30 – 40** | | **Wave >40cm** | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total in all plots | Total per ha and block | Total in all plots | Total per ha and block | Total in all plots | Total per ha and block | Total in all plots | Total per ha and block |
| Timber species(*) | **manglieta, Schima superba, sp** | ☺ | 50 | 250/26.500 | 23 | 115/12.190 | 18 | 90/9.540 | 15 | 75/7950 |
| Non-timber species | | ☹ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total per ha and block** | | | | **250/16.250** | | **115/7.475** | | **90/5.850** | | **75/4.875** |

Date: 15/07/2008 Recorded by: group 4

**Annex 2: Block description**

**2.1: Description of blocks: Cư Tê M'Nâm, Păng Teh M'Nâm, Dă M'Diêng, Lâm DHă. Status: IIIa2/Grôi M'Nâm. Area: 218 ha**

| | | | |
|---|---|---|---|
| Date | 14/7/2008 | Compartment | 1204 |
| Province | Đăk Lăk | Sub-compartment | |
| District | Krông Bông | Block | |
| Commune | Yang Mao | Area/status | |
| Village | Tul | Recorder | Trịnh Ngọc Trọng |

| | | | |
|---|---|---|---|
| Main use | Culture, history, religion | Less critical protection forest | Timber production forest |
| | | | x |

| | | | |
|---|---|---|---|
| Access | What is the walking time from the village to reach the forest block? | | |
| | Less than 1 hour ( < 5km) | 1-2 hours (5 - 10km) | More than 2 hours (> 10km) |
| | | | x |

| | | | | |
|---|---|---|---|---|
| **Forest tyype and characteristics** | Forest type | Characteristics | | |
| | Unexploited, low-impacted forest, | restored < 5 years | Restored 5-10 years | Primeval |
| | | | | x |
| | Already harvested timber forest | Only trees < 15cm | Trees 15cm-minimum harvestable diameter | Trees ≥ minimum harvestable diameter |
| | | | | x |
| | Timber mixed bamboo forest | Bamboo: some<br>Timber: Only trees < 15cm | Bamboo: Medium<br>Timber: Trees 15-minimum harvestable diameter | Bamboo: plenty<br>Timber: Trees ≥ minimum harvestable diameter |
| | | | | |
| | Bamboo forest:<br>- diameter. | - small. | - medium. | - big |
| | | | | |
| | Density | - sparse | - medium | - dense |
| | | | | |

| | | |
|---|---|---|
| Species | Big timber species | Smaller timber species |
| | manglieta,<br>Schima superba | Canarium<br>Garcinia |
| Canopy coverage | sparse | dense |
| | | x |

| | | | |
|---|---|---|---|
| Gaps in forest stand | None | Some | many |
| | | x | |
| Slope | Is it easy to walk in forest block? | | |
| | easy (gentle) | normal (moderate) | difficult (steep) |
| | | | x |

| | | | |
|---|---|---|---|
| Products | Can you get any forest products in the next 5 years? | yes<br>x | No |
| | List 3 main forest products that can be expected from the forest block. | | |
| | Timber:<br>NTFP: rattan, | | |

| | | | | |
|---|---|---|---|---|
| Fire hazard | When did fire last occur in the forest block? | | | |
| | In the last 5 yrs | Not in the last 5 yrs | Not in the last 10 yrs | Never<br>x |

| | | | | |
|---|---|---|---|---|
| Grazing | *What is the grazing pressure in the block? (check signs like cattle manure; trampled areas; very short grass; browsed shrubs and herbs etc.)* | | | |
| | High | Medium | Low | None x |

**Management Goal Table**

| | |
|---|---|
| **Block Name** | Cư Tê M'Nâm, Păng Teh M'Nâm, Dă M'Diêng, Lâm DHă |
| **Management goal** | - Forest protection, harvesting big timber and NTFPs |
| **Disadvantages & Difficulties** | - far away from village, steep slopes, difficult for protection, harvesting, transportation. |
| **Advantages & Opportunities** | - many valuable timber trees.<br>- high degree of regeneration.<br>- clear boundaries (Ea Găm treams and trails) |
| **Solutions** | - Selective cutting of timber<br>- Forest protection and development regulation required<br>- No forest clearing and burning for cultivation<br>- Forest fire prevention in dry season |

**2.2: Description of blocks: Cư Teh Pda, Grôi N'Hô, Grôi Klông, Grôi Jơ U. Status: IIIa1/Grôi Pda. Area: 378 ha**

| | |
|---|---|
| Date | 14/7/2008 |
| Province | Đăk Lăk |
| District | Krông Bông |
| Commune | Yang Mao |
| Village | Tul |

| | |
|---|---|
| Compartment | 1204 |
| Sub-compartment | |
| Block | |
| Area/status | |
| Recorder | Nguyễn Đình Thông |

| Main use | Culture, history, religion | Less critical protection forest | Timber production forest |
|---|---|---|---|
| | | | x |

| Access | What is the walking time from the village to reach the forest block? | | |
|---|---|---|---|
| | Less than 1 hour ( < 5km) | 1-2 hours (5 - 10km) | More than 2 hours (> 10km) |
| | | | x |

| Forest tyype and characteristics | Forest type | Characteristics | | |
|---|---|---|---|---|
| | Young forest restored after shifting cultivation, | restored < 5 years | Restored 5-10 years | Restored >10 years |
| | | | | |
| | Already harvested timber forest | Only trees < 15cm | Trees 15cm-minimum harvestable diameter | Trees ≥ minimum harvestable diameter |
| | | | | x |
| | Timber mixed bamboo forest | Bamboo: some<br>Timber: Only trees < 15cm | Bamboo: Medium<br>Timber: Trees 15-minimum harvestable diameter | Bamboo: plenty<br>Timber: Trees ≥ minimum harvestable diameter |
| | | | | |
| | Bamboo forest:<br>- diameter. | - small. | - medium. | - big |
| | | | | |
| | Density | - sparse | - medium | - dense |
| | | x | | |

| Species | Big timber species | Smaller timber species |
|---|---|---|
| | manglieta<br>Dianella ensifolia<br>Artocarpus | Parinari annamensis<br>Syzygium |

| Canopy coverage | sparse | dense |
|---|---|---|
| | x | |

| | | | | |
|---|---|---|---|---|
| Gaps in forest stand | None | Some | Many | |
| | | x | | |
| Slope | Is it easy to walk in forest block | | | |
| | easy (gentle) | normal (moderate) | difficult (steep) | |
| | | | x | |
| Products | Can you get any forest products in the next 5 years? | | Yes<br>x | No |
| | List 3 main forest products that can be expected from the forest block. | | | |
| | manglieta, Schima superba<br>NTFPs: Rattan, bamboo, | | | |
| Fire hazard | When did fire last occur in the forest block? | | | |
| | In the last 5 yrs<br>x | Not in the last 5 yrs | Not in the last 10 yrs | Never |

| | | | | |
|---|---|---|---|---|
| Grazing | What is the grazing pressure in the block? (check signs like cattle manure; trampled areas; very short grass; browsed shrubs and herbs etc.) | | | |
| | High | Medium | Low | None x |

**Management Goal Table**

| | |
|---|---|
| **Block Name** | Cư Teh Pda, Grôi N'Hô, Grôi Klông, Grôi Jơ U |
| **Management goal** | - Forest protection.<br>- Protection of Ea Găm watershed area |
| **Disadvantages & Difficulties** | - far away from residential area<br>- steep, rocky thus difficult for protection and harvesting. |
| **Advantages & Opportunities** | - Almost no forest encroachment, clearing<br>- Surrounded by Ea Găm river |
| **Solutions** | - Fire prevention in dry season<br>- Clearing way for forest patrolling. |

**2.3: Description of blocks: Păng Teh lơa, Grôi Tlă, Lơa N'Hô, Lơa Ktum, Lơa Reuh, Dă Kơi. Status: Ib/Grôi Lơa. Area: 368 ha**

| | | | |
|---|---|---|---|
| Date | 14/7/2008 | Compartment | 1204 |
| Province | Đăk Lăk | Sub-compartment | |
| District | Krông Bông | Block | |
| Commune | Yang Mao | Area/status | |
| Village | Tul | Recorder | Phan Văn Quỳnh |

| Main use | Culture, history, religion | Less critical protection forest | Timber production forest |
|---|---|---|---|
| | | | x |

| Access | What is the walking time from the village to reach the forest block? | | |
|---|---|---|---|
| | Less than 1 hour ( < 5km) | 1-2 hours (5 - 10km) | More than 2 hours (> 10km) |
| | | | x |

| Forest tyype and characteristics | Forest type | Characteristics | | |
|---|---|---|---|---|
| | Young forest restored after shifting cultivation, | restored < 5 years | Restored 5-10 years | Restored >10 years |
| | | | | |
| | Already harvested timber forest | Only trees < 15cm | Trees 15cm-minimum harvestable diameter | Trees ≥ minimum harvestable diameter |
| | | | | |
| | Timber mixed bamboo forest | Bamboo: some<br>Timber: Only trees < 15cm | Bamboo: Medium<br>Timber: Trees 15-minimum harvestable diameter | Bamboo: plenty<br>Timber: Trees ≥ minimum harvestable diameter |
| | | | | x |
| | Bamboo forest:<br>- diameter. | - small. | - medium. | - big |
| | | | | |
| | Density | - sparse | - medium | - dense |
| | | | | x |

| Species | Big timber species | Smaller timber species |
|---|---|---|
| | Artocarpus<br>Cratoxylum<br>Irvingia malayana<br>Canarium | |
| Canopy coverage | sparse | dense |
| | x | |

| | | | |
|---|---|---|---|
| Gaps in forest stand | None | Some | Many |
| | | | x |
| Slope | Is it easy to walk in forest block | | |
| | easy (gentle) | normal (moderate) | difficult (steep) |
| | | | x |

| | | | |
|---|---|---|---|
| Products | Can you get any forest products in the next 5 years? | Yes<br>x | No |
| | List 3 main forest products that can be expected from the forest block. | | |
| | Timber: Lithocarpus, Schima superba<br>NTFPs: Thysanolaena, bamboo, | | |

| | | | | |
|---|---|---|---|---|
| Fire hazard | When did fire last occur in the forest block? | | | |
| | In the last 5 yrs<br>x | Not in the last 5 yrs | Not in the last 10 yrs | Never |

| | | | | |
|---|---|---|---|---|
| Grazing | What is the grazing pressure in the block? (check signs like cattle manure; trampled areas; very short grass; browsed shrubs and herbs etc.) | | | |
| | High | Medium | Low | None x |

**Management Goal Table**

| | |
|---|---|
| **Block Name** | Păng Teh lơa, Grôi Tlă, Lơa N'Hô, Lơa Ktum, Lơa Reuh, Dă Kơi |
| **Management goal** | - Afforestation, protection<br>- Harvesting NFTPs for own consumption. |
| **Disadvantages & Difficulties** | - Bamboo forest therefore in risk of fire annually.<br>- Steep terrain |
| **Advantages & Opportunities** | - Close to village, easy for harvesting bamboo, herbs<br>- Clear, visible boundaries, (trails, Ea Chay stream) |
| **Solutions** | - No burning the field.<br>- Fire prevention in dry season<br>- No grazing.<br>- Forest protection and development regulation required. |