

FOREST HARVESTING IN COMMUNITY BASED FOREST MANAGEMENT IN THE PHILIPPINES: SIMPLE TOOLS VERSUS COMPLEX PROCEDURES

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Introduction

Forest harvesting by communities offers great potential to reduce poverty in the Philippine uplands. The country has approximately 1.5 million ha of second-growth “production forests” that can be utilized commercially on a sustainable basis by thousands of poor upland communities. While not as economically valuable as natural forests, timber from tree farms also offers viable livelihood opportunities to upland communities. Aside from timber revenue, additional income may also be generated from branches and thinnings sold as firewood or converted to charcoal.



Most rural villagers already possess the necessary skills for manual flitching¹ of timber from natural forests. They also know how to plant and tend tree farms since trees have always been an important component of their farming systems. Furthermore, policies set forth in the Community-based Forest Management (CBFM) Program of the Philippine Government envisage active involvement of the rural poor in the management of both tree plantations and natural forests.

Despite its immense potential to reduce rural poverty, community timber harvesting has not been effectively harnessed by the Philippine Government. While natural timber harvesting only requires “simple tools” to benefit the poor upland communities, “complex procedures” continue to obstruct the realization of this potential. We view “simple tools” to be of two types: (i) simple physical tools such as hand saws, animal skidding², and other simple equipment; and (ii) procedural tools such as simple management guidelines, simple approvals, simple inventory techniques, simple management plans, and the like. On the other hand, existing “complex procedures” relate to a blend of policy/political, institutional, and operational factors whose combined effects hinder the achievement of the poverty reduction objective of CBFM. This paper reviews the opportunities and constraints for poverty reduction through timber harvesting in upland communities, and suggests that realizing this potential will require the reduction of “complex procedures” and adoption of “simple tools”.

Overview of community-based forest management

Until recently, policies on the commercial utilization of the country’s timber resources consistently favored the wealthy and politically more influential concessionaires under the so-called timber license agreements (TLAs). Such policies contributed to the socio-economic and political marginalization of the rural population, and also to the continuous degradation of the country’s forest resources (Broad and Cavanagh 1993; Kummer 1992; Porter and Ganapin 1988; Vitug 1993).

Following Rebugio and Chiong-Javier’s classification (1995), the evolution of community forestry over the last three decades can be loosely divided into three categories. First is the *pioneering* period from 1971 to 1980. This term saw the adoption of three major people-oriented forestry programs, namely the Forest Occupancy Management (FOM), Family Approach to Reforestation (FAR), and Communal Tree Farming (CTF). In general, these programs centered on the involvement of local people in reforestation activities. People were seen more as labor-providers rather than partners in forest conservation and development. Considering the volatile political situation during this time, community forestry was also seen as a counterinsurgency measure to maintain political stability and order in the countryside (Porter and Ganapin 1988). However, it was during this period that the forestry sector started to realize that the problem of unsustainable deforestation is not merely technical, but also socio-political in nature.

The second category is the *integration and consolidation* period from 1981 to 1989. This marked the adoption of two main people-oriented forestry programs, namely, the Integrated Social Forestry Program (ISFP) and the Community Forestry Program (CFP). ISFP consolidated the three earlier programs, while recognizing the vested rights of the forest occupants through the provision of a 25-year tenure security arrangement. Meanwhile, CFP extended the coverage of community forestry to natural forests, allowing participating upland

¹ Flitching refers to the process of cutting logs into strips.

² Skidding refers to the dragging of logs.

communities to commercially utilize forest resources subject to appropriate social and technical preparation. From being merely laborers in reforestation activities, local people were increasingly recognized as the *de facto* resource managers, hence, partners in forest development and conservation.

The third category from 1990 to the present is the *expansion and institutionalization* period. This period is characterized by the growth of community forestry to include various land-use types not originally included in the first two periods. In particular, community forestry coverage included degraded watershed areas and practically all types of forests where there are indigenous cultural communities. Increasing support from international funding agencies such as the Asian Development Bank, World Bank, Japan's Overseas Economic Cooperation fund, United States Agency for International Development, and other multilateral and bilateral donors also defines the period, especially from the late 1980s to early 2000. Efforts to provide tenurial security during this period led to the evolution of various types of tenure instruments. Moreover, attempts to alleviate upland poverty while ensuring the sustainability of the forest resources induced the development of a diverse array of income generation mechanisms and models for the uplands.

Various forms of institutional arrangements also continued to evolve during this period. From purely government-implemented projects in the 1970s, the practice of community forestry has increasingly involved upland communities in forest management. This is made possible through the formation of people's organizations with assistance from other stakeholder organizations such as non-government organizations (NGOs), local government units (LGUs), academia, and others.

Recently, the different programs and projects that emerged during the last two periods were "integrated and unified" into one umbrella program, otherwise known as the *Community-based Forest Management Program* (CBFMP), through Executive Order (E.O.) No. 263 (July 1995) and the Implementing Rules and Regulations, Department of Environment and Natural Resources (DENR) Administrative Order No. 96-29 (October 1996). E.O. 263 adopted CBFM as the national strategy for sustainable forestry and social equity, thereby institutionalizing the practice of community forestry in the country.

The formal adoption of CBFM frames the main government strategy towards the restructuring of the once corporate-controlled timber industry. Timber Licensee Agreements (TLAs) controlled one-third of the country's total land area of 30 million ha from 1971 to 1977. With the shift in the government's forest management approach in favor of CBFM starting in the late 1980s, TLA areas have gradually declined to the present 0.54 million ha due to the cancellation of non-compliant licensees and non-renewal of those that have expired. At the same time, from less than 200,000 ha in 1986, the CBFMP currently covers some 5.97 million ha of forestlands involving 5,503 individual sites and directly benefiting more than 690,000 households. Of these, around 4.9 million ha are under various forms of land tenure arrangements, with 1.57 million ha covered by Community-based Forest Management Agreements (CBFMA) (Figure 1).³

³ CBFMA is an agreement entered into, by and between the government and the local community, which has a term of 25 years and is renewable for an additional 25 years.

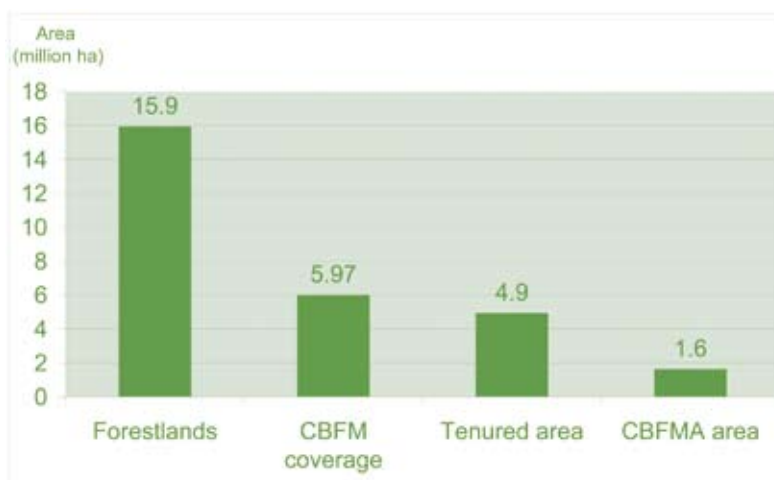


Figure 1. Status of CBFM Implementation

Potential of forest harvesting in CBFM

Without doubt, the harvesting of forest resources by communities has tremendous potential to reduce rural poverty in the Philippines. This potential is illustrated by the following data:

- The Philippines has about 2.56 million ha of second-growth forests, of which approximately 1.5 million ha are production forests.⁴
- Second-growth production forests contain an average timber volume of 145 cubic meters (m³) per ha (FMB-DENR, FAO and UNDP 2003), equivalent to a gross national volume of approximately 217.5 million m³.
- At current market values of not less than US\$ 60 per m³, the production forests comprise a natural resource asset worth more than US\$ 13 billion;⁵
- Drawing on this huge asset, two-person teams using manual flitching saws can produce an average 0.25 m³ per day (Bagong Pagasa Foundation 2006), or a potential daily income of US\$ 7.50 per person day (0.25 m³ x US\$ 60 ÷ 2 persons = US\$ 7.50 per person day).
- The current average income per family in rural upland communities of the Philippines is less than US\$ 2 per day.
- Timber harvesting by communities in these second-growth forests has the potential to bring about a 3.75% increase in rural family income (US\$ 7.50 ÷ US\$ 2 = 3.75%).

On privately-owned lands that cannot be farmed profitably, and on denuded government-owned lands, average annual growth rates in tree-farms devoted to fast-growing timber species⁶ are at least five m³ per ha. While not as valuable as timber from natural forests, the prevailing price for these species is not less than US\$ 40 per m³. This is equivalent to a

⁴ Official statistics of the Department of Environment and Natural Resources (DENR).

⁵ 217.5 million m³ x US\$ 60 per m³ = US\$ 13.05 billion.

⁶ For example: *Gmelina arborea*, *Acacia mangium*, *Eucalyptus deglupta*.

potential annual income of around US\$ 200 per ha⁷, plus additional revenue from branches and thinnings sold as firewood or converted to charcoal.

Rural villagers already have the skills required for manual flitching of timber from natural forests. They also know how to plant and tend tree farms. Furthermore, policies set forth in the Government's CBFM program envision active involvement of the rural poor in the management of both man-made and natural forests. Given this policy framework and the prospects for significantly increasing rural income, one would assume that forestry is already contributing to reduction of rural poverty.

The CBFM program, which in principle supports sustainable timber harvesting by local communities for commercial purposes, was launched in 1995. Its predecessor, the CFP, began as early as 1989. Both of these development interventions were preceded in the mid-1970s onward by similar programs and projects focusing on tenure security, agro-forestry, tree-farm development, community organization, training, and related initiatives. Most of these programs and projects have been supported by international donors, NGOs, and other concerned stakeholders. After all this time and support, have the poverty alleviation and other objectives been realized?

Constraining factors

Unfortunately, the poverty alleviation, community empowerment, and environmental management objectives of the CBFM program have not been realized except in a few rare cases (see for instance Borlagdan *et al.* 2001; and Pulhin 2005). Why not? What are the factors that stand in the way of reducing poverty in rural communities through active participation in forest management?

There are no simple answers to these questions. One could cite the widely-held, but mistaken perception that forest management cannot be implemented effectively without a large-scale investment in machinery and sophisticated technical expertise. Due to this false perception, many government planners, decision makers, and financial managers doubt that community participation in forestry is a viable strategy. Consequently, they withhold support for such initiatives. Additionally, distorted media reports, coupled with strident advocacy work by some NGOs, tend to create the erroneous conclusion that forest harvesting is synonymous with total deforestation. Riding on "sound bytes" that generate negative attitudes towards forestry in general, opportunistic politicians espouse short-sighted policies that seek to ban any and all forms of timber harvesting, whether by communities or corporate entities. Another factor is the generally recognized resistance to change among many professional foresters and forest agencies. While often agreeing with the concept that communities can and should have a major role in forest management, this amounts to little more than "lip service" with very few tangible inputs toward achieving either community-based forestry or poverty alleviation.

All of these factors pose challenges that need to be addressed in the Philippines and in other countries where the opportunities for forestry to reduce rural poverty are beginning to be recognized. However, this paper primarily focuses on another set of constraints: namely, rules and regulations that are unrealistic in a community context, and which serve no useful purpose with respect to sustainable forest management.

⁷ Jurgen Schade (1988), the then Executive Adviser and German Team Leader of the Philippines-German Forest Resource Inventory Project cited an annual growth of 5 to 10m³ per ha for *albizzia*, *eucalyptus* and *pine* plantations.

In the Philippines, and in other countries as well, practitioners of community-based forest management are required to produce sophisticated forest management plans wherein the annual allowable cut (AAC) is computed on the basis of prescribed inventory procedures and formulas. By contrast, villagers in Imazu, Gifu Prefecture in Japan, limit the AAC to one tree per hectare per year, and have followed this practice for more than 100 years (Forestry Agency of Japan 1995). Their forests remain intact and productive while using a very simple procedure for calculating the AAC. Both of these approaches have the same objective - sustainable forest management. But between these two procedures, it does not take much analysis to conclude which is more appropriate and more feasible for communities to implement. In the Philippines, communities are forced to seek assistance from professional foresters who know how to conform with government standards for the preparation of complicated forest management plans. Is it realistic to assume that the residents of impoverished rural villages have the financial resources to pay for the services of professional foresters?

Rules that govern scaling are another impediment in some Asia-Pacific countries. Logs must be scaled after felling and bucking, then scaled once again in log form when loaded on hauling trucks. Scaling of flitches is not allowed. How can a community with no heavy equipment be expected to comply with scaling rules that require movement of a round log from the forest on to a truck? If timber can be accurately scaled in lumber yards, is it not reasonable to conclude that flitches can be scaled accurately in the woods.

Regulations to control the transport of harvested timber create additional problems. Communities are required to obtain permits for moving timber from the woods to roadside, and another permit to transport the timber to buyers. At first glance, compliance with these rules would seem to be a simple matter. However, offices of the agencies authorized to issue permits are many kilometers away from the forest. Each time a community requests issuance of a permit, someone from the village must travel to the office of whoever has authority to sign a permit, hope the individuals he or she needs to see are available, and facilitate their travel to the production site. These individuals will inspect the timber, return to their offices, and submit their inspection report to their head of office for signature. It is only then that the timber can be moved. Bureaucratic delays are inevitable and are compounded by the need to travel back and forth several times. Granting that inspections are necessary to determine compliance with cutting limits, is there any valid reason for multiple permits, which require multiple inspections?

Tree farmers who develop plantations on their own private lands have complained bitterly about the need for transport permits. Regulations originally formulated to monitor and control the removal of timber from natural forests are being enforced on planted timber. This has led to a proliferation of checkpoints along transport routes, ostensibly to prevent the movement of illegally cut logs. In theory, the tree farmer is required to present a transport permit at each checkpoint. In practice, the persons manning the checkpoint waive this requirement after demanding and receiving an unofficial payment. The requirement to obtain and produce transport permits has created an environment conducive to corruption. Indeed, there is a standing joke that checkpoints are actually "cash points" because the people manning these facilities do not accept checks.

Legislation was introduced in the Philippine Congress more than ten years ago to streamline and update forest policies, rules and regulations. But this important piece of legislation has lain dormant. More recently, the Society of Filipino Foresters (SFF) drafted legislation doing away with transport permits for timber grown on private land. This proposal is also languishing in Congress.

An unfortunate result of the above problems is the fact that being issued with a tenure instrument in the Philippines, particularly a CBFMA, does not provide the participating

communities any assurance that they can engage in timber harvesting or benefit economically from the forest. In principle, a CBFMA entitles the community the right to occupy, possess, utilize, and develop the forest lands and resources, and claim ownership of introduced improvements in the area. In reality, the permit for timber utilization may be withheld or cancelled by the government on its own volition at any time. Over the last three years, for instance, three DENR Secretaries issued nationwide cancellations of all CBFM resource utilization permits (RUP) due to alleged violations of some participating People's Organizations (POs). Investigations of these cases revealed that violations were indeed committed by a few POs. The investigations further revealed that the violations were carried out in connivance with DENR field personnel. Unfortunately, all POs nationwide were punished for the transgressions of a few POs and some DENR personnel.

The series of cancellations had adverse socio-economic and environmental impacts, including the reduction in income or loss of livelihoods by the concerned POs, loss of communities' interest to participate in CBFM activities, erosion of people's confidence in the government, and acceleration of forest destruction due to reduction of forest protection activities by the local communities (Pulhin and Arboleda in progress).

The greatest blow to CBFM, however, happened less than a year ago when the former DENR Secretary cancelled about 1,200 of the more than 1,500 CBFMAs nationwide without due process. This was a major violation of the CBFMP provisions. Fortunately, implementation of the cancellation order was stopped by the new Secretary due to pressure from civil society and from legislators during the DENR budget hearing. However, the propensity to order wholesale cancellations remains a big threat to the sustainability of CBFM and its potential to help reduce poverty in the Philippine uplands. Existing policies state that CBFMAs have a duration of 25 years and are renewable for the same period. Unfortunately, recent experience demonstrates that the CBFMP policies can be set aside through a single stroke of a pen by people in power, with complete disregard for due process of law.

Conclusion and recommendations

Community-Based Forest Management has been alluded to as representing a major paradigm shift in Philippines' forest management from a centrally controlled approach benefiting the privileged few towards a more participatory "people-oriented" strategy. The latter envisions improvement of the socio-economic welfare of poor upland communities through the promotion of social equity and justice while advancing sustainable forest management. While much of the original old growth forest of the country which served as the traditional sources of commercial timber have been degraded over the last century, the remaining second-growth forests still represent a rich natural resource that can be utilized commercially on a sustainable basis by thousands of poor upland communities. Forest harvesting by communities in these areas offers a great potential to reduce poverty and improve current forest management.

However, despite the immense potential of community timber harvesting to reduce rural poverty, "complex procedures" continue to obstruct the realization of this potential. For CBFM to be able to contribute to poverty reduction, the following strategies should be pursued with the aim of reducing "complex procedures" and adopting "simple tools."

1. Include subjects on the financial feasibility and use of animal-powered skidding technologies in the curricula of forestry education institutions. This can help legitimize timber extraction procedures that are feasible for communities to implement in their struggle to overcome rural poverty. Many graduates of these institutions will eventually

- be employed by forest agencies and be in a position to influence the crafting of simplified rules and regulations.
2. Adopt rules that combine scaling at the stump, followed by flitching in the woods, such that animal-powered skidding can be applied while concurrently ensuring accurate methods for determining the volume of timber subject to payment of government royalties.
 3. Deregulate the harvesting, extraction, and utilization of plantation species grown on private land. At present, most of these species are exotics. Thus, drawing up a list of deregulated species would not be difficult.
 4. Develop simple area-based criteria for determining the annual allowable cut. For example, one tree per ha per year on marginal forests, two or three trees per ha on medium density forests, and four or five trees per ha on rich forests. Set standards for “marginal,” “medium density,” and “rich” forests that can be determined by simple random sampling of strips.
 5. Provide forest extension agents with the skills needed to disseminate methods for accurate determination of road and skid trail gradients using simple calibrated “A-frames” fabricated on site.
 6. Devolve responsibility for issuance of permits to field offices located within easy travel distance from forests managed by communities. Use only one form for scaling and for extraction, hauling, transporting, and selling. This can be done by simply adding lines to be signed first by the scaler, and next by the officer authorized to issue the permits.
 7. Develop “filling in the blank” forms for preparation of management plans, indicating who will do *what*, *when*, and *how*. Provide “check the appropriate box (es)” on these forms. Specify that approved management plans are valid for at least five years, subject to updating by the community as and when needed, by re-submission of “filling in the blank” forms.
 8. Include the organization of information field trips for media representatives, NGOs, and government decision makers in the work plans or terms of reference (TORs) of forest officers to help demonstrate that forest harvesting is not synonymous with deforestation.
 9. Provide satellite imagery that clearly illustrates forest conditions to the media, NGOs, and government decision makers so they have accurate information on forest cover. This may help dispel the negative perception that “all is lost.”
 10. Conduct studies that provide accurate data on the employment opportunities generated by medium- and small-scale enterprises that are dependent on reliable supplies of timber. Previous studies deal principally with the formal forestry sector but do not include the large number of people working in small furniture shops, carpentry, production of boxes to transport agricultural products, charcoaling, and supplying firewood to bakeries, restaurants, and households, and other wood-based jobs.
 11. Institutionalize a multi-stakeholder participatory policy and decision-making process to ensure that the interests of the communities and other important sectors will be adequately represented.

References

- Bagong Pagasa Foundation, 2006. *Study on labor-based timber production using manual flitching saws*. Philippines.

- Borlagdan, S. B., Guiang and J. Phulhin, 2001. Preliminary Assessment of Community-Based Forest Management in the Philippines. A final project report submitted to the Ford Foundation Inc., Philippines which was a joint undertaking of the Institute of Philippine Culture, Ateneo de Manila University and the Department of Social Forestry and Forest Governance, University of the Philippines Los Banos.
- Broad, R. and J.Cavanagh. 1993. *Plundering Paradise: The Struggle for the Environment in the Philippines*. Anvil Publishing, Manila.
- Forest Management Bureau, 2004. *Community-Based Forest Management: A National Strategy to Promote Sustainable Forest Management*. Briefing material presented during the meeting of the National Forest Program (NFP) Facility Coordinator based at FAO Bangkok and the DENR Undersecretary for Field Operations on November 17, 2004 at FMB Conference Room, DENR, Quezon City.
- FMB-DENR, FAO and UNDP, 2003. *Revised Master Plan for Forestry Development*. A report prepared and reproduced by the Forest Management Bureau of the Department of Environment and Natural Resources with financial support from the United Nations Development Programme-Country Program Action Plan and the Food and Agriculture Organization of the United Nations. Manila.
- Forest Agency of Japan, 1995. *Imazu Forestry*. Tokyo, Japan.
- Kummer, D., 1992. *Deforestation in the post-war Philippines*. Ateneo de Manila University Press, Quezon City, Philippines.
- Porter, G. and D.J. Ganapin, 1988. *Resources, Population and the Philippines' Future: A Case Study*. World Resource Paper No. 4. World Resources Institute, Washington, D.C., USA.
- Pulhin, J. M., 2005. *Enhancing the Philippine's Community-Based Forest Management Implementation Strategy: Synthesis of Six Case Studies*. Final Report submitted to the Forest Management Bureau of the Department of Environment and Natural Resources under the National Forestry Programme Facility managed by the Food and Agriculture Organization of the United Nations, Manila.
- Pulhin, J. M. and L. Arboleda, in progress. *Advancing Environmental Justice through CBFM: Possibility or Illusion?* A proposed book based on the outputs of six case studies on the impacts of the cancellation of Resource Utilization Permits in selected CBFM areas under the UPLB College of Forestry and Natural Resources Environmental Justice Project.
- Rebugio, L. and M. Chiong-Javier, 1995. *Community Participation in Sustainable Forestry. In Review of Policies and Programs Affecting Sustainable Forest Management and Development (SFMD)*. A policy report submitted to the Department of Environment and Natural Resources, Manila.
- Vitug, M., 1993. *The Politics of Logging: Power from the Forest*. Philippine Center for Investigative Journalism, Philippines.



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

The 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 contribute 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 community 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 Rti, 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.

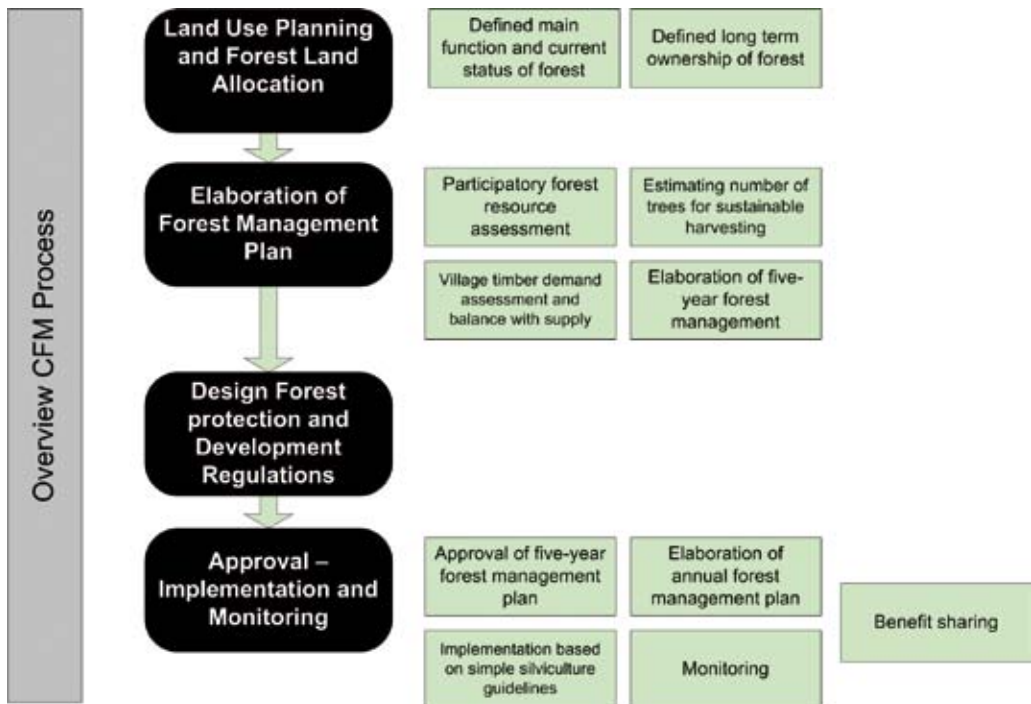


Figure 1: Overview of CFM Process

The development of CFM involves changes that can only be achieved through a strong 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 silvicultural 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

To 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, RDDDL/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

The 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 applied by 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.



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

(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.

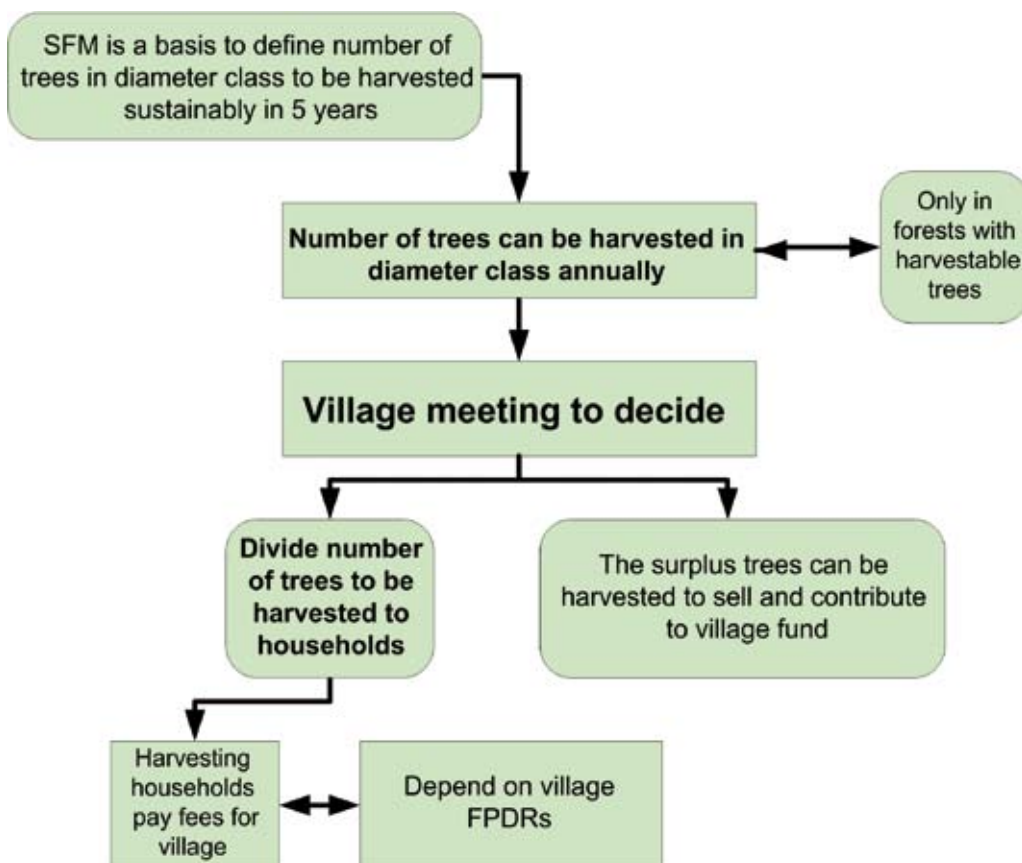


Figure 2: Benefit sharing for household purpose

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.

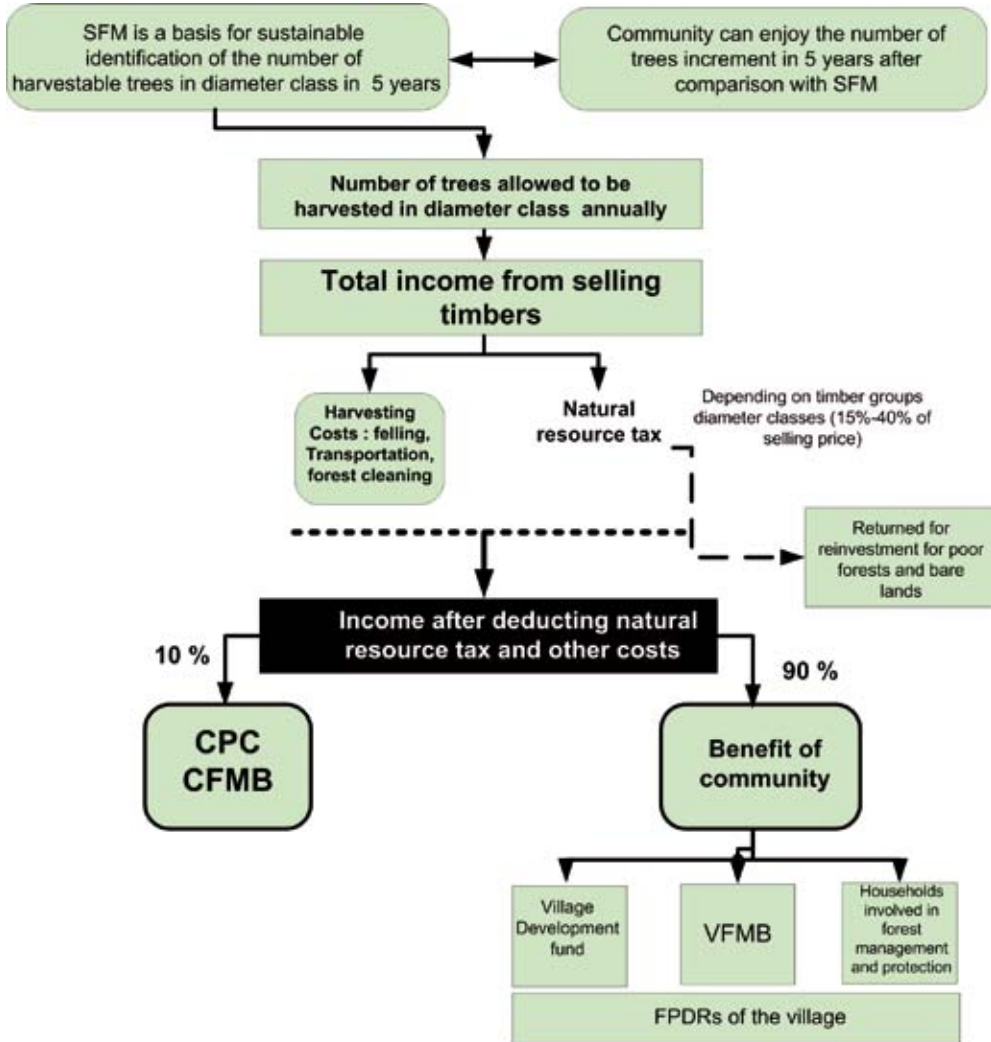


Figure 3: Benefit sharing for commercial purposes

Forestry administration for CFM

The 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 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)	<i>Established by professional company and approved by DARD and Provincial People’s Committee (PPC)</i>
Annual forest management planning and approval	Annual forest management plan is developed based on the 5-year plan by community		<i>Established by State Forest Enterprise (SFE) and approved by Department of Agriculture and Rural Development (DARD) and PPC</i>
Select and mark trees	Selected trees marked in the forest by painting order numbers in red by farmer		<i>Mark trees to be cut by forest hammer by Provincial Forest Department or a professional company</i>
Issuance of timber harvesting permit	List of marked trees is submitted for harvesting permit by VFMB	DPC	<i>Approved by DARD, PPC</i>

(Source: RDDL 2006)

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		<i>Monitor by Forest protection Unit (FPU), DARD</i>
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	<i>Villagers must follow the same procedures as SFEs to ensure their timber has legal documentation for sale</i>
Selling timber in delivery log yard	Organize auction or another selling form selected by community		<i>Organized by SFE</i>
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		<i>No benefit for communities</i>

(Source: RDDDL 2006)



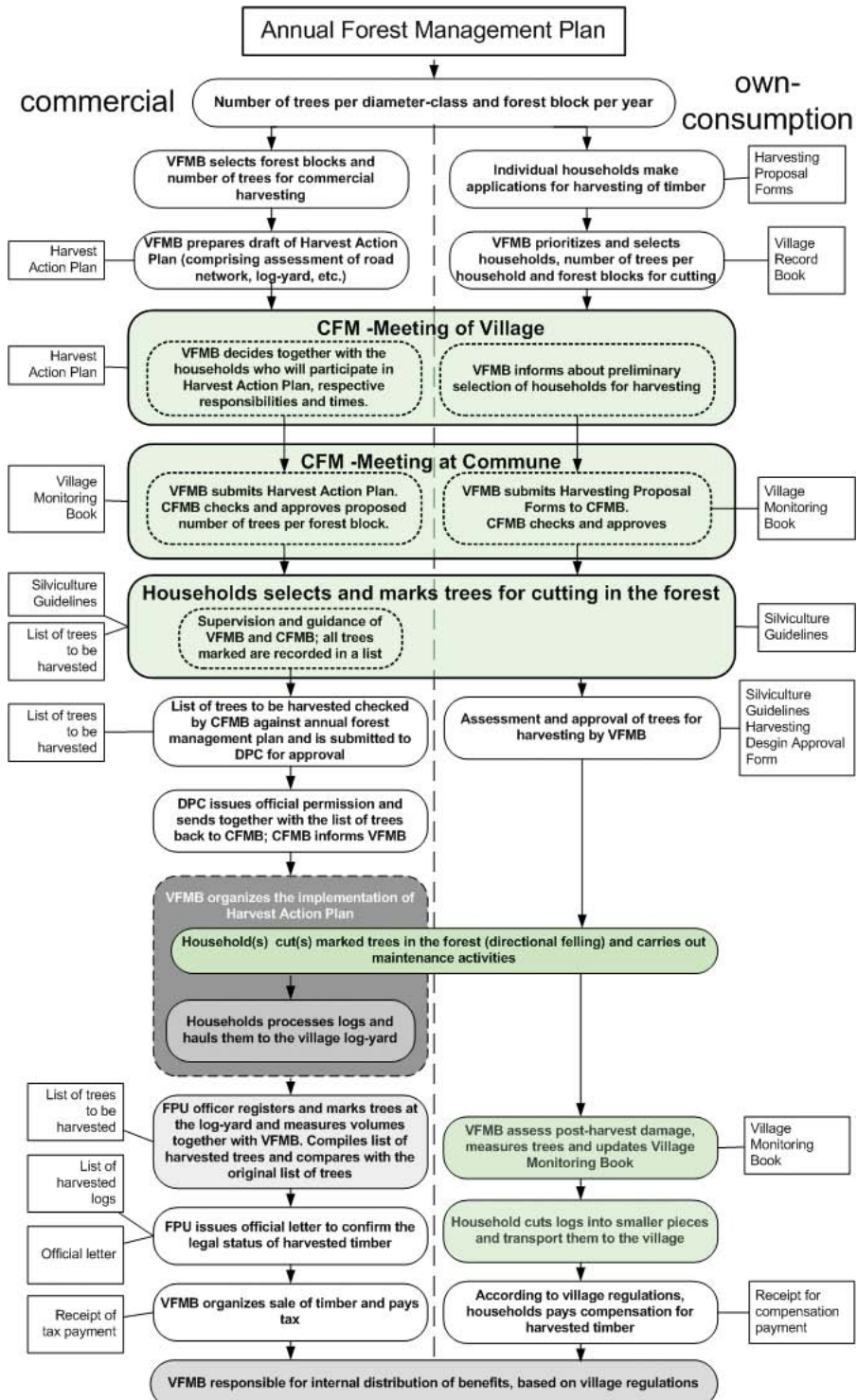


Figure 4: Forestry administrative procedures to harvest timber for own consumption and commercial purposes

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.

References

- Bao Huy, 2005. *Building a forest & forestland management model based on the ethnic minority communities Jrai and Bahnar of Gia Lai province*. Department of Science and Technology, PPC Gia Lai province, Viet Nam.
- Bao Huy, 2005. *Technical guidelines for community forest management, Simple silvicultural techniques*. ETSP/Helvetas, MARD, Hanoi, Viet Nam.
- ETSP Dak Nong, 2005. *The 5-years CFM plan*. ETSP, MARD and Helvetas, Viet Nam
- GFA and GTZ, 2002. *Community Forest Management*. Social Forestry Development Project (SFDP), MARD, Hanoi, Viet Nam.
- RDDL, 2006. Workshop document on benefit sharing mechanism in community forest management in Dak Lak province, Viet Nam.

