Community Forest Management-(CFM) (ToT) - Module 1

Handout

Name of participant: _____

Hanoi, October 2006

Editorial: Eight tested and revised documents on Community Forest Management (CFM)

Dear Reader,

Throughout last years, the Extension and Training Support Project for Forestry and Agriculture in the uplands (ETSP) in close collaboration with DARDs and sub Forest Department in three provinces (Hoa Binh, Thua Thien Hue and Dac Nong) has tested and adjusted the Community Forest Management process. Today there is a tested and refined **set of eight CFM approach documents** available which enable provincial forest and extension authorities to design their own Training of Trainers (ToT) program on CFM. Such a program is a precondition to spread the CFM approach within a province. The documents provide the frame to establish CFM according to the defined rules set up in the Guidelines for Management of Village Community Forest. The CFM approach will be further tested in the years to come, so the detailed steps may again be fine tuned and the documents revised later.

One important element of CFM is the intensive interaction of village stakeholders with forest personnel right from the very beginning to gain as much as possible village level ownership on CFM plans and regulations. For that purpose inventory methods, harvesting calculation and silvicultural practices had to be simplified. The set of eight CFM documents have been compiled, based on CFM documents of many projects such as ADB, RDDL (GTZ-GFA), SNV, SFDP Song Da… and experience, lessons learnt from ETSP on its CFM pilot program. We would like to give special thanks to organizations and projects that allow us to use their intellectual property. This set of documents can be obtained from CFM-NWG/Forest Department or ETSP.

The content of those eight documents in brief:

1. **CFM Technical Guidelines** provides all CFM information in one document: The whole implementation cycle is described, from forest management planning to the approval process for the forest protection and development plan. Monitoring the results of implementation then allows adjusting the next management plan according to the outcome. The document is structured into five chapters: 1) Introduction, 2) Principles in CFM, 3) Elaboration of Forest Management and Development Plan, 4) Designing Forest Protection and Development Regulations and their implementation, 5) Approval of the forest management plan, implementation and monitoring in CFM.
2. **Community Forest Management Planning – Facilitator's Field Guide** has been specially designed and compiled for facilitators (forest staff) involved in CFM management planning processes at field level with the local population. It addresses all required steps in preparing the forest management and development plan. Those steps include: Blocking of the village forest area, participatory forest resource inventory, assessment of village timber demand, defining forest management objectives and proposing suitable management activities for each forest block. The document also provides recommendations on the setup of an appropriate organizational structure at village level and the elaboration of forest protection and development regulations.
3. **Guidelines for simple silvicultural practices in CFM** is addressing a number of simple silviculture measurements such as harvesting, selective cutting and forest enrichment planting which local people can apply themselves in maintaining their forest area.
4. **3 Training material documents on CFM:**
   ToT Module 1 contains all steps to do the forest management planning (participatory

forest resource assessment, elaboration of five-year forest management and development plans, drafting the forest protection and development regulations). In addition, the Module 1 document illustrates potential conflicts which might occur during the introduction and discusses other issues related to a successful selection of villages where CFM can be introduced.

ToT Module 2 focuses on facilitation skills required to support village communities in developing their local forest resource management system. The CFM implementation steps are discussed in detail, including topics such as benefit sharing mechanisms and the introduction of collaborative conflict management strategies for natural resource management. The document further includes the topic, how Non-Timber Forest Products (NTFP) can be integrated into the CFM management planning process.

ToT Module 3 gives useful hints for the preparation of short training courses and presents some major elements of Participatory Curriculum Development (PCD). Alternative funding mechanisms for CFM (Clean Development Mechanism (CDM) and Timber Certification (FSC)) are described, as well as some aspects on easy-to-apply silvicultural techniques and the institutional setup for a successful CFM implementation and monitoring.

5. **CFM Glossary** comprises the definition for the most important terms related to Community Forest Management.
6. **CFM ToT Manual**: This document has been compiled for trainers who conduct own trainings on topics related to CFM. The content and structure addresses the tasks and steps which trainers have to do to facilitate a successful training process. The document gives in-depth information on the various topics and provides useful hints for the preparation of training units (materials required and time needed). A special focus of the document is on facilitation skills and introduction of elements of Participatory Curriculum Development (PCD).

The last document exists in English only, all other documents are available in both English and Vietnamese language.

Hanoi, October 2006

Dr. Pham Duc Tuan
Project Director ETSP – Extension and Training Support Project

Add: Extension and Training Support Project (ETSP), 218 Doi Can st - (La Thanh Hotel)
P.0.Box 81
Hanoi, Viet Nam
Tel: +84(0)4 8 329 833
Fax: +84 (0)4 8 329 834
Email: ngoc.thang@helvetas.org
Website: www.etsp.org.vn

TABLE OF CONTENTS

Course Outline 4

Part I - Overview of the Community Forestry Management Process 11

Part II - Overview of the legal framework for CFM 14

Part III - Role and importance of LUP/FLA in the CFM Process 19

Part IV - Awareness about potential conflicts in CFM 24

Part V - Forest Protection and Development Regulations 29

Part VI – Participatory Forest Management Planning 34

Annex 1 Training evaluation form *51*

➲ Course Outline

Purpose, structure, and learning objectives of the ToT

Outline of ToT – Purpose and structure

Hand Out

Purpose of the ToT program and definition of required trainer qualification

The purpose of the ToT program is to equip participants with knowledge, skills and attitudes necessary to successfully perform training in CFM, particularly the adoption and facilitation of technical tools used in the process, to ensure that there are a sufficient number of well qualified trainers for CFM in the respective provinces.

Structure of the ToT

The ToT is designed in a modular form consisting of ***three main modules***:

- The objective of the **first module** is to provide participants with the theoretical background and practical skills of the CFM concept, also comprising knowledge about the current legal situation, as well as awareness about potential benefits of CFM. The forest management planning process is demonstrated in form of a 3-day field exercise, providing participants with first onsite experiences of the various steps, including suitable ways of facilitation. Identification of criteria for the selection of suitable villages, as well as clarification of the role and mandate of various institutions in the CFM process are crucial steps to ensure that CFM planning can be implemented amid the first and second module. Regarding the later, a detailed action plan is elaborated together with the participants, detailing necessary steps to be taken for the pilot implementation in the three provinces.
- The ***second module*** aims at consolidating the theoretical knowledge and practical skills obtained in the first module. This is done via evaluation of experiences made and trainees' performance during the implementation of CFM in the village between first and second module. Besides clarification of existing questions, building-up of trainer skills constitutes an essential element of this module.
- The ***third module*** serves to further reflect upon the training progress and experiences made by the trainees, identifying lessons learned and steps to be taken for the facilitation of own training courses on CFM. The specific content of this module will be designed in dependence of the needs expressed by the participants during the implementation of own training- courses amid the second and third module. Concluding the ToT-cycle, a one-day reflection workshop on the implemented CFM process will be conducted to identify necessary modifications and future activities in CFM in respective provinces.

Outline of ToT – time schedule & participants

hand Out

Total time and schedule of the ToT program

The full ToT program is organized over a period of around 7 to 9 months with different activities:

- Three ToT modules each lasting for about five days
- Participants have to implement CFM in selected villages amid the three ToT modules in order to gain own practical experiences in preparing and conducting training at village level. These experiences are partly recorded on video, and are subject to reflection and further development during the second and third ToT module.
- Coaching of trainees when implementing CFM. The coaching is provided by the ToT Co-trainers.

Participants

In order to safeguard the quality of the course and to make sure that investments in ToT are effectively used, the following admission requirements must be met by the candidates:

- **Personal attitude**: Applicants must have personal attitude to become a good trainer. This includes in particular good communication competences and empathy, and high devotion for working with people.
- **Availability as trainer**: Applicants must be available to join the full ToT program (not only the first or second module), and to work as a trainer after completion of the ToT program. For this, the superior of the applicants have to sign a commitment, stating that the participant will be available during the whole ToT program (three modules, and practical part), and as a trainer after its completion.
- **Technical knowledge**: It is preferable that applicants have knowledge about the subject matter beforehand, i.e. if he /she has joined technical CFM training courses and/or facilitated CF activities in a number of villages. This requirement is of lower importance, as the first module has been designed to primarily train participants in technical issues.

Outline of ToT – Learning objectives

hand Out

Learning objectives

The specific learning objectives of the ToT program are formulated for three areas:
(1) Technical and administrative contents about CFM, (2) General facilitation skills, and (3) Training competences.

After the ToT program, the participants are able to:

	Topic
Technical knowledge	**CFM process**
	Outline and explain sequence and main elements of the methodologies in the process of CFM, as illustrated on the flowchart *Forest Management Planning Process*
	Understand the role / mandate of different institutions involved in the entire CFM process
	Introduction to Mapping and Blocking
	Facilitate the process of participatory mapping / forest blocking in the field
	Forest Protection and Development Regulations
	Guide farmers in the development of FPDR at village level
	Facilitate participatory M&E of FPDR at village level
	Community Forest Management Planning
	Guide farmers to conduct Participatory Forest Resource Inventory
	Guide farmers in developing and monitoring forest management plans

General facilitation skills	▪ Discuss why facilitation competences are important in the context of CF ▪ Provide respective feedback on performance to persons working as facilitator ▪ Are able to moderate group discussions, questioning and listening skills, contribute technical knowledge, convey empathy

Training competences	▪ Prepare training outline (training objectives and agenda, etc.) ▪ Design training session plans for CFM training ▪ Are able to develop handouts and material needed for facilitation of CFM training ▪ Use different training methods other than lecturing ▪ Provide opportunity to learn from experiences and reflection in CF training courses ▪ Encourage high degree of interaction among participants ▪ Evaluate training course and draw conclusions for next training ▪ Coach CFM facilitators on their job

Outline of ToT – Certification requirements

hand Out

Certification requirements

In order to obtain a trainer certificate at the end of the ToT program, participants have to successfully fulfil the following requirements:

- Participate in all three modules (missing max. two days, with explanation of superior)
- Properly use their *Training Logbook*
- Conduct own CFM at village level, and get positive evaluation by participants (at the end of each course, the standard evaluation form has to be filled in by the participants. This form includes a mark for the facilitator).
- Pass final test (multiple choice at the end of third module)

➲Time Schedule Module 1

	Time	Duration (min.)	Content
1st day			***Introduction***
	8.00	30	Opening
	8.30	30	Presentation of the National Working Group on Community Forest Management on the current situation and national policy development regarding CFM
	9.00	15	Coffee break
	9.15	30	Introduction of participants and expectations of Module 1
	9.45	45	Presentation of training objectives and program (detailed for Module 1)
	10.30	30	Setting group norms
	11.00	30	Introduction to training logbook
	11.30	-	Lunch break
			Community forestry - Introduction to CF Management Planning Process
	13.30	15	General Introduction/Overview of CFM Process
	13.45	60	LUP/FLA – clarification of basic requirements and important implications on CFM
	14.45	20	Coffee break
	15.05	30	LUP/FLA – clarification of basic requirements and important implications on CFM
	15.35	15	Awareness about potential conflicts in CFM
	15.50	60	Forest Protection Regulations – Evaluation of existing experiences and clarification of principles and procedure
	16:50	15	Reflection on training/Personal notes in training logbook

	Time	Duration (min.)	Content
2nd day	7.30	30	Feedback exercise
	8.00	60	Forest Resource Assessment and Forest Management Planning
	9.00	20	Coffee break
	9.20	120	Forest Resource Assessment and Forest Management Planning (continued)
	11.30	-	Lunch break
	13.30	60	Clarification of questions about CFM planning process
	14.30	30	Principles and criteria for the selection of villages for CFM
	14.45	45	Role and mandate of various institutions in the CFM planning process
	15.30	15	Coffee break
	15.45	45	Role and mandate of various institutions in the CFM planning process
	16.30	20	Clarification of logistics for field-survey
	16.50	15	Daily feedback / personal notes in training logbook

	Time	Duration (min.)	Content
3rd – 5th day	**Practical Training Unit - Forest Management Planning Process** (*refer to the next page for a detailed schedule*)		

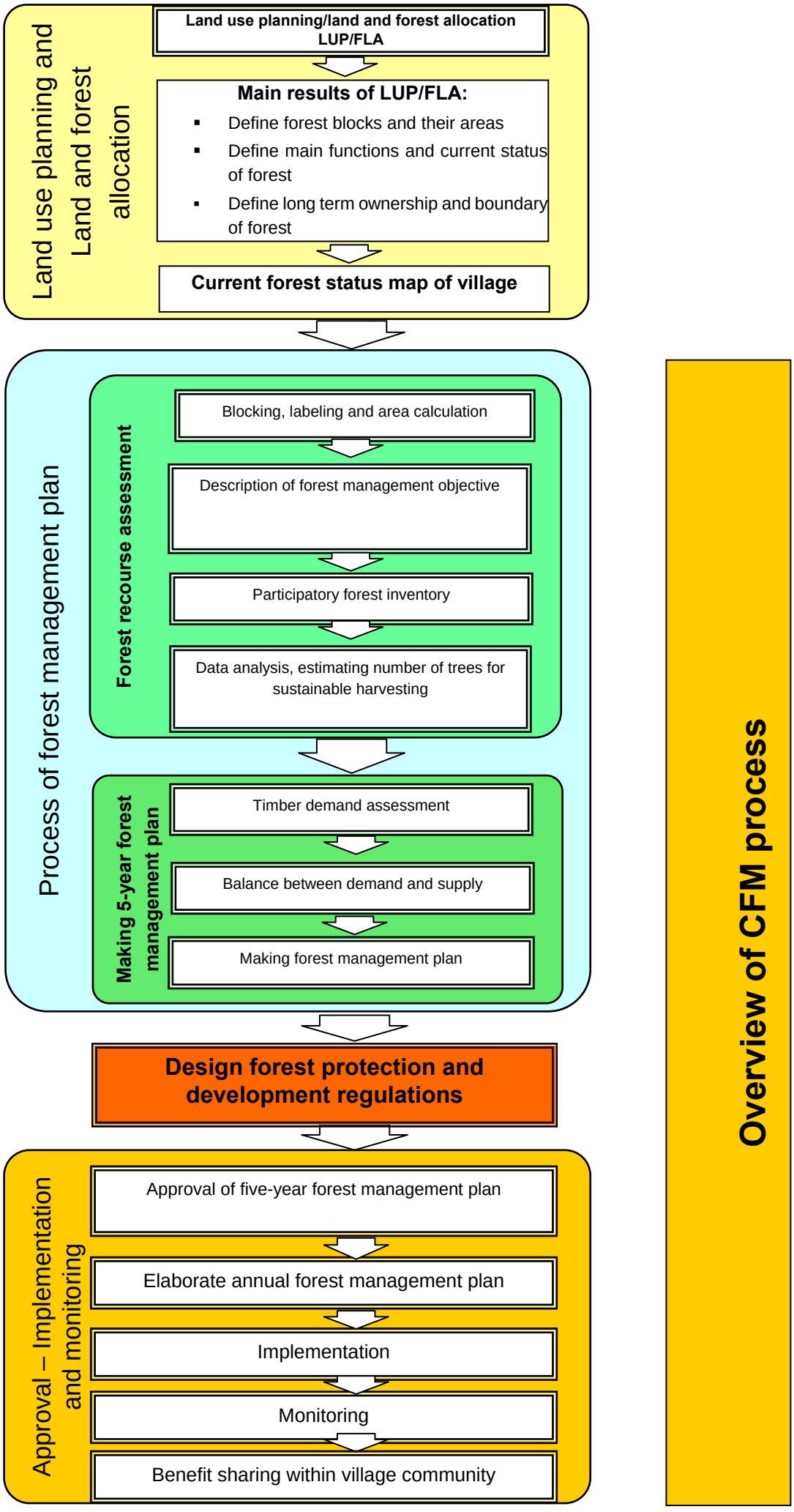
	Time	Duration (min.)	Content
6th day	8:00	90	Reflection of experiences made during field implementation, identification and discussion of potential challenges for the implementation of CFM
	9:30	15	Coffee break
	9:45	90	Activity plan – including important prerequisites (e.g. forest types, ideal forest models)
	11:15	30	Evaluation and closing of Module 1

➲Time Schedule Field Training / Module 1

Day 3		Day 4		Day 5	
1. Introduction (1 hour)	• Ideas and experiences about community forestry • Why do we need PFRA? • Who benefits from PFRA? • Principles of PFRA • Participants expectations	6. Plot measurement (3 hours)	• Practice locating and measuring one plot • Locate other plots from starting point using transects (two groups) • Collect sample plot data (two groups) • Complete Plot Sample Form for every sample plot (two groups) • Complete about five sample plots per group	8. Forest time line (past) (1 hour)	• Past and present forest situation • Events in the village over the past 30 years
2. Blocking (1 hour)	• Divide village forest into blocks using aerial photomap • Estimate area of each block and agree on name for each block			9. Comparing demand & supply (1 hour)	• Forest product demand, availability, and balance
3. Block description (1 hour)	• Complete block description form • Presentation by each group			10. Preparing the activities plan (1 hour)	• Objective setting • Activities and descriptions
Lunch		**Lunch**		**Lunch**	
3. Forest management goal (1 hour)	o Forest Management Goals elaborated for forest blocks	7. Data analysis (3 hours)	• Compile plot data (Block summary form) • List of timber species and other species • Prepare histograms/charts (two groups) • Presentation of histograms/charts • Identify issues and opportunities • Estimate harvest levels and work out some criteria for tree selection	11. Forest Management and Protection Groups (1.5 hours)	• Formation, task and financing of Forest Management and Protection Groups discussed
4. Forest product demand (1 hour)	• List of forest products used in village • Estimate 5-year village demand			13.Organisational Structure at Village Level (1hour)	• Discussing structure, duties and principles of the Village Forest Management Board
5. Preparation for field work (30 min)	• Explain tasks for PFRA • Explain plot sample form • Agree on roles of small groups • Select block for measurement and agree on transect starting point • Practice measurement systems e.g. transect (using sticks) measure dbh; layout and measure plots			14. Evaluation & Closing (30 minutes)	• Review of participants' expectations • Unresolved issues • Future activities

➲ PART I

Overview of the community forest management process


Land use planning and Land and forest allocation
Land use planning/land and forest allocation LUP/FLA
Main results of LUP/FLA:
Define forest blocks and their areas
Define main functions and current status of forest
Define long term ownership and boundary of forest
Current forest status map of village
Process of forest management plan
Forest recourse assessment
Blocking, labeling and area calculation
Description of forest management objective
Participatory forest inventory
Data analysis, estimating number of trees for sustainable harvesting
Making 5-year forest management plan
Timber demand assessment
Balance between demand and supply
Making forest management plan
Design forest protection and development regulations
Approval – Implementation and monitoring
Approval of five-year forest management plan
Elaborate annual forest management plan
Implementation
Monitoring
Benefit sharing within village community
Overview of CFM process

➲ Remarks:

➲ PART II

Overview of legal framework for CFM

Law and policies related to the development of Community Forest Management (CFM)

hand Out

Some related policies

- ✓ The decision 245/1998/QĐ-TTg date 21/12/1998 of the Prime Minister on the implementation of administrative management of different levels on forest and forestland.
- ✓ The decision 661/QĐ-TTg date 29/7/1998 of the Prime Minister on the objectives, tasks, policy and implementation of 5 million afforestation project.
- ✓ The decree 163/1999/NĐ-CP date 16/11/1999 of the government on forest land allocation and lease to organizations, households and individuals for long term use of forest objectives.
- ✓ The forest development strategy from 2001 – 2010. The Ministry of Agriculture and Rural Development, 2001.
- ✓ The decision 08/2001/QĐ-TTg date 11/1/2001 of the Prime Minister on the issues of management regulations of special use forest, protection forest and production forest as natural forest.
- ✓ The decision 178/2001/QĐ-TTg date 12/11/2001 of the Prime Minister on the benefits and duties of households, individuals who were allocated, leased forest and forest land.
- ✓ The land law dated 10/12/2003.
- ✓ The bilateral circular number 80/2003/TTLT/BNN-BTC of MARD and Ministry of Finance date 03/09/2003 "on the guideline of implementation of the decision 178/2001/QĐ-TTg date 12/11/2001 of the Prime Minister on the benefits and duties of households, individuals who were allocated, leased forest and forest land ".
- ✓ The forest protection and development law, 2004.
- ✓ The decree number 139/2004/NĐCP date 25/6/2004 of the government on the administrative fining in forest protection and management and forest product management.

Some of the legal documents mentioned above need to pay extra attention as the important legal background for the implementation of land allocation, design of forest protection and development regulations such as: the decree 163, the decision 178, the bilateral circular 80, the land law 2003, the forest protection and development law 2004 and the decree 139.

Summary of important points

The decree 163: about land allocation, land lease to organizations, households and individuals for the long term use on forest objectives. In particular, the land allocation and give red book to organizations, households and individuals for the period of 50 years were addressed.

The decision 178 and the bilateral circular 80: about the benefits and duties of households, individuals who were allocated, leased forest and forest land. The benefit sharing mechanism between households, individuals those were allocated forest and the state was stressed. The rate of benefit sharing applied for natural forest depends on the allocated forest status.

The land law 2003: some important articles:

- **Article 9: land user**

Land users defined in this law include:

3. Local people including all kinds of ethnic people living in the same area like village, hamlet or community with the same custom and tradition or the same surname will then be allocated land or confirm land use rights by the state.

- **Article 3: word explanation**

In this law, the following words should be understood, as follows:

13. The community means all of the households, individuals living in the same village, community or the same units

Article 29: forest allocation to local people

1. The conditions to allocate forest to local people are:

a) The village (group of households) has the same tradition, custom on forest production, culture and spirit. It has capacity of managing forest and demand as well as request for land allocation.

b) The land allocation process must be in line with the approved forest protection and management plan, suitable for forest land area of locality.

2. The village is allocated forest areas as follows:

a) The forest area is under effective management of village at present.

b) The forest is for watershed protection of village and for the common benefit of the village; and cannot be allocated to organizations, households and individuals.

c) Forest areas have the same boundary with other villages, communes or district, and cannot be allocated to organizations, households and individuals, and need to be allocated to village for the common benefits.

3. The institutions to allocate, claim back forest to village is defined as follows:

District People Committee, town or city under the management of province based on the plan, and planning of forest protection and development defined in point 1 and 2 of this article have rights to allocate forest to village.

■ **Article 30: The rights and duties of village which is allocated forest**

1. Rights of village:

a) Rights to use forest for the long and stable period as defined in the allocation process by government institutions.

b) Rights to harvest, use forest products and other benefits from forest for the common and individual purposes; right to combine agriculture, forest production or aquaculture in accordance with this law and forest management regulations.

c) Rights to enjoy results of investment on the allocated land and forest

d) Right to receive technical support, finance according to the state policy in forest protection and management; rights to use benefit resulted from public work for forest protection.

e) Rights to claim compensation for results of investment on forest protection and development in line with this law and other laws since the state get back the forest.

2. Duties of village:

a) Develop **forest protection and development regulations** in line with the legal framework of this law and other related laws, submit to DPC, town and city for approval and implementation.

b) **Protect and develop forest, and report regularly** to the designated office for forest management and other related forest activities under the guideline of CPC.

c) Pay tax and other financial requirement in accordance with the law.

d) Give forest back since the state claims or when the period of use finishes.

e) Does not allocate the allocated land and forest to households, does not transfer, exchange, lease, rent and mortgage.

➲ Remarks:

➲ PART III

The role of LUP/FLA in the CFM process

The importance of LUP/FLA in the CFM process

hand Out

The overall goal of forest land allocation to local stakeholders is to provide incentives for sustainable forest management, forest protection and development. Considering the long rotation periods associated with the management of natural forests, long-term ownership has been identified as a key-component to allow for investments of labor and/or capital to be made. It is therefore crucial to be aware of the fact that forest land allocation does not stop with the issuance and hand-over of red-book certificates, but that support in forest management is needed to ensure that respective forest land areas are managed sustainable.

Moreover, forests often represent so-called ***"open-access"*** resources, meaning that many stakeholders use them in a deliberate way (for example various households within a village, households of neighboring villages/communes…). It is important to be aware of the fact that existing conflicts at time of forest land allocation are likely to be invisible to the outsider. This is due to the above-mentioned 'open-access' situation, where forest resources are used deliberately. If potential (or 'hidden') conflicts are not taken into consideration before the forest land is allocated, a high probability exists that they consolidate as the process of CFM advances, usually when forest land owners enforce their property rights.

The term conflict is defined as ***"…a relationship among two or more opposing parties (e.g. different stakeholders of a community forest), based on actual or perceived differences in needs, interests, and goals".*** Conflicts can exist:

- … ***within a village*** (between households) – for example if the forest land allocation is inequitable and some people do not have access to formerly managed forests - keep in mind that every household in the village is usually in need of forest products!
- … ***between two or more villages*** –for example in case that adjacent forest resources are managed by households of respective villages
- … ***between village and commune*** –for example if the commune refuses to allocate forest land which is traditionally managed by a village
- … ***between villages and State Forest Enterprises*** – for example forest areas which have been traditionally managed by a village but have been allocated to a State Forest Enterprises
- … Etc.

To be able to enforce their property rights, local communities need to elaborate their own set of regulations about the utilization of their forest resources, so-called Forest Protection and Development Regulations (FPDR). Following the establishment of FPDR, management plans are elaborated in a participatory way for respective forest land areas and support as well as supervision is provided for local stakeholders in the implementation of forest management planning (refer to the flowchart of the CFM process).

The importance of LUP/FLA in the CFM process

Hand Out

In order to resolve potential conflicts and to minimise the risk of conflicts emerging in the subsequent process of forest management, a comprehensive assessment of all stakeholders involved or affected, their present land –use, as well as specific needs, has to be undertaken. Based on the information obtained from the assessment, a pre-selection of villages as well as forest land areas for the subsequent LUP/FLA has to be made. It is important to realise that this pre-selection might be subject to later revision and change, as during the LUP/FLA process more detailed information are made available - for example the identification of additional stakeholders in a particular forest land area during the more detailed land-use planning and field verification in the subsequent LUP/FLA process. Respective steps are to be carried out prior to the initiation of the actual LUP/FLA process at village and commune level.

Moreover, comprehensive LUP/FLA has to consider the capacities of potential forest land owners to adequately manage and protect the allocated forest resource. In the following, a brief overview over the three forms of forest land allocation and their implication for forest management is provided:

Forest land allocation to individual households

Natural forests, especially if located in some distance to the village settlement area, should not be allocated to individual households. Firstly, individual households are likely to lack capacity to protect their individual plot of natural forest. This is due to the fact that natural forests are often managed for construction timber, implying that household members will not visit the allocated forest area every day/week, which will lead to inability to adequately protect the resource. The incentive for households to individually protect plots of natural forest is furthermore reduced by the fact that usually no investments are made into the land (apart from the labour needed to harvest products).

Another important issue to be considered is that for individual allocation and management forest land, the exact location of plot boundaries must be known. Given that the maximum size of forest land to be allocated is 30 ha, this will result in many small patches. Boundaries of such patches will in most cases not coincide with natural boundaries (such as rivers, ridges, transitions between land use types…), which implies a high workload to demarcate the individually owned plots. Moreover, regarding the vigorous growth of secondary natural forests, respective plot boundaries have to be cleared annually or at least every two years and it is rather doubtful that individual households endue over sufficient labour force to conduct the annual clearing. As a result, the demarcation of individually allocated natural forests is in most cases unclear, leading to inability to protect and manage the individually owned forest resource sustainably.

Regarding the allocation of forest land that is currently not covered with forest (bare land), the opposite is usually the case. Here, individual land ownership enables investments by households to develop the allocated forest land (e.g. afforestation, agro-forestry, or conversion of parts into agriculture land, as in accordance with Decision 178).

The importance of LUP/FLA in the CFM process

Hand Out

Forest land allocation to groups of households

The allocation of forest land to groups of households represents an option in cases where natural forests cannot be managed by the entire village community. This can for example be the case in villages consisting of more than one ethnic group or where a traditional clan-structure exists. It has to be considered that respective groups of households should not be too small, guaranteeing that the forest land each group receives is of adequate size (think about the boundaries!). For reasons of practicability for the technical allocation, as well as to ensure that boundaries of each plot of natural forest can easily be identified in the field, the latter should coincide with existing natural boundaries whenever possible.

As far as management and protection of the allocated forest land is concerned, respective groups of households need to be able to share the workload and benefits from forest management amongst themselves.

Forest land allocation to the entire village community

The allocation of forest land to the entire village community represents the least complex procedure. As forest blocks are the unit for protection and management, no additional boundaries have to be delineated (apart from boundaries between villages/communes/districts). The suitability of this form of allocation depends on tradition and social composition of the respective village, as well as the ability to organise themselves.

Does this imply that CFM cannot be implemented in case that natural forest has already been allocated to individual households?

The attentive reader might have already asked her- or himself whether reallocation of forest land is a prerequisite in villages where natural forest has been allocated to individual households and which have expressed their interest to go ahead with CFM. There is no universal solution to this question. In some cases reallocation might indeed represent the only option (for example in cases where not all households had the chance to participate in forest land allocation and as a result did not receive forest land), while in other cases the formation of forest user groups (or organisation of the entire village community) to jointly manage and protect the village forests constitutes another option. However, the consent of all households affected will be needed to achieve the latter. A careful and comprehensive assessment of the local situation regarding LUP/FLA is therefore a crucial prerequisite for the initiation of CFM.

➲ Remarks:

➲ PART IV

Awareness about potential conflicts in CFM

Conflict assessment, prevention and resolution

hand Out

Definition of Conflict

✓ A conflict can be defined as '…***a relationship among two or more opposing parties (e.g. different stakeholders of a community forest), based on actual or perceived differences in needs, interests, and goals.***'

Scales of Conflict

✓ Conflicts occur…

…**at various levels**

➔ Household, community, national, regional, global

…**involve a variety of different individuals, groups, and organizations**

➔ Within a household, within a village, between neighbouring villages, between commune and village, between communes, between village/commune and SFE

✓ Conflicts **change/evolve over time**…

Potential
- Simply a potential threat
- Hidden within the community or in the community's relationship with others

Emerging
- May begin as a small problem but then starts to grow
- It can grow gradually and steadily, or develop rapidly
- Conflicting parties are identified, the dispute is acknowledged
- A workable problem-solving process has not been developed
- Potential to escalate

Open/ Manifested
- Parties are engaged in active and ongoing dispute
- Negotiation between parties might have started

Example for different stages of a conflict in CFM

- ✓ The following example illustrates what can happen if potential conflicts are not taken into consideration right from the start of the process of CFM
- ✓ Villages A, B, and C are managing parts of a certain forest area traditionally. The boundary of the areas they manage is not really known and in reality there is also some overlap in management. => **POTENTIAL CONFLICT**
- ✓ The decision is made to allocate the respective forest land area to local communities. However, in meetings about LUP/FLA, only villages A and B are invited
- ✓ Following the land allocation process, villages A and B receive red books for the respective forest areas. However, forests are still managed in the same manner as before. => **POTENTIAL CONFLICT**
- ✓ In the process of CFM, villages A and B are facilitated to establish their own forest protection and development regulations, where the decision is made not to permit the harvesting from their forest land by outsiders. In a commune weekly meeting, village C is informed about the regulations and realizes that some of the forest land which has been allocated is traditionally management. => **EMERGING CONFLICT** – conflicting parties have been identified
- ✓ As the process of CFM advances, villages A and B establish forest management plans and enforce their protection regulations. This implies that they report inhabitants of village C who are harvesting timber from their forest area. The situation escalates, as villagers from village C are not willing to confine from the traditionally managed forest area. As a result, established forest protection regulations and forest management plans cannot be implemented adequately by villages A and B. => **OPEN CONFLICT**

Further examples for different stages of a conflict in CFM

Time-line / Level	Potential Conflict	Emerging Conflict	Open Conflict
Within one village	Not all households received forest land but forest land is still managed according to customary laws of the village community.	Forest Protection Regulations are established and people who did not receive forest land suddenly get aware that they have no legal right to manage their land. However, management still continues to be customary.	Forest land receiving households are eager to manage "their" forest land areas, try to implement the forest protection regulations. It comes to open conflicts between them and the non-receiving households.
Between villages	Villages A, B, and C customarily manage parts of a consecutive area of forest land. Only villages A and B are invited to meetings organized for LUP/FLA and receive the forest area.	For villages A and B forest protection regulations are established in a non-participatory way. As a result inhabitants of villages A and B do not know how to protect their forests, but share the opinion that inhabitants of village C should not be allowed to harvest any forest products.	Forest protection regulations are revised and forest management plans are established in villages A and B. As a result, inhabitants of village C are fined for managing the forests that have been allocated to villages A and B. As part of these forests are the only source of timber available, village C continues to harvest timber and the management plans established for villages A and B cannot be implemented accordingly.

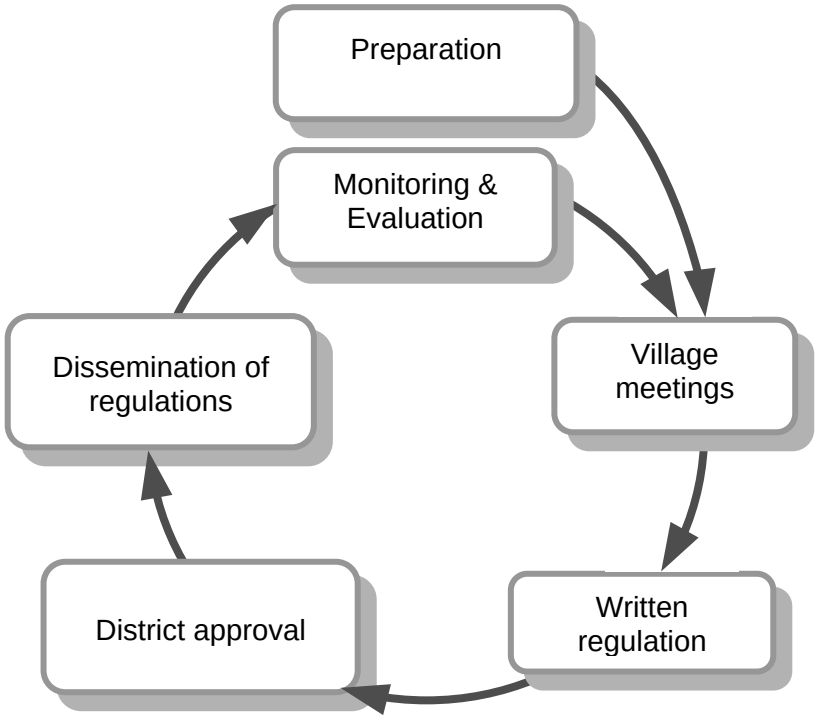
➲ Remarks:

➲ PART V

Forest Protection and Development Regulations

FOREST PROTECTION AND DEVELOPMENT REGULATIONS (FPDR) - Overview

Hand Out



OVERVIEW OF THE VILLAGE MEETINGS' AGENDA

9- Dissemination of the regulations within the community

8- Procedure for fining, compensations, and awarding

7- Benefits and duties of forest owners and protectors

6- Regulations for hunting and harvesting of wildlife

5- Regulations for cattle grazing

4- Regulations for uplands clearing and burning, and designing the fire prevention plan

3- Regulations for harvesting of forest products

2- Forest classification for management, utilization and identification of main problems related to protection and management

1- Introduction to the meeting and setting village forest regulations objectives

FOREST PROTECTION AND DEVELOPMENT REGULATIONS – OVERVIEW (continued)

hand Out

Purpose

The methodology aims to build farmers capacity to analyse their forest resources and traditional regulations, eventually identifying and adopting the forest regulations that will best respond to farmers and government's forest protection needs. The purpose is also to assist Forest Protection officers to establish a rapport of trust, respect and exchange of information with local communities.

Consequently the methodology is not meant to instruct farmers on how the forest regulations should be prepared but through participatory training methods to provide them with tools and skills which will enable them to analyse their own forest resources, and to generate their own ideas on forest protection regulations.

1. Preparations

To make each village meeting successful, participatory and an useful learning experience for all farmers, some preparations may be necessary and they may include:

- to review existing data on forest resources, and village socio-economic data
- to organize a meeting at commune level inviting all village heads to attend (if appropriate)
- to inform the village management board about:
  - the village forest regulations process that will take place, its approach and the main objectives
  - what they can expect and what is expected from them
  - who should attend the village meetings
  - to agree on the date of the first day meeting

FOREST PROTECTION AND DEVELOPMENT REGULATIONS – OVERVIEW (continued)

Hand Out

2. The village meetings

This is probably the most important step in the preparation of the village forest regulations. During a series of meetings the community members will first share their ideas and opinions on the purpose of the forest regulations and agree on what they would like to achieve with them.

The main objective of the village meetings is the identification and finalization of the village forest regulations. During this step, the meeting is facilitated by a forest protection officer together with the village head.

3. Finalize village forest regulations document for approval

Once the village forest regulations have been developed and agreed by all community members, such regulations need to be written down in a simple document that will then be submitted to the commune and district for approval.

During this step the forest protection officer assists the village management board to finalize the document.

4. Approval of the village forest regulations

The document is submitted by the village leader to the commune authorities, and from the commune to the district authorities for approval.

The main role of the facilitator is to follow-up and make sure that the regulations are submitted and that the commune takes action and complete approval procedures in time.

5. Dissemination of government and village forest regulations

It has often been pointed out that farmers and in particular women are not always well aware of the forest regulations.

During this step it has to be assured that the approved regulations are properly disseminated within the community according to farmers' identified methods, to ensure that everyone knows the regulations.

6. Monitoring and enforcing forest regulations in the village

At village level the farmers themselves are main responsible to ensure that regulations designed by them are followed. This is one of the main reasons why the new guidelines for forest regulations stress the importance of community member's participation in the design process.

7. Periodical review of the village forest regulations

The village level forest protection and development regulations should be officially revised every 3 to 5 years. The role of the facilitator will be to organize the village meetings to re-design the regulations including their official approval.

An annual meeting could be conducted at village and commune level to monitor and evaluate how communities are implementing the regulations.

➲ Remarks:

➲ PART VI

Participatory Forest Management Planning

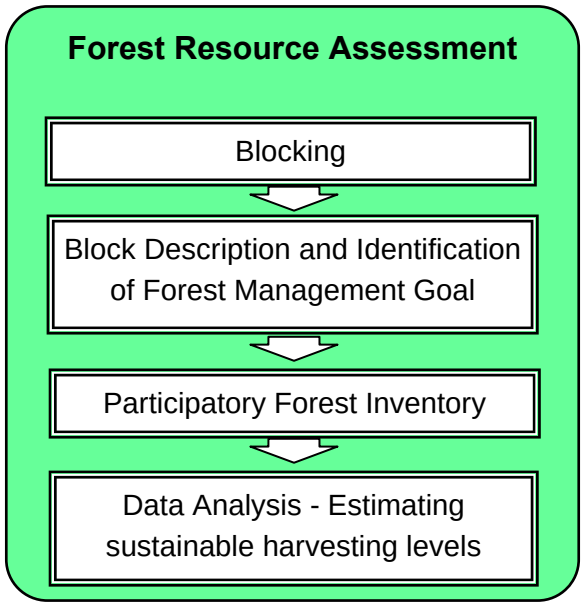
FOREST MANAMGEMENT PLANNING – Outline of the procedure and steps

hand Out

The process of forest management planning can be split into two main parts, the first part consist of participatory assessment of the forest resources, while the second part consists of the elaboration of forest management plans. The various steps of both parts are described in the following:

Forest Resource Assessment

In order to know what our forests can provide sustainable and which activities might be needed for their development, available forest resources have to be assessed. The first step of this assessment is to clarify the **location** of various forest blocks of the village, the **total area** covered by each block, as well as the **type and status** of the forest. Ideally, the information about the location and area of the forest blocks of a village has already been assessed during LUP/FLA, which usually results in a village forest map. However, in order to ensure that the information about the forests is accurate (especially considering cases where LUP/FLA has been accomplished some years ago), the **blocking** exercise is carried out.



Blocking

During this step, villagers identify the various forest blocks belonging to their village on a base-map. The scale of the map should not be smaller than 1:10000, as villagers have to sit around it. A transparency is put over the map to facilitate the drawing. This is especially helpful since participants are often afraid to make mistakes and therefore reluctant to start drawing.

Various types of maps can be used to facilitate the exercise:

Topography Map - Available throughout Vietnam. Contains overall information about the forest land distribution, but additional tools are required to help villagers to identify the location of their forests. Suitable tools are for example 3-D terrain models, which greatly help villagers to orientate themselves on the map. Another option is to consult an experienced person who knows the village territory well and is used to work with maps before starting the exercise. Such persons can often add important features, such as local streams and trails onto the map.

In order to obtain the exact location of forest blocks (and more importantly the respective areas), a GPS-hand receiver can be used for participatory field verification of results from the mapping exercise. During the field verification, existing boundaries of each forest block have to be surrounded and waypoints be recorded. Note that the base map has to contain coordinates to be able to reference your position.

FOREST MANAMGEMENT PLANNING –
Outline of the procedure and steps

hand Out

Illustration: Participants delineating the forest areas of their village, using topography map.

FOREST MANAMGEMENT PLANNING – Outline of the procedure and steps	**hand Out**

Current Forest Status Map - Respective maps are usually prepared by FIPI and display the location of forests according to the status classification, which is uniform for whole Vietnam (some of the indicators are modified to suit the local context). Accuracy depends largely on the age of the maps and also varies from location to location. However, respective maps are available throughout Vietnam and are most commonly used by institutions engaged in forestry. Regarding supplementary tools for participatory delineation of forest blocks as well as field verification, the same applies as for topography maps.

Aerial Photomaps - Are photographs of an area that have been taken from an aeroplane, have been geometrically corrected (rectified) and placed into a map coordinate system. If not too old (a couple of years), these maps represent the most accurate data about the distribution of forest land. Another advantage of the use of such maps is that villagers are able to actually "see" the various types of land use, their settlement area and even differences of forest status (e.g. degraded versus virgin forest). Due to the high accuracy, field verification is reduced to a minimum (usually achieved in conjunction with subsequent forest inventory). The disadvantages of aerial photomaps are the comparatively high costs and current unavailability at the district and commune level.

Villagers are asked to group around the map and to start identifying more easy features, such as their settlement areas, village boundaries, locally known mountains and streams. Once this has been completed and villagers have gained confidence in drawing on the transparency, the various forest blocks have to be delineated.

➲ ***A forest block is defined as a forest patch of similar forest type, in which the same management will be applied in the future, and from which the same forest products can be expected in the future.***

Each forest block will be given a local name to ensure a common understanding among the village community about the locations. As simple grid, also drawn on a transparency is used to calculate the area of each forest block. If the map is at a scale of 1:10.000, one centimetre will equal 100m in reality. If each square is 1cm x 1cm it comprises 1 ha (1cm ≈ 100m; 100m x 100m = 10.000 m^2 = 1 ha). However, based on the accuracy of the maps used to facilitate this exercise, some field verification might be necessary.

FOREST MANAMGEMENT PLANNING – Outline of the procedure and steps

hand Out

Block Description and Identification of Management Goal

Once the location and areas of forest blocks is known, the next step is to describe each forest block and to identify a long-term forest management goal. A description will not be made for forest land that is currently not covered by forest (i.e. bare land) and management goals will be defined based on available options for afforestation and agro-forestry, as well as preferences set by the participants (Participatory Technology Development represents another suitable option to define long-term management options with the villagers).

The stand description comprises information that is important for forest management: **accessibility**, **forest type** and **age**, **harvestable products**, **occurrence of weeds, fire, and grazing,** as well as the **logging history**. Information about the forest structure, such as the distribution of trees in the upper layer and under the canopy, respective main species and their potential use for the villagers, is furthermore assessed for each forest block. The assessment is initially achieved in the village meeting, and later revised in the forest (this can be achieved prior to the actual forest inventory).

The reason why stand descriptions are made before forest management goals are defined is simply that we have to work with the already existing forest (species, structure, quality).

The sequence of steps needed for the determination of forest management goals is displayed on the two pages. For forest land stocked with forest, the function for the village has first of all be determined (i.e. whether the forest block is under production, protection, or is of cultural value). For the forest blocks under production, villagers are facilitated to define management goals by asking the following guiding questions:

*What **products** do you want from your forest?*

*What **forest species** can provide these products?*

*What **harvest diameter** do you need for each product?*

What products do you need most in terms of **quantity***?*

Once these questions have been answered, participants have to discuss how the forest must look like in the future in order to provide these products. The result of the discussion is a detailed management goal, leading to the question of how to achieve it (i.e. identification of silvicultural options).

An example of a management goal is for example: '*Dipterocarp high-forest for production of valuable construction timber, with selective harvesting of timber'*.

Regarding forest blocks under protection or of cultural value, the specific purpose has to be determined (e.g. village cemetery, watershed protection, etc.) and assessed whether minor forest products are allowed to be harvested.

As far as bare forest land is concerned, options for afforestation and agro-forestry have to be discussed with the farmers. Participatory Technology Development (PTD) represents a suitable approach to determine suitable options.

➲ It is important to elaborate long-term forest management goals for the forest blocks from the very beginning to **avoid contra-productive interventions over the entire production period**, especially regarding the long rotation periods (up to decades), associated with forestry.

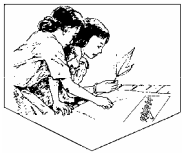
FOREST MANAMGEMENT PLANNING –
Outline of the procedure and steps

hand Out

Sequence of steps for the determination of management goals for productive natural forests

Reflection on current **village forest status**
- available resources
- present forest management

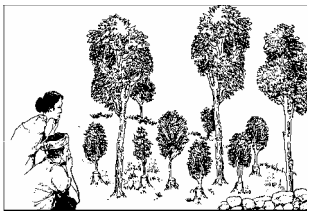
Identification of desired **forest products**
- demand oriented
- farmers create self-interest in benefits
- independent continuation
  - long-term sustainability



Identification of **species** and **harvest diameter**
- diameter refers to height ⇒ vertical structure
- diameter refers to age ⇒ age structure
  - length of rotation cycle

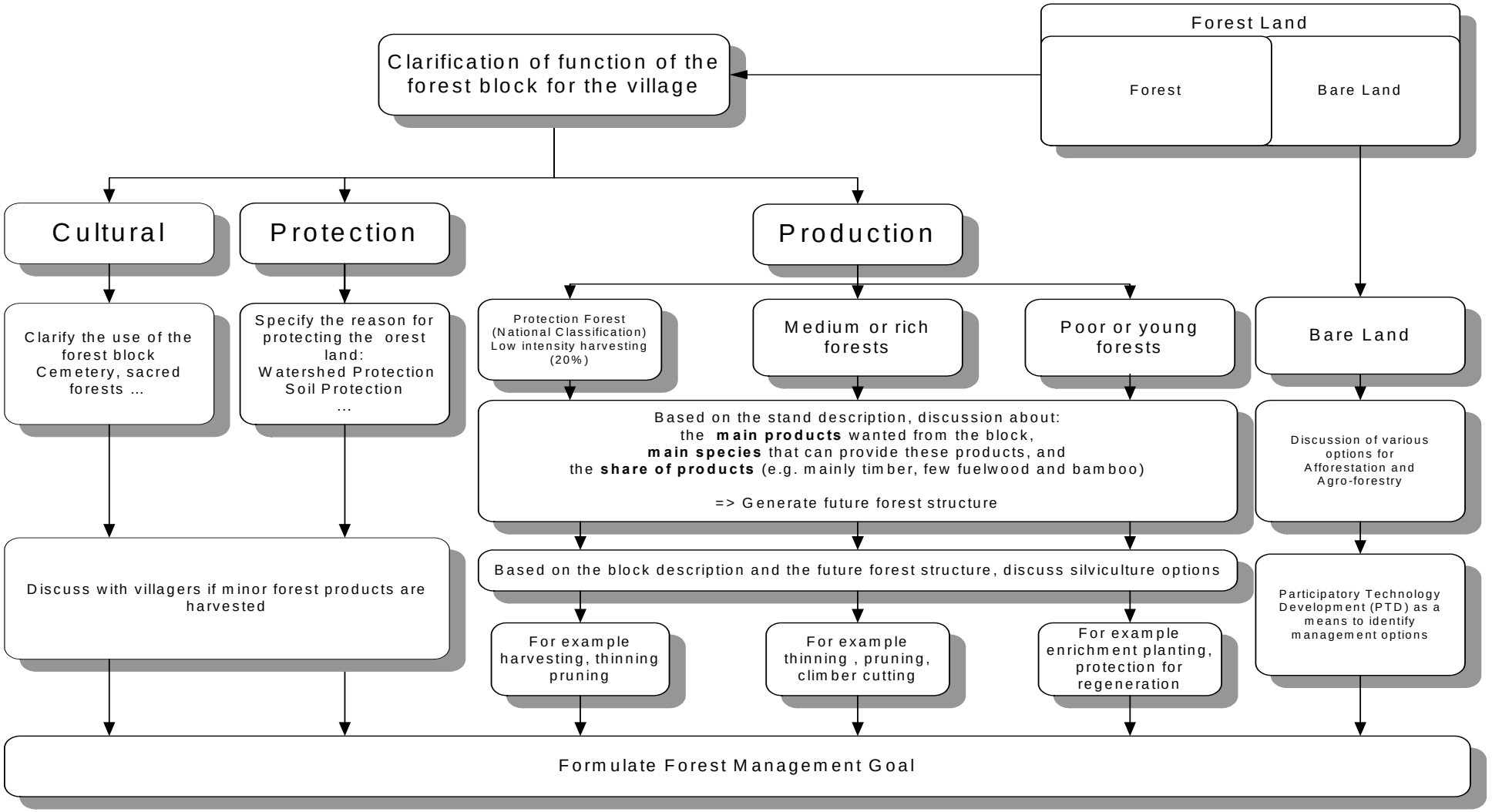
Ranking of products according to demand
- species composition
- proportion of mixture ⇒ horizontal structure

Picture of **future forest structure** developed
- vertical structure
- horizontal structure
- mixture of species



Flowchart displaying the sequence of steps for the elaboration of Forest Management Goals

hand Out



FOREST MANAMGEMENT PLANNING – Outline of the procedure and steps

hand Out

Participatory forest resource inventory

Once forest blocks have been described and management goals defined, the next step is to accomplish a forest inventory in each block where villagers intend to harvest timber within the next planning period (i.e. 5 years). In forest blocks that are not going to be managed by the village, no forest inventory will be carried out. Forest inventories are needed to **determine sustainable levels of harvesting**. Considering that the goal of community forestry is to involve villagers to a maximum extent, **conventional approaches** like the ones used by state forest enterprises or at universities **cannot be applied**, but other ways of data collection, as well as the type of data collected need to be applied.

Participatory forest inventory as described in the following is based on the following **principles**:

- ***Participatory –*** forest users are actively carrying out main activities from sample-plot layout, over tree measurement to data recording and analysis, with only minor support by external staff.
- ***Simple*** - forest users are able to fully understand the methodology and information produced. The supporting staff does not necessarily have to be trained foresters.
- ***Relevant*** - only information essential for active forest management is collected
- ***Cost effective*** - the methodology uses few resources and takes little time

The **following modifications** have been made in order to adjust a conventional approach of forest inventory to the context of CFM:

- **No data about tree heights or volume is recorded**. This data is too difficult to be understood by local people, and expensive measurement tools are required for data collection. Local people are not able to convert volumes into stem numbers, which would make it difficult for them to derive management options (i.e. the number of trees that can be harvested) if volumes would be calculated.
- The forest status is described by **stem number per diameter-class** and **timber quality** only.
- The measurement of tree diameter at breast height (dbh) is done with a **coloured diameter-tape measure**. Participants get a good feeling for the diameter-classes during the inventory work in the field. After the inventory farmers are usually able to show which diameter a tree in a certain diameter-class has. Furthermore, cut-out diameter circles are used to illustrate the dimension of trees in the various diameter-classes.
- **The side length of each sample-plot is limited to 10 meters** to minimize mistakes in area measurement using simple tools.
- Trees are recorded with local instead of scientific names and the assessment of timber quality is based on utilisation purposes of forest users only (suitability for construction timber or firewood).

FOREST MANAMGEMENT PLANNING – Outline of the procedure and steps

hand Out

Description of technical procedure for forest inventory

Data is recorded in **sample-plots**, which are established along **transect lines**. The total number of sample-plots to be established depends on the size of the actual forest block (refer to the CFM Trainer Guide for details).

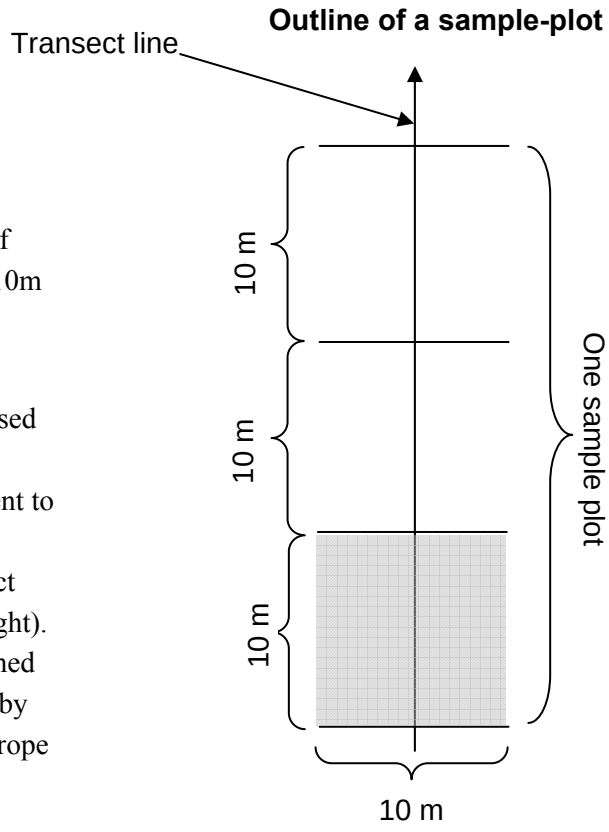
Transect lines should to be laid out to more or less evenly cover the entire forest block area. They should be **oriented uphill and downhill** to include the maximum ecological gradient (i.e. forest conditions are likely to change from the bottom to the top of the mountain). In order to establish a straight transect-line, three persons holding bamboo sticks are used with the person at the back having to shift to the front the others each time. **No compass is needed** as it has merely to be ensured that participants move in a straight line and are not free to choose the location of the sample-plots - this would result in biases, as plots would probably be concentrated in better forest areas. **Every 50 meters, a sample-plots will be established,** using the transect line as the centre (dividing the plot into left and right side).

Sample-Plot Design

Size: 300 m^2

Layout: One sample plot consists of three compartments, each 10m x 10m, established along a transect line.

Demarcation: Ropes (2 x 10 meter) are used for the demarcation of the compartments, it is sufficient to demarcate the sides perpendicular to the transect line (as displayed on the right). Compartments are established one after the other, simply by shifting the first ten-meter rope twenty meters ahead.



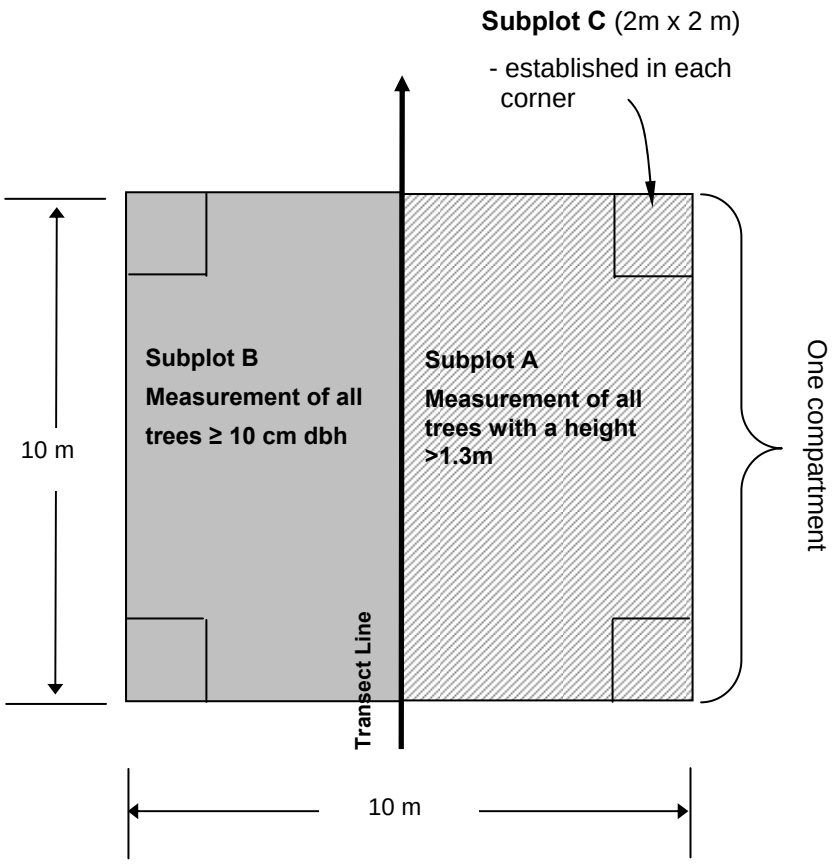
FOREST MANAMGEMENT PLANNING – Outline of the procedure and steps

hand Out

In each of the three compartments, **tree diameters at breast height** (dbh) are measured and the local name of the tree is recorded. Moreover, for all trees ≥ 10 cm dbh it is assessed whether the stem has potential to be used for construction purposes – as stated earlier, this judgment purely depends on the perspective of the forest user.

Trees are measured in dependence of their size:

- on the right side of each compartment (**Subplot A**), all the trees are measured which are taller than 1,3 m height (= breast height)
- on the left side of each compartment (**Subplot B**), only the trees with a diameter ≥ 10 cm are measured.
- In each corner of the compartments, natural regeneration is counted in squares of 2 x 2m (**Subplot C**).



The measurement of smaller-sized trees (below 10 cm dbh) has been confined to half of the sample-plot area in order to reduce the total time needed for forest inventory. This is rendered possible due to the higher abundance of trees in these size-classes. While sample-plot establishment and measurement of tree diameters is done by forest users, the task of data recording has to be carried out by a more experienced person (for example extension workers or forest ranger).

FOREST MANAMGEMENT PLANNING – Outline of the procedure and steps

hand Out

Data analysis

Once data collection has been concluded, the data from all sample-plots that have been established in a forest block has to be **aggregated**. Completed sample-plot forms are equally distributed among participating forest users, who will be mainly involved in the process of data analysis. The first step is to elaborate a **list of tree-species** that have been included in the sample. It is distinguished between species yielding timber that can potentially be used for construction purposes (so-called timber-species), and those who are only suitable for firewood. This information is of importance as later on, the distribution of timber-potential trees is compared with the distribution of all trees of the forest stand to derive conclusions about the quality of the stand as well as to identify first management options.

Using the **pre-printed block summary forms** (refer to the CFM Trainer Guide for details), the numbers of trees in the various diameter-classes are summarised and multiplied with a certain factor to arrive at numbers that are representative for the entire forest block area.

The **factors,** with which the number of trees measured within the sample-plots has to be multiplied, vary in dependence of the size of the trees. This is because trees have been measured in different subplots according to their diameter (refer to the previous page).

In each sample-plot, trees have been measured in the following areas:

- **Trees ≥ 10 cm dbh** → 10m x 30m (the entire plot area) = 300 m^2 or **0,03 ha**
- **Trees < 10 cm dbh** → 5m x 30m (half of the plot area)= 150 m^2 or **0,015 ha**
- **Natural Regeneration** → 6 x 4m^2 (2 times 2m x 2m in each compartment and 3 compartments per sample-plot) = 24 m^2 or **0,0024 ha**

Based on the areas sampled, factors for the multiplication of stem numbers obtained from sample-plot can be calculated as follows:

Factor a (trees ≥ 10 cm dbh) = Total forest block area/(Number of sample-plots x **0,03 ha**)

Factor b (trees < 10 cm dbh) = Total forest block area/(Number of sample-plots x **0,015 ha**)

Factor c (nat. regeneration) = Total forest block area/(Number of sample-plots x **0,0024 ha**)

Example: 50 sample-plots have been established in a forest block with a total size of 150 ha.

Factor a = 150 ha / (50 x 0,03 ha) = 150/1,5 = 100

This means that the number of trees in all diameter-classes > 9 cm have to be multiplied by 100 to arrive at numbers which are representative for the entire forest block.

The number of trees measured in all sample-plots is multiplied with the respective factors to obtain figures, which are representative for the entire forest block area.

FOREST MANAMGEMENT PLANNING – Outline of the procedure and steps

hand Out

Based on the total number of trees per diameter-class in the forest block, the next step consists of **drawing of histograms**. Histograms are suitable tools to enable forest users to analyse the forest structure. As mentioned above, two histograms are drawn: one displaying the **distribution of all trees in the forest block**, while the other only displays **distribution of trees which are of timber-potential**. Villagers are facilitated to compare both histograms, diameter-class by diameter-class and questions are asked about actual differences (e.g. possible reasons for the relatively low abundance of timber-species in the lower diameter-classes -> grazing, weeds, fire, or canopy too open?).

While this comparison allows the drawing of conclusions about the quality of the forest block, it does not allow for the identification of sustainable harvesting levels. In order to achieve this, a **so-called ideal forest model** is needed.

Ideal Forest Model

To identify a sustainable number of trees that can be harvested from the forest block, a **reference or standard** is needed, against which the actual forest structure (resulting from forest inventory) can be compared. In the context of community forestry, this standard aims at satisfying the demand of the forest user in terms of forest products and at the same time ensuring sustainability of the forest resource. In other words, the structure of the forest is mainly defined by the human demand and based on its production potential. It is important to realise that ideal forest models do not represent virgin forests where no management is carried out, but that they are **modelled to resemble forests in a productive state**, constantly providing forest users with the needed timber (e.g. according to forest classification $IIIA_1$ and $IIIA_2$). Therefore, ideal forest models are modelled to satisfy a certain **management goal** (for example for the harvesting of timber for construction purposes), which is expressed by local forest users. Ideal models are elaborated for the **main forest types** at the locality (for example dry-dipterocarp and semi-deciduous forests in Dak Lak), to ensure that management of this forest types can be based on the orientation on respective ideal models.

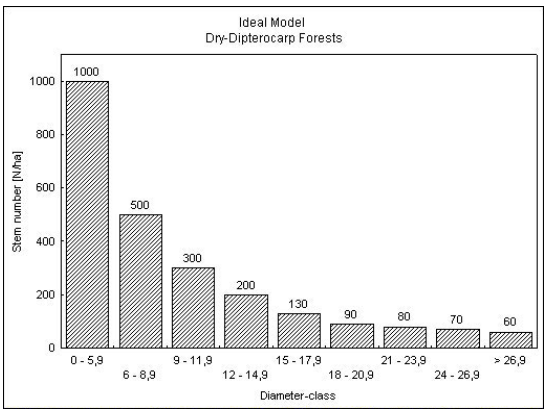


Illustration: Ideal forest model for dry-dipterocarp forest

Ideal forest models are going to be elaborated for all 7 agro-ecological zones of Vietnam, but at present **preliminary ideal forest models** will be used for the promotion of CFM.

FOREST MANAMGEMENT PLANNING –
Outline of the procedure and steps

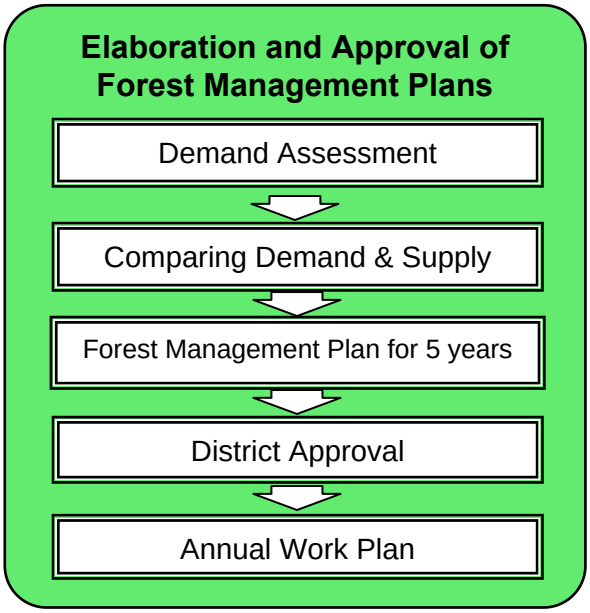
hand Out

The respective **ideal forest model** is drawn on a transparency and is placed over the histogram displaying the total number of trees of the forest block. Then, **the actual stemnumber is compared with the stemnumber postulated by the ideal forest model** enabling forest users to determine where trees are lacking and in which diameter-classes they can harvest trees. Besides harvesting and thinning, management options regarding improvement/enrichment and protection are identified and discussed, referring to the information from the participatory stand description.

Elaboration and Approval of Forest Management Plans

As a result of forest resource assessment, management options have been discussed and the maximum number of trees in the different diameter-classes which can be harvested sustainable have been identified for the various forest blocks. Prior to start writing management plans for respective forest blocks, the village demand for timber in the planning period (i.e. the next 5 years) has to be assessed.

Village timber demand assessment
The demand for various forest products is assessed via listing the various products which are built from forest products (for example house, pigsty, cowsheds, fences). Then, with the help of the cut-out diameter circles, it is estimated how many trees are needed on average per unit of each product. A whiteboard can be used to sketch the various parts of the product. Based on the per-unit number of trees it is assessed how many new units are going to be needed during the next five-years and how many old units need to be replaced (maintenance).



The tree numbers needed per unit are then multiplied with the estimated number of units to arrive at a rough estimate of the village demand for timber in the next 5 years. Firewood represents a somewhat special case, as the unit of measurement varies (backpacks, bundles, small truck-loads). In some villages, predominantly dead and dry trees and branches, as well as harvesting debris will be used, while in others, live trees will be cut for firewood. In the latter case, it has to be assessed how many units an average households needs, as well as the average number of trees in that is harvested for each unit.

Comparing demand and supply

Once demand and supply of trees in the various diameter-classes have been assessed, an overview table is drawn to compare both. For each diameter-class, the village demand is confronted with the supply form all the forest blocks that are under production. Based on this information, as well as considering the management options that have been identified during the analyses of the inventory data, forest users determine the **number of trees in various diameter-classes to be harvested from the forest blocks**. Based on the result, **problems and opportunities** are identified. A problem is defined as an inability to build a certain product (e.g. not enough timber to built houses). This step is somewhat difficult to cover in a three days training course, as only the supply information from one forest block will be available and has to be exemplarily compared against the whole village demand.

Writing of five-year forest management plans

Forest management plans are written for forest blocks, as well as bare forest land. Activities for management are generally grouped according to three main objectives:

- Harvesting and thinning (afforestation/agro-forestry in case of bare land),
- Improvement and enrichment, as well as
- Protection.

Based on the information obtained during stand description, data analysis, as well as the comparison of demand and supply, activities are formulated under each objective. Harvesting and thinning refers to the stem numbers in various diameter-classes that will be cut from the forest block in the next 5-year period (identified in the previous step). Regarding improvement and enrichment, options such as climber cutting, liberation of natural regeneration, enrichment plantings in gaps, marking of future crop trees, and pruning represent some options. Protection refers to the remaining stand and comprises measures such as fire prevention, prohibition of grazing, slash and burn. Respective activities are described in more detail, a time-frame is indicated and responsibilities for the implementation are identified.

FOREST MANAMGEMENT PLANNING – Outline of the procedure and steps

hand Out

Following the elaboration of forest management plans, **organisational and managerial aspects** of forest management at village level have to be described to ensure that the plans can be jointly implemented and enforced. This comprises the set-up of a so-called **Village Forest Management Board (VFMB)** in charge of enforcing the approved forest protection regulations, solving of violation cases, as well as the collection of application forms for timber harvesting by individual households for forests which are jointly managed by the village (see below under implementation and monitoring).

District pproval

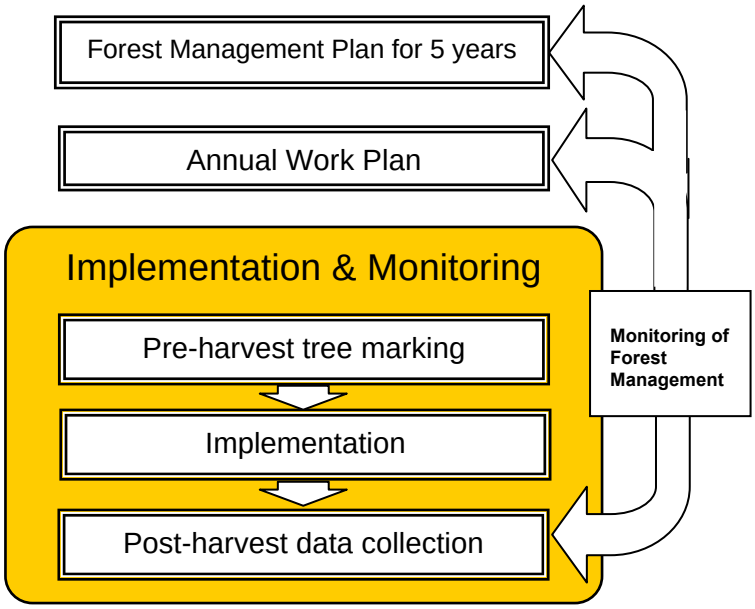
Completed management plans are **submitted to the commune**, who is in charge of passing them on to the **district** for appraisal and approval. At the district level, the People's Committee is entitled to approve the 5-year forest management plans, as stipulated in the new law on forest development and protection. The Agriculture and Cadastral Office (ACO) is assisting the DPC in the technical appraisal of the management plans. Once forest management plans are approved, they are submitted to the commune and send back to the village.

Annual Work Plans

Based on the frame set by the 5-year forest management plan, a more detailed annual work plan has to be elaborated for the respective year. In principle, **activities contained within the 5-year forest management plans are specified** and broken down. In case that measure of afforestation and/or forest rehabilitation have been identified as necessary, annual work plans **form the basis for the annual budgeting of planned forest management operations within the VDP**. Annual work plans are **submitted to the commune for approval.**

Implementation & Monitoring

Forest users have to be enabled to implement the various measures detailed in the respective annual work plans. Regarding the harvesting of timber, technical training in the selection of trees suitable for harvesting will be one prerequisite to ensure that good forest management can be applied. A simple set of criteria has therefore to be elaborated and applied in the field together with forest users. Moreover, it has to be ensured that forest users are able to apply directional felling in order to reduce harvesting damage to the remaining stand. Households will have to apply for the harvesting of timber, filing application forms to the Village Forest Management Board. The VFMB will organise meetings at certain intervals (e.g. every 2 months). The commune has to be informed prior to the meeting, to allow CPC members to participate.



FOREST MANAMGEMENT PLANNING – Outline of the procedure and steps

hand Out

In this meeting, all activities related to forest protection, development, and utilization are outlined for the next two months, and the application forms for timber harvesting are forwarded to the CPC. The CPC checks whether the proposed harvesting activities are inline with the annual work plan (i.e. whether the harvesting of timber in various forest blocks does not surpass the amount stated in the work plan). **Approval of the timber harvesting proposals by the district is <u>not</u> needed**, as the latter has already approved the amount of trees to be harvested for the 5-year period.

Post-harvest data collection should be carried out to assess whether the management applied by forest users is suitable or if further improvements of technical procedures regarding tree selection and harvesting technique are needed.

➲ Remarks:

Annex 1: Training evaluation form

The trainees are requested to fill in the form at the end of the training Date:

Location: Training about: Organizer:

1. General: What is your general opinion about this training course?

☒ Give a mark	Comments
☐ Excellent	
☐ Good	
☐ Medium	
☐ Not so good	

2. Usefulness: Did you learn something useful for your real job? What is the most interesting?

☒ Give a mark	Comments
☐ Very useful	
☐ Useful	
☐ Medium	
☐ Not useful	

3. Training Methods: Were the methods participatory, practical and interactive?

☒ Give a mark	Comments
☐ Excellent	
☐ Good	
☐ Medium	
☐ Mostly lecturing	

4. Training materials: What is your opinion about the quality of the training materials?

☒ Give a mark	Comments
☐ Excellent	
☐ Good	
☐ Medium	
☐ Not so good	

5. Training capacities: What is your impression about the trainers (empathy, enthusiastic, and capacities)?

☒ Mark	☒ Mark	☒ Mark
Name:	Name:	Name:
☐ Excellent	☐ Excellent	☐ Excellent
☐ Very good	☐ Very good	☐ Very good
☐ Good	☐ Good	☐ Good
☐ Medium	☐ Medium	☐ Medium
☐ Not so good	☐ Not so good	☐ Not so good

6. Which changes are necessary for the improvement of next training courses?