

Community Forest Management (CFM)



Community Forest Management (CFM) Glossary

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, RDDDL (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.

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Term	Definition
Additional planting	Additional planting is carried out in forest and plantation areas to ensure an optimal number of trees.
Bare forest land	Areas are considered as bare forest land when trees are lacking and the land is predominantly covered by shrubs and weeds. A proper forest cover cannot build up again due to weak natural regeneration. The lack of a protective canopy cover frequently results in a high risk of soil erosion.
Benefit sharing	The term benefit sharing refers to the mechanism that regulates how benefits from allocated forest resources are shared among forest users, the village forest management board (VFMB), forest protection groups (FPG) and the share that is kept to create the village fund for forest development. Benefit sharing regulations are defined by the communities and are part of the forest protection and development regulations (FPDR). Also refer to the term “right to benefit”.
Block description	Compilation of qualitative information relevant for managing the forest blocks (i.e. forest structure, main tree species, history of use, risk of fire, animal grazing). This information is important for discussion among forest users when defining management goals for a specific forest block.
Canopy coverage	This measure provides information on the density of the canopy referring to the percentage of ground area that is cover by the canopy (values ranging from 0 to 1).
Competing tree	Competing trees are those which actively compete with the target trees (refer to the definition of “target tree” for reference) for growth space and resources such as light, nutrients and water. One indicator for competition is the touching of crowns of neighboring trees. In order to promote growth and quality of target trees, competing trees are to be removed (refer to “selective cutting” for details). A tree is also defined as a competing tree if it is hindering the establishment and growth of natural regeneration of target trees.
Commune Forest Management Board (CFMB)	Institution at the commune level with the task to supervise and assist villages in forestry related activities including: <ul style="list-style-type: none"> ▪ Monitoring the fulfillment of the annual management plan and five-year forest management and development plan. ▪ Organizing regular meetings with members of all VFMB to inform about issues related to forestry, planned activities and new forest policies. ▪ Monitoring and supporting in terms of functioning forest protection and development regulations and reporting all violation cases to forest protection units. <p>Since the CFMB is the lowest legally recognized entity, it has the important function to link the village with the higher administrative levels (district and province). Recommended members of the CFMB are the chairman/vice-chairman of the Commune Peoples Committee, as well as the Forest Protection Unit officer of the commune.</p>

Term	Definition
	(Refer to VFMB for comparable institution at the village level).
Community Forest Management (CFM)	<p>Participatory approach of forest management that includes the following elements:</p> <ul style="list-style-type: none"> - Villages are given the right to manage land and forest in accordance with the revised forest protection and development law (2004) and the new land law (2003) - The village carries out activities that are related to forest protection and management. With support from extensionists and foresters, the village elaborates a five-year forest management and development plan and forest protection and development regulations. - The approved management plan is implemented by the participating households. - The village defines a benefit sharing mechanism among villagers and the village forest management board (VFMB). - The village forest management board (VFMB) is responsible for monitoring and evaluation of forest management plans. <p>For CFM, some external support from extension workers and forestry officers is needed for the elaboration of five-year forest management plan and the selection of appropriate silvicultural practices.</p>
Compensation	<p>Two forms of compensation exist: Compensation applies in case of violation of forest protection and development regulations (FPDR), whereas compensations also apply when the village community is compensated for the use of forest products by individuals (i.e. for harvesting certain forest products). Forms and levels of both types of compensation are stipulated in the forest protection and development regulations (FPDR). Severe violation cases of rules and regulations that imply high compensation levels should be handed over to the higher administrative level (commune/district).</p>
Colored diameter-tape	<p>A diameter-tape (normally used for tailoring) that has been colored to display the various diameter-classes. The widths of diameter-classes are normally set in accordance with the mean average diameter increment in five years for the respective forest type (e.g. if the mean annual increment is 0.6 cm, than the width of the diameter-class would be 3 cm). The diameter-classes in Vietnam normally range from three to five centimeter.</p>
dbh	<p>Abbreviation for diameter at breast height. In forestry, the diameter of a tree is measured at breast height (about 1.3 m above ground).</p>
Directional felling	<p>Technique to ensure that the cut tree falls in the direction that has been determines suitable before the cut is made. A suitable felling direction is the one where the damage that the falling tree will make to the residual stand (i.e. the remaining trees) is minimized. This means that trees are not felled down-slope, as this results in uncontrollable slipping and rolling with high possibility of damage. Open areas are preferably chosen. To ensure work-safety, it is important to consider the natural lean of the tree for the determination of a suitable felling direction. Also refer to "selective cutting".</p>

Term	Definition
Enrichment planting	Silviculture measure to add value to poor forest stands by planting high value trees (fast-growing trees, economically important trees, high quality trees etc.). This is done additionally to ensuring favorable conditions for natural regeneration.
Five-Year Forest Development Plan for Village	Five-year forest development plan is elaborated to summarize the information contained within the five-year forest management plans of the village. It contains an overview of the various forest areas grouped into forest blocks, including bare forest land. It states the forest management goal, responsibilities and times for the implementation of specific activities. The document also mentions the elected members of the VFMB. The rights and duties of all involved stakeholders are clearly defined in this document.
Five Year Forest Management Plan for forest block	<p>Five-year forest management plans are established for each forest block that is going to be managed within the next five-year planning period. Forests that are reserved or strictly protected do not need a management plan, but have to be included in the five-year forest development plan (under protection).</p> <p>The five-year forest management plans gives indications regarding the three main management objectives:</p> <ul style="list-style-type: none"> ▪ Selective cutting: for natural forests, alternatively <i>afforestation/ agro forestry</i> in case of bare land. ▪ Enrichment: all measures implemented to improve the forest structure and growth, including enrichment planting, cutting of weeds and climbers to liberate natural regeneration for young and poor forest etc. ▪ Protection: activities that are necessary to protect the forest stand from degradation (e.g. restriction of grazing, fire protection). ▪ In some case the use of NTFP is regulated <p>For each measure stated under the above mentioned objectives, the location, the quantity, the tentative timeframe, as well as responsibilities have to be defined. Activities are broken-down into more detail in the annual forest management plan.</p>
Forest and Land Allocation (FLA)	Forest and Land Allocation is the process of allocating forest and forest land to households, communities, organizations and individuals for the sustainable use on a long-term basis. The maximum duration time for this type of lease is 50 years. If households, communities, organizations or individuals use the land and forest in accordance with the government's guidelines, the land can be allocated again after the first term of allocation expires.
Forest blocking	Division of the forest area into homogenous areas (so-called forest blocks). Boundaries should be set according to existing natural features (such as streams, mountain ridges, etc.) to avoid additional labor for the establishment of boundaries and to ensure that the local village community knows the boundaries. Local names should be used for naming forest blocks such as names of a stream, a river or a mountain so that villagers can easily refer to them. A forest block represents an area of more or less homogenous forest

Term	Definition
	characteristics (e.g. dry-dipterocarp, evergreen, etc.), status (matured/virgin, secondary, regenerating, etc.) and management goal (e.g. low forest for production of fire wood, high forest for production of construction timber, strictly protected forest) so that appropriate silvicultural techniques can be proposed accordingly.
Forest coverage	The forest coverage is the rate of forest area in a village compared with the total area of the village – expressed as percentage (%).
Forest Management Goal	For each forest block, forest management goals are determined that define the future production aim. In the context of CFM, forest management goals are defined in accordance with the need and aspiration of local people, such as production forests, protection forests (watershed protection) or special use forests as spiritual forest for cemeteries. Management goals need to define desired trees and products in order to get an impression about the future forest structure. A clear vision of the desired future forest structure that can provide the desired tangible and non-tangible forest functions and products has to be established before carrying out any silvicultural measures. The lack of a forest management goal and therefore a vision about how the forest stand should look like in the future might lead to contra-productive silvicultural activities.
Forest Protection and Development Regulations (FPDR)	The FPDR are one of the main part of the five-year forest management plan. The content of these regulations are issues related to forest protection and development, for instance grazing, fire prevention, harvesting, fine and compensation etc. with the purposes to protect and develop the village forest resources. These regulations are designed by key farmers and are then approved by the whole village (village meeting) with the facilitation of extensionists or forest protection officers. The forest protection and development regulations are submitted to the commune and the district peoples committees (CPC/DPC) for approval.
Forest Protection Group (FPG)	Group of villagers chosen and assigned the tasks of forest protection for the village such as being responsible to patrol the whole area of the village forest, or certain forest blocks at defined intervals (ex. weekly). Forest Protection Groups are chosen by the villagers, the VFMB is responsible to organize the work (i.e. assign the groups to carry out the patrolling).
Forest user	Anyone using the forest resources is considered a forest user. This can be the entire village community, groups of households, individual households. Even an outsider is considered a forest user if harvesting forest products from a forest block with the permission of the respective village community (having no permission, he or she will be considered a violator).
Land Use Planning (LUP)	Land use planning is an arrangement, a trend and methods to use land effectively for an area, a region (commune, district and province) in order to meet the social economic development. The length of land use planning is usually a period of 5 years to 10 years.
Marking of trees	Trees that are selected for cutting (refer to the description of selective cutting for details) are marked at breast height, using a simple colored band. The marking is necessary to enable an

Term	Definition
	assessment and maybe revision of tree selection before felling. No official marking of trees with the hammer by forest protection - as common code of practice in conventional forestry of state forest enterprises - is carried out.
Natural forest	Forest stands which have been established naturally, i.e. from natural regeneration (as contrary to being planted) with the majority of tree species being local (i.e. not exotic).
Non Timber Forest Products (NTFP)	The name says it all – forest products that are not consisting of timber (i.e. that are not trees) such as fruit, honey or medical plants.
Participatory forest resource assessment	Quantitative and qualitative assessment of the present forest status. In CFM, the forest inventory is done in a participatory manner and carried out by the local villagers. In order to enable farmers to participate in the whole process, methodology and tools used are simple and practical. Trees are measured in sample plots (refer to the definition given below) that are established along transect lines (systematic sampling). Instead of measuring the height of trees, or recording the exact diameter at breast height, the latter is measured using a colored diameter-tape (refer to the definition given above). Data recording is also kept simple, but should be accomplished by a local extension worker.
Plantation	Forest stand that has been established by planting, not from natural regeneration. Frequently, plantations consist of merely one or two tree species that are not local (so-called exotics).
Promotion of natural regeneration	All measures implemented to promote the growth and establishment of natural regeneration of tree species. This can be done by opening the canopy to allow for more light to pass on to the ground, by soil aeration, cutting liana and shrub to help the germination of seeds, liberation of matured trees to trigger seed production, etc.
Production forest	Forest which has the main function to produce timber and other forest products (economical function). Production forests are divided into a number of types such as: Big timber production forest, small timber production forest, bamboo production forest and special production forest.
Protection forest	Forest which is mainly used to protect water sources and land, prevent soil erosion and desertification, restrict natural calamities and regulate climate, thus contribute to environmental protection. They can include: <ul style="list-style-type: none"> - Watershed protection forests - Wind and sand shielding protection forests - Protection forests for tide shielding and sea encroachment prevention. This classification follows criteria of national forest protection. However, in CFM some forest blocks defined as production forests, can be used by the village as protection forest such as watershed protection, soil protection.
Regeneration sub-plot	Sub-plot situated inside the sample plot to count the regeneration trees with a size of 2x2 m arranged systematically in each corner of

Term	Definition
	the sample plot.
Regeneration tree	Small trees are born from seeds of big trees or from stumps, and their height does not reach the forest canopy. Includes all trees that do not reach breast height ($h < 1.3\text{m}$).
Reforestation	Silvicultural methods used to develop low quality and low productivity forest stands in order to meet the demand of the village. This method implies the clearing of the existing vegetation of the forest land (classification $I_{A,C}$) and the replanting of tree species (not necessarily natural tree species).
Right to benefit	Is the right given by government to local communities to benefit from the management of the forest land that has been allocated to them. This right regulates the amount of taxes to be paid to the government when timber is sold commercially.
Protection for promotion of natural regeneration	<p>The protection of forest blocks is used if the forest block has the potential to rehabilitate through natural regeneration. The protection of natural regeneration from disturbing influences (mainly fire and grazing) is often sufficient to achieve this.</p> <p>In general, the growth of natural regeneration should be promoted by protection from disturbances, as natural regeneration is the most cost-effective measure for the insurance of sustainable timber production.</p>
Sample plot	<p>Rectangle-shaped plot that is laid out along transect lines using simple sticks and ropes. The purpose is to measure trees contained within them, as the whole forest area cannot be measured due to limited time and resources. Sample plots consist of compartments (the number of compartments may vary according to forest type and status) which are for the reason of practicability of the size 10 m x 10 m. The size of sample plot can vary from 10 m x 20m to 10 m x 50m. The number of sample plots needed for forest inventory of one block depends on the density of forest block. The area assessed for the forest inventory is normally from 0.5 to 1% of the total area of the forest block.</p>
Selective cutting	<p>In the context of CFM, selective cutting comprises the following main elements:</p> <ul style="list-style-type: none"> - Selection of forest blocks for annual cutting of trees - Selection and marking of trees for cutting - Directional felling of trees (including climber cutting) - Transportation of trees (using animals, local trucks,...) - Cleaning (disintegration of tree crowns and branches remaining in the forest) <p>The selection and felling of trees is based on a set of “tree-selection criteria” that have been defined by the community in a participatory way and apply for each individual tree to be harvested (otherwise, the tree is not harvested). The criteria are different for small, medium- and large trees. The sustainable forest model is used as reference for defining the number of trees that can be selected for harvesting in each diameter class.</p> <p>Selective cutting comprises the cutting of big, medium and small trees. All of these operations are carried out to satisfy the farmers’</p>

Term	Definition
	demand for timber, needed for houses, animal sheds, fence-posts, firewood, and also for selling on the market (depending on forest condition, market access,...).
Silviculture guidelines	Document for guiding the implementation of silvicultural measures, such as selective cutting (cutting, thinning, pruning), enrichment planting, afforestation, etc. With the target group being local communities, guidelines should be kept simple and make use of illustrations wherever possible so that local people can easily understand and apply the content in the field.
Special Use Forest	Forests stands which have been established and mainly used for special purposes such as biodiversity protection, ecological area conservation, historical and cultural heritage. In CFM, some forest blocks can be used as spiritual forests containing the village cemetery.
Stem number diameter distribution	A diagram displaying the number of stems (y-axis) in the different diameter classes (x-axis) to illustrate visually and specifically the number of trees for one forest block. Local people can easily understand and see their current forest status.
Sustainable forest model	The sustainable forest model is elaborated as a relation of the number of trees and diameter classes for a certain forest type. The interaction between number of trees and diameter class is illustrated by a negative exponential curve. The model is used as reference to propose specific silvicultural methods, particularly determine the number of stems from each forest block in the village that can be harvested sustainably. When the current forest status reaches the structure of sustainable model, it can at the same time provide two important functions: forest production and protection. Such models are to be established for each forest type and also according to different forest management goals (e.g. high forest for construction timber, low forest for fire wood).
Target tree	<p>Trees that are of value to the community. Target trees are selected either for later use (i.e. when reaching matured-size needed for house construction or for selling on the market) or for preservation (landscape-value, holy trees, seed trees to ensure natural regeneration) or strict protection (rare tree species listed in the red book).</p> <p>The set of criteria for the selection of target trees should therefore be defined together with the local communities and should detail tree species, stem form and vigor (good growth, free of diseases), the later ones applying in case that trees are to be used commercially or are maintained as seed-trees.</p>
Transect lines	Straight lines laid out in the forest in a systematical way along which the sample plots are established to assess the forest resources of the forest block. These lines are parallel, running up and down the slope of hills in order to ensure that all types of forest will be measured in the assessment.
Transportation	In CFM, transportation of timber from the forest should be done according to local practices (i.e. with the help of buffalos, or small local trucks). Collaboration with state forest enterprises in case that

Term	Definition
	a large amount of trees is harvested for commercial purposes (selling on markets), is optional, with the decision being left at the village. Use of local techniques is especially suitable since it results in less negative impacts (low impact logging) on the forest soil and natural regeneration.
Village Forest Management Board (VFMB)	The board of the village in charge of coordinating forestry related activities, e.g. enforcement of forest protection and development regulations, issuance and submission of violation case reports, organization of forest patrolling teams, organization and implementation of forest management planning (five-year and annual management plans) with the support of competent state institutions. It usually consists of the village head, the village patriarch, key-farmers experienced in forest management, a women's union representative, as well as representatives of mass organizations (e.g. youth union, fatherland front). The village forest management board and its term is elected and defined by the village households.