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Community Forest Management (CFM) in Viet Nam: Sustainable Forest Management and Benefit Sharing

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Introduction

The concept of Community Forest Management (CFM) was officially recognized for the first time in Viet Nam with the implementation of the Law on Forest Protection and Development (2004). Prior to this, however, the Government of Viet Nam had been promoting CFM for some decades, specifically on issues such as (i) the process of forest land allocation to households and household groups (particularly to poor, ethnic minorities whose livelihoods are closely linked to traditional forest management); (ii) the decentralization of forest management; and (iii) the development of pro-poor mechanisms targeting groups involved in innovative forest management solutions. This process of devolving forest management has faced significant challenges. For example, there is a lack of capacity in facilitating participatory approaches to forest allocation, and community



forest assessment and planning. In addition, the policy on benefit sharing for land recipients is not clear and therefore not workable, and the administrative procedures for harvesting, which have historically been applied to State Forest Enterprises, are too complicated for the Community Forest Management context.

This paper looks at these issues through a synthesis and summary of field-based learning with the following main issues:

- *Forestry techniques and approaches*: Guidelines for participatory forest assessment and planning, development of local regulations for forest protection and development, in conjunction with simple silvicultural treatments.
- Forestry policy: Mechanisms to identify benefit sharing and rights of communities.
- *Forestry administration*: Procedures for the suitable management and monitoring of Community Forest Management.

The lessons have been derived from the Song Da Social Forestry Development Project (SFDP) in Son La Province, experiences in undertaking consultancies with the Extension and Training Support Project (ETSP) in Hoa Binh, Thua Thien Hue and Dak Nong Provinces, and for the Rural Development Project of Dak Lak (RDDL) in Dak Lak Province (capacity building, initiation and implementation of CFM pilots), and from experience with Government-funded research on establishing a CFM model in Gia Lai Province.

Background

he Land Law (2003) and the Law on Forest Protection and Development (2004) highlight the relevance of community forest management (CFM), in which the roles of local people and their traditional forest practices are considered important components of overall forest management. It is expected that CFM will significantly contibute towards national sustainable forest management, while at the same time contributing to poverty alleviation. CFM is normally introduced after forest land is allocated to the local village commuity along with the rights to manage and make use of the resources within the current legal framework. The rationale for supporting CFM in Viet Nam is: (i) While natural forests continue to be steadily degraded, local forest-dependent people, who have significant knowledge and skills to contribute to the management and protection of these forests, are not afforded actual rights and responsibilities to meaningfully contribute; (ii) Local forest-dependent people are not receiving fair benefits from current forest management arrangements, which do not acknowledge the linkage between community participation in forest management and poverty alleviation: and (iii) The ethnic minorities, which possess valuable knowledge on traditional forest management and use, are not being utilized as much as they should be. Therefore, the overall rationale is that local forest-dependent people, possessing clear and secure rights and responsibilities, can play an important role in the sustainable management of forests. The CFM process has been piloted in many provinces in Viet Nam, such as Son La, Hoa Binh, Thua Thien Hue, Quang Nam, Binh Dinh, Quang Ngai, Dak Lak, Dak Nong, and Gia Lai provinces through various projects implemented by SFDP/GTZ, ETSP/Helvetas, Viet Nam/SDC, RDDL/ GFA Dak Lak, and through some Government-funded research. Since 2000, the methodology for CFM has been developed with the participation of many stakeholders, including forestry department officials from various levels. The methodology covers areas such as the development of participatory methods and approaches for forest land allocation, forest assessment, development of forest management plans, designing forest protection regulations, and the development of simple silvicultural guidelines. However, the effectiveness of almost all of these methodologies depends on the development of the CFM plan, as there are policy

shortfalls on issues such as benefit sharing, rights, and the administrative procedures for harvesting and utilization of resources.

To date, only two villages (Dak Rtih, Dak Nong Province and T'Li, Dak Lak Province) have been allowed to pilot CFM implementation, including looking at innovative administrative procedures and benefit-sharing mechanisms for commercial wood harvesting. From these two pilot studies, it was shown that the two communities were able to generate an average annual income of about VND 3-5 million (US\$ 190-310) per household.



Figure 1: Overview of CFM Process

The development of CFM involves changes that can only be achieved through a stong collaborative effort. This includes change in the policy framework, as well as the introduction of new management procedures and technologies. An important aspect is the development of appropriate financial mechanisms at the community level that will help facilitate transparent and equitable benefit sharing.

The establishment of CFM systems begins with the development of a five-year forest management plan by the community, ultimately calculating community needs, both domestic and commercial, and ability of their forest resource base to meet these needs. Following this step, local forest protection and development regulations are developed in accordance with the existing legal framework. In order to implement the forest management plan, appropriate sivilcultural methods are then developed, based on both traditional and customary systems, in conjunction with needed capacity building. Finally, locally appropriate and developed monitoring mechanisms, and a cost effective operating system, form the final framework for the implementation and ongoing management of the CFM arrangement.

Forestry techniques and approaches for CFM

o support the implementation of CFM, guidelines have been established for participatory forest assessment and planning, the formulation of local regulations on forest protection and development, and simple silviculture techniques (SFDP Song Da 2002, ETSP/Helvetas 2005, RDDL/GFA 2005- 2006). Within these guidelines, participatory approaches have been developed to:

- Enhance community participation in the decision-making process during the development and implementation of forest management plans, forest protection regulations, and development regulations. This will in turn assist the community in improved management of their forest resources.
- Define the role of technical staff in CFM as one of facilitation and support to the community during all steps of the CFM process, such as providing information on changing forestry policies and new and appropriate silvicultural technologies.
- Define the roles and responsibilities of community members in CFM organizational systems.
- Build capacity in using simple methods and tools (communities differ in terms of management capacity, education level, and experience in natural resource management).
- Promote a common learning process. CFM is a new approach in Viet Nam, with the methodology being continually developed and improved, and there is no one model that can be applied to all situations. Approaching CFM as a learning process is therefore more realistic and sensible at this time. Through the development of new methodologies and sharing of experiences, a more effective and flexible approach that is adaptable to all conditions will be encouraged.

In addition to the participatory approaches above, there are several additional forestry techniques that are currently being tested and piloted as listed below.

Participatory forest assessment

he ultimate objective of participatory forest resource assessment is the use of a simple but effective methodology to capture the baseline information needed for the development of a management plan for each forest block. It includes activities such as blocking, labelling, area calculation, block description, and participatory forest inventory.

The sustainable forest management (SFM) model as a tool for forest management

Characteristics of SFM:

- By using tree diameter measurements, growth rates, and distribution, foresters supporting CFM can calculate the incremental growth and sustainable harvest rates of their forest resources.
- Using mainstream systems for forest management is not, for the most part, appropriate, as the reserve and condition of natural forests after years of exploitation remain low. Through SFM, forests are managed for biodiversity and a combination of sustainable domestic and commercial exploitation.

SFM mechanisms support:

- The development of timber harvest strategies: SFM is an effective tool for calculating the sustainable harvest rates for each forest block.
- Forest supervision and management: The SFM model also provides a mechanism for forestry agencies to monitor the management of the allocated community forests.

Community timber supply and demand assessment

One of the primary purposes of CFM is to provide timber to meet the long-term needs of the community through the sustainable harvest of their forest resources. The "timber needs assessment" is therefore an important part of the management planning process. The ability of the available forest resources to supply these needs is then assessed under the SFM mechanisms.

Development of forest management plans

A 5-year forest management plan is developed for each forest block, including for highly degraded or deforested areas that provide few, if any, forest products in the short term. The development of the plan is based on the current forest status, the community needs, and the human and financial resources that the community has at its disposal.

Design of forest protection and development regulations (FPDR)

The development of regulations based on traditional knowledge, while recognizing current government rules on forest protection and development, is a fundamental component in the process. The development of regulations by the community provides the best chance for continued community participation in the implementation of these regulations. Only when regulations are prepared by the community will there be sufficient incentive and motivation to adhere to the "agreed" rules.

Development of appropriate silviculture guidelines

There are important differences to note between conventional silvicultural techniques applied by State Forest Enterprises (SFEs) and forestry companies, and those developed and used in CFM, as outlined in Table 1.



Table 1: Differences between silvicultural techniques appliedby SFEs and CFM

Criteria for comparison	Conventional forestry	CFM
Volume of timber per harvest and silvicultural applications	Selected harvesting with large volume (based on the economic efficiency of the harvest; all the timber increment grown over previous 20 years harvested)	Small volume harvested (mainly for household needs and some for trading); selected harvesting of individual trees based on diameter class, according to the sustainable forest model
Harvesting frequency	Not regular ("harvesting" and "waiting") over 20-30 years	Annually
Techniques applied	Machine harvesting and transportation	Use of local simple tools for harvesting and transportation
Impacts on the environment	High impact on the land and residual trees due to the use of machines and the large volume harvested	Low impact on the land and residual trees due to the use of simple tools and the small volume harvested
Requirement to maintain the forest after harvesting	Very high (due to high impact on forest resources)	Low (depends on the selection of the trees for harvesting and logging techniques)

(Source: Bao Huy 2005)

Silvicultural techniques applied in CFM aim at meeting household needs, including for commercial purposes, on a regular and sustainable basis. Community harvesting is normally conducted with manual tools and is considered to be "low-impact harvesting." Therefore, community silvicultural techniques need to respond appropriately to local resources and knowledge.

To manage community forests sustainably with available resources, the principles in Table 2 apply in the development of silvicultural techniques for CFM.



Principles	Results
Participation of local people and communities	Improved capacity in forest management by forest users, enabling them to apply techniques themselves
Multi-purpose use of forests	CFM allows for product diversification, taking into account products such as timber, NTFPs (food, medicinal plants, materials), etc.
	Low impact on forests as forest structure and function are maintained: production, protection, genetic conservation, and biodiversity.
Application of local knowledge and experiences	Local knowledge and experiences on the use of forest products (timber, medicinal plants, materials, food, etc.) are incorporated to meet the needs of the communities.
Local silvicultural techniques combined with scientific knowledge	Forest harvesting has low impacts on the environment and is appropriate for the community's resources.
Balance of supply and demand to ensure sustainability	Ensures the sustainability of the forest resources while providing for the needs of the community.
Cost-effectiveness	Optimizes the use of time required and other resources to maximize economic efficiency - appropriate to the community's resources.

Table 2: Principles for the application of silvicultural techniques in CFM

(Source: Bao Huy 2005)

The system of silvicultural techniques needs to be further developed based on the practical needs of CFM. In Viet Nam, special use forests are managed by state agencies and only protection and production forests are allocated to communities, household groups, and individual households for long-term management and use. Therefore, appropriate silvicultural techniques should be developed for these two types of forests.

Cleared land is mainly used for forest plantations or agro-forestry, with the option chosen based on the needs and resources of local resource users and on the specific environmental conditions of the locality. Depending on the condition of the forests, and the management capacity and resource use needs of the community, the following basic silvicultural solutions apply:

- For timber and firewood: selected harvesting, forest enrichment, promotion of natural regeneration, and forest fire prevention are recommended.
- For NTFPs: management solutions and propagation are recommended.
- For protection: forest protection, forest maintenance, and fire prevention are recommended.

Through the piloting of appropriate silvicultural techniques, the community itself is able to assess the condition of their forests, calculate their demand for timber and non-timber products, and balance this demand against projected supply in order to develop adaptive forest management and harvesting plans. This offers an important opportunity for the community to be able to manage their own forests for commercial and non-commercial purposes, and also for forestry officials monitoring the process of forest management to build their capacity.

CFM policy

Setting benefit-sharing mechanisms in CFM

The system of using post-allocation incremental growth to determine equitable harvesting programs appears to be a fair system. The traditional volume-based growth harvesting system is not practical, as there is a lack of data norms for different forest types, soil conditions, climate, and forest condition which are needed to model growth. As a result, using the SFM system to define harvest strategies and benefit sharing is the preferred option.

SFM as a tool for determining forest increment and benefit sharing

The benefit-sharing plan is determined as a result of the harvest limits, which are based on a percentage of the tree diameter growth over five years, regardless of forest condition variations between blocks. Based on this, the community can develop an equitable intra-block sustainable five year harvest plan.

Proposed mechanism for benefit sharing among forest users

In order for community forest management to be undertaken by communes and villages without external financial support, benefit sharing must be both equitable and transparent. Community forest management is considered as a livelihood development or poverty alleviation form of forestry, and the income generated from selling timber and non-timber forest products can be used for common community interests and as a direct form of compensation or income for communities.

Based on the growth data over five years, benefits can be calculated for each stage of the five year CFM plan. Comparing the actual number of trees from each forest plot against the SFM guidelines, the community can calculate which trees can be harvested. SFM is therefore used as a control for determining harvesting rates and benefits to be shared.

Results from benefit-sharing projects trialed in T'Li village, Dak Lak province by the RDDL project

Benefit-sharing mechanisms for household purposes:

The Village Forest Management Board (VFMB) organizes a village meeting to decide on the following issues (see Figure 2):

- The amount that households can harvest annually for their personal consumption.
- The amount households must pay in partial fees to the village fund, agreed on in the Village Forest Protection and Development Regulations (FPDRs), for village forest management.
- The amount of surplus trees (if available) that can be harvested to contribute to the village fund for forest management.



Figure 2: Benefit sharing for household purpose

Benefit-sharing mechanisms for commercial purposes:

The trees harvested annually are sold and benefits are shared as follows (see Figure 3):

- First, a payment of a natural resource tax is made. This is usually between 15% and 40%, depending on timber groups and diameter regulations. The tax paid is transferred to the commune for forest management, or for investment and development of bare land or more degraded plots.
- Second, all harvesting costs such as felling, transportation, and forest cleaning are deducted.
- Third, after deducting payment of the natural resource tax and harvesting costs, 10% of the remaining income is allocated to the Commune People's Committee (CPC) for forest management costs and an allowance for the Commune Forest management Board (CFMB).
- Finally, the remainder is shared among the VFMB, the village fund establishment and the households involved in CFM.

The benefit-sharing regime is based on the village FPDRs, which are agreed on by the entire village and approved by the local authority. This benefit-sharing mechanism aligns with

the forestry techniques and forest land allocation policy, in which the forest owners can generate income through incremental growth. The SFM approach is robust and functional at the community level; however, to fully benefit from CFM, forest users still need to better understand markets and the administrative procedures surrounding harvesting.



Figure 3: Benefit sharing for commercial purposes

Forestry administration for CFM

he concepts, methods, and tools of CFM are still relatively new to forestry agencies and staff in Viet Nam. It is therefore important to set up a management and monitoring system for the implementation of the CFM plan, particularly for harvesting activities. This management and monitoring system needs to be designed according to community capacity, with a focus on improving self-reliance and monitoring. In this system, the roles and tasks of local authorities and other stakeholders engaged in the CFM process need to be clearly defined in order to best support the process. To this end, a management system and CFM guidelines are currently being developed by the National Working Group on Community Forestry Management (NWG CFM). In principle, the new management system will encourage a decentralized decision-making process and promote monitoring at the community level. It should facilitate the link between the community and the district level, and reduce complex procedures for communities that impede on their ability to manage and monitor their forest resources efficiently.

The monitoring mechanism should distinguish between two types of timber harvesting:

- Harvesting for domestic consumption
- Harvesting for commercial purposes

The suggested administrative procedures for CFM are presented in Table 3 and Figure 4 below, and have been piloted in T'Li Village through the RDDL Dak Lak Project. The main procedural steps for CFM are quite simple in comparison to traditional methods currently applied to SFE operations.

Table 3: Simplified administrative and technical procedures for plan a	approval and			
implementation of CFM				

Procedure	Description	Approval	Comparison with traditional SFE approach
Approval of 5-year forest management plan	Approved 5-year forest management plan is developed by community	Commune People's Committee (CPC); District People's Committee (DPC)	Established by professional company and approved by DARD and Provincial People's Committee (PPC)
Annual forest management planning and approval	Annual forest management plan is developed based on the 5-year plan by community		Established by State Forest Enterprise (SFE) and approved by Department of Agriculture and Rural Development (DARD) and PPC
Select and mark trees	Selected trees marked in the forest by painting order numbers in red by farmer		Mark trees to be cut by forest hammer by Provincial Forest Department or a professional company
Issuance of timber harvesting permit	List of marked trees is submitted for harvesting permit by VFMB	DPC	Approved by DARD, PPC

(Source: RDDL 2006)

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Procedure	Description	Approval	Comparison with traditional SFE approach
Post-harvest monitoring	Monitor felled trees, location, forest cleaning, forest status post harvest follow the silvicultural guidelines by VFMB and CFMB		Monitor by Forest protection Unit (FPU), DARD
List of volume of logs in log yard; legalized by hammering in log yard	Farmers make list of timbers; seal with FPU hammer and make a minute	FPU	Villagers must follow the same procedures as SFEs to ensure their timber has legal documentation for sale
Selling timber in delivery log yard	Organize auction or another selling form selected by community		Organized by SFE
Benefit sharing; village fund management	After deducting natural resource tax and actual harvesting costs, 10% share for CPC, the rest is shared in accordance with FPDRs		No benefit for communities

(Source: RDDL 2006)





Figure 4: Forestry administrative procedures to harvest timber for own consumption and commercial purposes

Conclusion

The reality of the forest land allocation process in Viet Nam is that there is currently not enough guidance in terms of the mechanisms, policies, organizational systems, and techniques for implementing CFM. The most challenging issues are related to post-allocation sustainable forest management and how poor people can benefit from these allocated forests, which vary considerably among allocated units. With the slow growth of forest and extended periods with no profitable returns, it is easy to understand why people do not benefit significantly from forests immediately after allocation. Forests have not yet become a competitive economic component in the uplands and, because of this, require mechanisms, policies, and ongoing technical support in order to significantly contribute in terms of incentives for farmers to engage in CF and contribute towards SFM. Ultimately, this system of CFM combined with SFM principals can lead to meaningful livelihood development and poverty alleviation for the forest-dependent communities that are allocated forest lands for CFM purposes. Much is dependent on simple management and monitoring rules and regulations that can help to facilitate this process and lead to the success of CFM in Viet Nam.

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