

Chapter VII

Institutional Arrangements

The characteristics of community and forest resource as mentioned in the previous Chapters create incentives for villagers to make choice of actions on their forest resources. These actions can be uncooperative and bring about results not as their common expectation, which negatively affect the forest resource managed. The forest management by the community, however, requires cooperative actions for its common objective of sustainable use of the forest resources. The only characteristics above are not strong enough to force people to cooperatively work together. The set of rules established by the local institution create incentives or disincentives for people to make their choices. The rules are divided into three levels- operational rules, collective-choice rules and constitutional-choice rules. (Ostrom, 1990). In this chapter, we will examine in detail about the existing rules the villagers faced with day by day, the incentives or disincentives created by these rules, the process in which the rules are made and the degree to which the rules go into the practice of the community.

7.1. Operational rules

Operational rules are the ones that directly affect the day to day decisions made by the people concerning what kind of forest resources allowed or not to collect; when, where and how to harvest them; who should monitor the actions of others and how; and what reward and sanctions will be assigned to different combinations of actions and outcomes (Ostrom, 1991).

Since the commune authority took over the task of forest management from the Cooperative in 1990, the traditional forest management, previously limited to the village forest, has been developed to cover the whole forest area within Van Tien village, including the “village” and “open” forest. Accordingly, a set of more complete rules has been devised and adapted. The last set of rules, called the

Regulation on forest protection, includes the following parts

- **Regarding the village forest**

1. Anybody without assigned tasks is forbidden to enter the forest
2. No exploitation of wood, charcoals and firewood, and cultivation is allowed in the forest.
3. No firing for any purpose without permission from the competent organization is allowed.
4. No encroaching of the forest for cultivation or cemetery is allowed

- **Regarding the open forest**

1. To reserved forestland areas for regeneration: only collecting of dry tree branches and died stems is allowed
2. To plantations:
 - Villagers (owners) has to require permission by the forest inspection station or village committee if want to harvest trees
 - Grazing in the less 5- year old plantations is forbidden.
 - Collection of any forest products except for dry leafs is not allowed

- **General regulations**

- i. Villagers with allocated land and forest (owners)
 - Owners have the right to decide their productive activities, benefit from extension service and borrow money from forest development projects.
 - Owners themselves are responsible to protect their own land or forest area. Those who leave their forest destroyed or burnt will be punished by the village, warned on the mass media or take legal action.
 - Owners are just allowed to do their productive activities on their land or forest area, not allowed to encroach to others' areas. It must not use their allowed land or forest areas for wrong purpose or leave them unused more than 12 months.
 - The village encourages owners to apply the agroforestry practice and advanced technologies to improve productivity on their allowed land areas.
 - Owners themselves are responsible to protect their own forests from firing.
 - Owners are responsible to protect their forest from pest and inform the village header for help in case necessary. Should not use pesticide in the forest area nearby water source for living activities.
 - Villagers have to gain the approval by the village, commune authority and forest inspection station if want to exploit their own forest. The exploitation has to follow trained technologies

2. All villagers

- Slash and burn for cultivation, especially in the upstream areas with high slope is forbidden.
- Anybody without assigned tasks is not allowed to enter the forest areas vulnerable to fire
- Any forest products, including those harvested from allocated forests, transported without permission from the forest inspection station, village and protector group are not allowed
- Villagers must not hunt and trade any kind of wild animals and have responsibility to inform the village header and forest protectors when discovering violators. Those who discover violators will be rewarded.
- No grazing in the young plantations and regeneration forest is allowed. Grazing has to follow village's regulations and is encouraged on the village's planned pastures.

3. Rights and Duties

Village committee

- Make organization for forest management, establish and control the forest protector groups, solve violations of rules that fall within its authority, and organize

the every six months or annually workshop for reviewing forest management activities

Forest protector group

- Participate in training courses related to forest protection and firing prevention and then transfer their knowledge to villagers
- To keep their eyes on the forest regularly, inform timely to the village committee when discovering forest fire.
- Discover and arrest violators, and seize their evidences and submit them to the commune authority to take legal action.

Commune authority

- Responsible to control and provide guidelines the village and protectors' implementation and settle violation cases.

Villagers

- Responsible to protect and have the right to get legal benefits from the forest
- Allowed to get supports and legal protection from the government when doing the task of forest protection
- Monitor the forest management in the village, discover violations and inform to protectors, village committee or commune authority.

Budget for forest management

- Got from the sources: Commune's public budget; contributions by villagers and irrigation fees; financial support by the government and other organization; penalty package, fees on exploitation and revenues from forest products.

• **Reward and sanction**

1. Those who have the good performance in forest protection will be rewarded by the village and high authorities. In addition, this performance is one of standard bases for approving the Title of Reputation.
2. Those who commit violation will be punished as follows:
 - Transporting illegally forest products, the penalties as follow:
 - First violation: 200,000 dong and seize products
 - Second one: 200,000 dong and seize the products and transportation means
 - Third one: submitted to the district authority to take legal action
 - Using explosive and burnable materials for exploitation of forest products
 - First one: 200,000 dong and seize the tools and products
 - Second one: submitted to the district authority to take legal action
 - Using electrical tools for hunting
 - First one: 100,000 dong and seize the tools and products
 - Second: 200, 000 dong and seize the tools and products
 - Third one: submitted to the district to take legal action
 - Burning forest for cultivation or charcoal
 - First one: 100, 000 and seize the tools
 - Second one: 200,000 seize the tools
 - Third one: submitted to district to take legal action
 - Resisting those who do their assigned task
Submitted to the district to take legal action.

Date 10 February, 2001

Signature:.....

(Phan Van Thong)

Leader of commune's Communist Party

Source: translation from original document held by the management board of the village.

The forest resources in the village are placed under some different management regimes such as the state forest enterprise, households and community's. Therefore, the rule system imposed is quite complicated. It defines clearly the right and duty at different levels such as villagers, protectors, village committee, and commune authority. The precise rules on contribution of the villager for the forest management budget is not stated in the Regulation. Because this was already stipulated in the Regulation on irrigation system management. For the village forest, because of being classified as the critical upstream protection forest, the rules on it are more rigorous. These rules are as the duplication from those in the collective period. These strict rules plus the traditionally respective perception of the villagers on the village forest have given disincentives for the villagers to exploit it. The rules on the open village still allow villagers to use minor forest products such as firewood that is indispensable to the villagers. There are many regulations imposed on the land with or without forest allocated to household. This land has been allocated to households since 1994. These regulations play the role as the legal base to protect the rights of the owners who have allocated land area

Attached with the rules are the reward and sanction. The reward stated in the Regulation is still quite general, so it has not created incentives to encourage villagers to try their best for the reward. The sanction is adapted from the legal document (Decree of the government on punishing financial transgression in forest management and protection and forest produce management, dated 29-11-1995) for being suitable to the local setting. This legal document covers all violation cases relating to forest protection and management, but the sanction established just forces on the regulations concerning to violations that popularly happen in the local. The sanction is graduated into different levels corresponding to different degrees of violations. With three authority levels such as the village, commune and district responsible to settle violation cases, the sanction is enforced quite effectively. This gives disincentives for the villagers to commit violations.

The rules on forest protection have step by step gone into the daily life of villagers. In 2002, these officially became one part of the village's Convention that

regulates all aspects of the socio-economic and cultural life of the village community.

7.1.1. Organizational arrangements and decision makers

Organization is the ordered group, functioning purposely (Gibbs, 1986). Through organization, the rules are established and enforced, and these rules eventually become “institutionalized” after having served the needs and normative expectations of people over time (Uphoff, 1986). Organizational arrangements are the rules that stipulate the right and obligation of each member of the organization and, at the same time, assign authorities to members at its different nodes.

When the commune authority executed the forest management, it established a Council with its members who are officials and communal leaders, which is responsible to forest management.

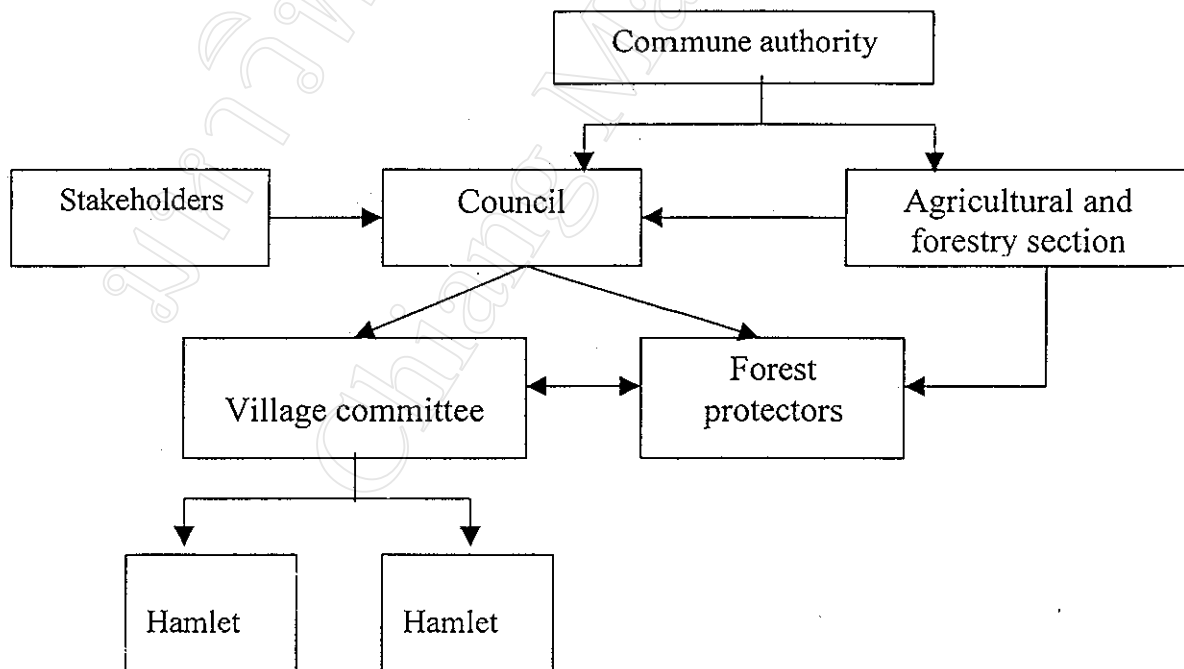


Figure 3. Diagram of the organization of forest management

Unlike the collective period in which the management mechanism was top-down, the decisions were imposed as the commands and villagers must follow, the

management mechanism under this organization encourages villager's participation. Much of the management authority is devolved to the village community and the villagers have been participated in the process of decision-making and monitoring tasks as well.

The members of the local organization on forest management come from different sections of the local administration. This organization's function is to serve for forest management of the local. Most members are the in-charge ones, this is, they are official staffs working for government and at the same time participating in this organization.

The decision-makers are those who make the rules and enforce them, and are representatives of the community making any decision on forest management. The Council has been used as the body of decision-making. It consists of the leader of commune's Communist Party, chairman of commune People's committee, representative of public associations, village leaders whom are elected by the villagers, and some district's officials responsible for forestry sector as advisors.

The procedure in which the operational rules on forest management is made as follows. Firstly, the Council holds the meeting with presence of all its members. On the meeting, they discuss on making the rules on forest in the light of the state law and policy and come to agreements. Then the village leader is responsible to make a draft of Regulation based on these agreements. The draft would be reconsidered by the council. Then the village leaders do dissemination of the draft to the villagers in the village meeting in order to collect villager's opinions. With these opinions and the draft, next the council devise the complete Regulation submitted to district's authority for approval. Finally, the Regulation is defused to the villagers before coming to effect.

There are two kinds of members directly involving in rules making, one includes communal leaders representing for the village community and another includes officials that representing for the state administration. Owing to this, the decisions

made are the combination between the specific settings of the local community and lawful documents promulgated on forest protection by the state. This helps the decisions on forest management of the local both to be suitable with the local context and to be legitimate, which in turn help to gain the recognition by the state.

When the rules are in effect, the enforcing task is assigned to the forest protectors. They are responsible for patrolling, discovering and handling violations of rules. At present, the commune has two forest protector groups. One with 6 members, who are responsible to protect the village forest, is employed by the commune council. Another with 11 members, who are responsible to protect the open forest, employed by the state forest enterprise. All of them are employed on a contract with the term of 6 months. After 6 months, they, if working well, would be re-employed. The allowances paid to them are different. The protectors for the open forest are paid by the forest enterprise with quite higher allowance funded by the Program 327. But the protectors for the village forest are paid from the contribution of the villagers, which, in fact, is deducted from source of irrigation fees.

The effectiveness of rule enforcement much depends on the forest protectors. To some extent, the protection of the village forest is better performed. From the field study, the researcher found many reasons for that. The protectors of the village forest have been selected and proposed by the villagers up to the commune Council for employment. They are always highly responsible persons in the affairs and village forests. In spite of low allowances compared to their efforts, they rarely refuse this position once they are trusted and voted by the villagers. Whilst, those for the open forests who are employed by the forest enterprise, in their mind, consider that they have no rights on it except for their payments. So their responsibility is not high for the forest. Moreover, the protectors for the village forest have got much cooperative supports in monitoring and discovering violations from villagers, while the protectors for the open forest have not. The village forest area is quite small and proximal to the village residence area, and has clear boundary by the road, but the open one is so large, off the village and bordered with many other communes.

7.1.2. Analysis of institutional arrangement at household level

This analysis is to arm at examining the degree to which the rules really go into the normal life of villagers. The variables included in the analysis are the perception on the forest concerned of the villagers, their knowledge about the rules, participation in decision-making and acceptance of rules, and the congruence of the rules with the local context.

Perception of the villagers on what kind of property the forest is, affects on their attitudes on it. From the survey, for the village forest, 87percent of respondents perceived it as common property and 13 percent of them, State property; for the open forest, 26 percent of respondents perceived it as common property and 74 percent of them, State property. In general, most of the villagers consider the village one as common property but the open one as state property. Normally, the financial and human resources available to the forest department are inadequate to carry out the task of policing the forest resources well enough. This can make the forest easy to become the “open access” property to everybody. The “open” forest fell in this situation.

Table 14. Perception of villagers on forest resource (percent)

Perception	Village forest	Open forest
Common property	87	26
State property	13	74
Open access	0	0
Total	100	100

Source: Survey, 2002

It was also found that most villagers who recognized the village forest as the common property still claimed that they have a right to manage and protect it for not only themselves but also the next generation. For the open forest, although most villagers thought that the forest is of the state forest enterprise, they claimed the right

to use it for their livelihood. It reveals that it is difficult to separate or limit villagers from forest resources. The right in which the villagers are interested is to manage and use rather than to own the forest. This may be a good signal for power sharing in a co-management context where the state still remains the owner of the forests and villages have the right to manage and use forest for their own interests (Chusak, 1994)

Knowing operational rules is a very fundamental condition for the village's collective action in forest management. People do collective action for achievement of a common objective as long as they know operational rules aimed at achieving their common purpose and others do likewise (Ostrom, 1990). During interviews, it was found that 92.3 percent of respondents knew about the rules and 7.7 percent of them did not.

Table 15. Knowledge of respondents about operational rules and penalties

	Case	Percentage
Know	65	92.3
Don't know	5	7.7
Total	70	100

Source: Survey, 2002

The villagers are regularly informed of the rules. The process of rules making gives them many chances to know the rules established. In implementing the forest management, the rules usually are disseminated and interpreted to villagers through the village meetings and activities of the public associations. Thanks to this, most villagers have knowledge about the rules. The degree to which the villagers have knowledge of the rules is different from one another. Many of them pay attention in forbidden things and correspondent penalties rather than in decision-making process. They have more attention in the rules for the village forest than for the others and thought that the regulations on the open forest were imposed by the state and those on the village forest, by the village community. Given certain institutional arrangements, individuals may forgo the use of a resource if it is not culturally acceptable (Schweik,

2000) and may ignore central government rules that contradict their daily patterns of resource use (Banana and Gombya-Ssembajjwe, 2000). This implies that in order to get high effectiveness of enforcement, the state law or regulation should be locally specified for the particular local. The different knowledge about the rules on two kinds of forests leads the villagers to have different attitudes to them. They tend to act more opportunistically in the open forest. This will be discussed in detail in Chapter 8.

Another important thing, which strong affects the compliance of the villager with the rules is their acceptance of the rules. Acceptation of the rules implies that the degree to which the rules reached the collective consensus of the whole community and is precondition for compliance of the rules. Knowing the rules does not mean that they all accept them. From the survey, 71.4 percent of interviewees voluntarily accepted the rules and the remainder accepted reluctantly.

Table 16. Percentage of villagers accepting the rules

	Case	Percentage
Voluntarily	50	71.4
Reluctantly	20	29.6
Total	70	100

Source: Survey, 2002

The strategies for livelihood affect the degree to which the villagers accept the rules. The villagers whose livelihood much depends on the forests certainly hardly accept the rules because they limit their chance to appropriate and use them. Most villagers easily accept the rules on the village forest because it, in their mind, is important to protect the water source for cultivation that decisively determines their survivals. They are aware that protection of the village forest is their duty and interest. On the contrary, they are reluctant to accept the rules on the open forest even though less strict. The reason may be that the open forest was open to them for a long time, where it has met villagers' demands for fuel-wood and other products as well. The demands for forest products, especially firewood, which has not had good

alternatives, will be rapidly increasing when the population increases. In order to manage the forests better, the state must find ways to harmonize between forest management and security for villagers' livelihood instead of completely forbidding the villagers to use these forest products.

Participation in decision-making process is another important factor that affects on effectiveness of enforcing the decisions made. From the survey, it was found that 28.6 percent of respondents participated in decision-making process and 71.4 percent of them did not.

Table 17. Percentage of respondents who take part in decision-making process

	Case	Percentage
Yes	20	28.6
No	50	71.4
Total	70	100

Source: Survey, 2002

As mentioned above, the decision making task is left to the council of commune, those who directly participated in this process are the only representatives of the village. However, most villagers indirectly participated in rules making through their representatives and the village meetings where they are allowed to voice out their own opinions. The big community makes it difficult for people to participate in full. During decisions implementing, the villagers also have the right to suggest for revising or modifying the rules if they are no longer suitable. Moreover, the villagers have been encouraged to participate in many management activities such as resolving violations and conflicts, voting protectors, and monitoring rules implementation, and therefore strong influencing the activities of managing the forests

The feasibility of the rules is partly determined by their congruence with the community settings and attribute of forest resource. The congruence implies that the rules established are based on the practically social and economic conditions, culture

and tradition of the villagers, and in some extent are considered by the villagers as their own rules rather than the rules imposed from outside. From the survey, it was found that 90 percent of respondents agreed that operational rules are congruent with the community settings and characteristic of the forest resource, and 10 percent of those did not.

Table 18. Congruency of the rules with the community conditions

	<i>Case</i>	Percentage
Yes	63	90
No	7	10
Total	70	100

Source: Survey, 2002

In general, most villagers thought that the rules are congruent. However, in fact it is not a matter of congruence but effectiveness of enforcement of the rules. It was found that many villagers call for the more strict rules and increase in penalties in order to limit forest destruction.

7.2. Collective-choice and constitutional-choice rules

Operational rules are neither self-generating nor self-enforcing. Institutional arrangements are needed to adjudicate conflicts, enforce decisions, formulate and change operational rules, detect and sanction against rules violation, and hold officials accountable to users. These institutional arrangements are called collective-choice rules (Tang, 1992). These rules used officials or external authorities in making policies about how the forest resources should be managed and by whom.

The legal basis or legal framework for the policies to be implemented is provided by constitutional rules. These rules define the eligible users and their property rights on the forest resources, assign authority to government agencies and define the right and duty of the people concerning the forest resources. In other words, the collective

choice and constitutional choice rules include the constitutions, laws, governmental decrees, ministerial regulation, and other legal documents of the state.

In the scope of the study, I do not cover all policies and laws related to the forest resources but deal with the policies concerning community-based forest management only.

(1) Social forest policy

People have been encouraged to participate in forest management since the government in Vietnam issued Decision No. 184 in 1983 on allocation of forest-land to farmers in mountainous areas to keep forest garden. However, from that time up to the late 1980s, the forests were still placed under the central management regime of the state and the state forestry policy forced on commercial and industrial forestry. This overshadowed the role of people' participation in forestry activities.

In the 1989, the government formulated the National forestry Action Plan in close collaboration with the international donor community, particularly FAO. A variety of guiding principles for forestry development was put in place. One of these was decentralization and participation. Since then, the state forest policy has shifted its emphasis from exclusive state control towards increased private sector involvement, enlisting rural households for national goals (AFN, 1998).

In 1991, the government promulgated the Forestry Development law, which recognize individuals and households as a legitimate entity allocated on lease with the production forests. The Decree No. 17/ HDBT, dated January 1992 states "village forests or forest hamlet forest belong to public use of villages or hamlets" and recognizes villages or hamlets as legitimate owners.

In 1994, the Decision No. 02 on forestland and forest allocation and Decision No. 202 on contract for forest protection were issued. These paid the role as the vehicle to increase participation of private sectors in forest management. Besides being forest

owners, households and individuals can participate in the management of special use, protection and production forests by being contracted with forest owners (state forest enterprise, management boards of special use and protection forests).

Recently attention has been paid to the forest management of communities. In 1999, the Ministry of Agricultural and Rural Development issued Circular 56/1999/TT/BNN-KL, guiding the development of rules for the protection and development of forests within village communities. It includes rules on forest protection and mobilizing internal resources to tend, maintain, and develop forests whose owners are village or hamlet communities.

So far, the social forestry or community forest management has steadily developed throughout the country. Nearly 3.34 million ha of forestland are under community forest management and millions hectares of forestland have been allocated to households and individuals. However, in some recent legal documents, the community has been not stated as a eligible entity to be allocated forest-land. Moreover, the government has not promulgated any community forestry laws.

(2) Program 327

This is the Program supporting forestry development, established under Decision 327/CT of the Council of Ministers issued in September 1992 concerning "policies on the use of bare land, denuded hills, forests, alluvial flats and water bodies". The Program was implemented from 1992 to 1997. Its objectives are to encourage replanting, to protect forests, to improve utilization of forestland and living standards, and to support the sedentarization program.

The program includes activities related to not only forest but also rural infrastructure and production. Its forest-related activities are tree planting on bare lands, and protection and enrichment of the existing forests. In order to reduce poverty and promote fixed cultivation and sedentarization, its supports are also

provided for production of livestock, food and cash crops, fish, and development of agroforestry model.

Each household in project areas of the Program was provided with a defined area of land for reforestation, protection, enrichment and regeneration. The land given to each household depended on overall land and funds available and on the household labor availability and its economic conditions. The payment for forest protection on contract is 50.000 VND/ha/year. The payment for plantation is 2 million VND per ha paid for three years. The fund for households to implement productive activities are the favorable credit without interest rate that could be repaid when their production started yielding revenue.

After 4 year of Program 327, Decree No. 556/TTg was signed by the Prime Minister on 15/9/1995 refining the scope and content of the activities of the Program. It was now called the "National Program" on rehabilitation and protection and forest regeneration through natural forest succession and forest planting aimed only at 2 targets: upstream protection forests and forests in national parks, nature reserves involving agroforestry projects with direct participation of the people.

(3) 5 million afforestation Program (the 661 Program)

The program is a sequence of the Program 327. In 1998, the Prime Minister promulgated a Decision No. 661/QD-TTg, which set out the policies, objectives and guidelines for an ambitious set of activities to follow-on from the Program 327. This has become known as the 5 million ha Program, named for its major long-term of establishing 5 million new hectares of forest by a variety of means between 1998 and 2010.

The program has three basic objectives: (1) to plant 5 million new hectares of new forest together with protecting the existing forest area to raise the forest cover to 43 percent; (2) to support the effective use of bare land and denuded hills, thus creating more employment for the laboring people; and (3) to supply wood for industrial

purposes, firewood and other forest products for domestic consumption and the production of export goods, to make forestry an important economic contributor to socio-economic development in the mountain regions.

A major guiding principle for the program is that it will be implemented through projects with people's participation. It is stated that "Citizens are the main and driving force for the implementation of protection, regeneration and afforestation and they are also beneficiaries from forestry activities..." (Prime Ministerial Decision No. 661/QD-TTg, July 29, 1998). Arrangements for funding the program are similar to those that applied for the Program 327 and "norms" have been set for paying for protection and reforestation activities.

(4) Forestland and forest allocation policy

The content of the policy is forest and forestland allocation on lease to various organizations, households and individuals on a long-term basis for forestry purpose.

The allocation of forestland and forest to people is one of major policies of the state, originating long time ago with directive No. 29 issued by the Communist Party in 1968 on the promotion of the forestland and forest allocation to Cooperatives. In 1983, the Government issued Decision No. 184 on the forestland and forest allocation to farmers in mountainous area to keep forest gardens.

After the 1993-land law was promulgated in 1993, which recognize five rights of the landholders including the right to exchange, transfers, lease, inherit, and mortgage, the forestland and forest allocation policy has been transformed and its implementation has been promoted in practice.

In 1994, the Government issued Decision No. 02/CP, dated 14/01/1994 on the allocation of forestland to organizations, households and individuals for long-term use serving forestry purpose. And then the Prime Minister issued Decision No. 202 dated

02/05/1994 on contraction for forest protection. According to these Decisions, households, individuals, and social organizations are legally stated as targets for forestland and forest allocation and contract for forest protection. The duration of allocation of forestland is regulated to be 50 years and can last more. Besides five rights in accordance with the 1993-land law, the Decision No. 02/CP added rights to enjoy the lawful benefits from the forestland and forest allocated for forest owners.

The forest land allocation policy plays an important role as a means for implementation of these programs above. It is a core policy for the people to participate in the protection and development of forest capital.

The social forest policy of the state and its legal documents concerning community forest management above specify who can make, modify or revoke operational rules and be responsible for decision-making about a given forest resources, and how decisions to be made.

The Forest Act promulgated in 1991 recognizes village or hamlet as a legitimate owner. It also recognizes households and individuals as eligible users of the forest. Therefore, the village is legally allowed to organize managing the forest on its territory. Households and individuals in the village are legally allowed to participate in managing and using the forest resource of their village.

Decree 245/1998 states that the chairman of commune is responsible to manage and protect of forest in the commune. As such, the government recognizes the role of the chairman of commune as a decision-maker in forest management. As far as decision-makers in forest management are concerned, the Circular 56/1999/TT/BNN-KL states that village leader and communal representatives play the role as decision-makers in making the village rules on forest management.

Concerning the procedure or the way of making the rules, the Circular 56/1999/TT/BNN-KL provides the following guideline. Firstly, the village leader organizes a meeting with participation of all householders or only communal

representatives. On this meeting, the village leader presents issues and content that should be in the village convention. On this base, householders or representatives discuss to come out rules for each issue. The content of the convention, if agreed by two third of participant, would be valid. Then, the village leader submits the convention to the people's council of the commune to reconsider and next submit it to the people's committee of district for approval. Finally, after approved, the convention is enforced.

For the local organization of forest management, there have not been any legal documents dealing with this issue. However, in case of the village, this organization is the combination between one side being communal representative and the other side being governmental representatives (officials), so that it has been governed by the civil code on governmental management. According to this code, the village leader is elected by villagers, with the term of 2 years and the chairman of commune and association chairman is elected by people's council of commune, with the term of 4 years. The chairman of commune has the highest power in making decisions concerning issues in the commune.

In conclusion, the social forest policy of the state and its legal documents concerning community forest management above play a role as legal base for the community-based forest management of the village. However, in the present situation, these regulations are still not enough legal base for the village to become an independent local organization of forest management.

7.3. Strengths and weaknesses, advantages and opportunities, and difficulties and threats of the community based forest management

7.3.1. Strengths and weaknesses

The strengths and weaknesses of the community-based forest management are examined by using eight design principles by Ostrom (1990), mentioned in chapter 2.

(1) Clearly defined boundaries

Boundaries include two kinds: the boundary of the commons and the boundary of eligible users. The presence of clearly defined boundaries makes the “commons-property” regime different from the “open access” regime. The local forests have border with many neighboring communes. The administrative boundary of the commune is used as the boundary of the forests. In places where the forests have border with forests of others communes. The boundary is not clearly defined. The villagers themselves do not recognize the boundary of the forests in these places. The unclear boundary make it difficult for monitoring and detecting the ineligible users from outside.

The boundary of the eligible users is not the same with that of the forests managed. All people who are members of the commune have been recognized as eligible users, while the forests managed situate within the Van Tien village. This causes obstacles to the cooperation to manage the common forests.

(2) Congruence between appropriation and provisions rules and local conditions

It seems that the operational rules are congruent with the conditions of the local settings as discussed previously. The appropriation rules reflect the degree of scarcity of the forest and the prior needs of the local. Since the forest resource is so poor and is recovering, the rules are so strict on using forest resources. Fallen trees or dry branches for fuelwood is allowed to use.

(3) Collective-choice arrangements

Although a few villagers were allowed to directly take part in the process of decision-making for this task was left to the council, most villagers indirectly participated in this process through their representatives. They were chanced to express their own opinions through the village meetings. In implementing the rules, the villagers had the right to propose for adjusting or modifying them if they were no

longer suitable. Thanks to this, the decisions, particularly the rules, on the forest management, in some extents, reached the collective consensus.

(4) Monitoring

The monitoring task was authorized by the decision-makers to the forest protector group. However, with the modest number of the protectors, it is difficult to do well monitoring for the quite large forest areas with the complicated characteristics. In addition, the villagers also monitored the common forest conditions and detected the behaviors each other. However, this just has been limited to the village forest area, while the open forest needs more of the monitoring of the users. In spite of under two levels of monitoring, the common forests, generally speaking, have been not yet monitored well.

(5) Graduated sanction

The sanction is established based on the state legislation and specified to be suitable to the local settings. This sanction is graduated in accordance with the seriousness and context of offenses. First time offenders, who are in desperate needs of the resources for subsistence, are likely to get a lenient penalty. Serious and repeated offenses will be heavily sanctioned.

(6) Conflict-resolution mechanisms

The village has established its moderating court for a long time. Most conflicts in the village, including those in using the forest resources, are settled by the Court. In case that the conflicts could not be solved by the Court, they were submitted to the commune authority to resolve. Rare are the resolving of conflict interfered by the high authorities or external agencies. In general, such way to resolve the conflicts is simple, with low cost.

(7) Recognition of rights to organize

This design principle means that the right of the resource users to devise their own institutions are not challenge by external governmental authority (Ostrom, 1990). The community forest management, despite of not being yet official recognized by the state as an independent institution, has been considered as the important section of the commune administration. So far, the CBFM's initiatives have not been overruled by the state. On the contrary, the national policies seem to support the role of the local institutions in protecting the local forest. Specifically, the Ministry of agricultural and rural development has promulgated the circular guiding organizing the forest management based on the village convention. Although few property rights of the community on the forests has legally recognized by the state, the government agencies, in practice, leaves the right to manage it for the local institution that has been established.

(8) Nested enterprise

The institutional arrangements on forest management by the local were made on the basis of state legislation and policies at the higher levels. Such a created set of rules at the local level will produce a stable system that may last over the long run.

7.3.2. Advantages and opportunities

The change in the villagers' livelihood from much dependency on the forest resource to much dependency on farming is the important advantage for the CBFM. Prior to 1990, the productivity of crops was very low and unstable for natural disasters. So the villagers' livelihood had to be much dependent on the forest resources. The forest products were used not only for domestic consumption but also for cash income. Because of low productivity, in order to meet their subsistence, the villagers had to expand the cultivable area by encroaching into the forest. From 1990 to the present time, the villagers' livelihood has gradually improved. In line with the progression of agricultural science and technology, the effectiveness of production has step by step been raised and the farming could increasingly meet the needs for

subsistence of the villagers. This has encouraged the villagers to pay much attention in farming, instead in forest exploitation as previous. Additionally, the development of market-oriented economy has contributed to supplying alternatives, instead of forest products, for additional income of the villagers. Among factors, the improved livelihood of the villagers is the basic factor determining the achievement of the CBFM.

The level of education of the householders is considered high as discussed in the Chapter 6. There is the tendency that the later the generations, the higher they have the educational level. The high education would help the villagers easily to access to the rules. The higher the villagers have the knowledge about legislation, the more legal they do their actions. On the other hand, with the increasing pace of industrial development, the needs for labor are more and more incremental. At the same time, the educational requirement raised is high for labors. Therefore, the villagers who have the high education would find it easy to get the jobs that create additional income. Likewise, there are some cases that the villagers could get the permanent jobs and will not return. These play an important role as the safety vales for sustainable use of the forests.

Another advantage for the CBFM is the activity of the public associations. The public associations are where the grass-root movement and collective actions are initiated as well as where provide the villagers with the propagation and education. The village has the strong network of public associations. Through this network, the forest management activities and relevant rules were regularly introduced and interpreted to the villagers. Also, activities armed to persuading the villagers to cooperate in managing the forests were also frequently done. Owing to this, the forest management has obtained the great cooperation, support and participation from the villagers, which are so important to the CBFM.

The present organization on forest management is inherited from the traditional institution. Although this institution just operated on the small forest area, particularly the forest village, its successes is the foundation for the present forest management.

The characteristic of homogeneous population of the village is also the advantage for CBFM.

So far, besides the certain failures, the forest management and protection by the village has achieved favorable results. The forests, especially the open forest, which was heavily degraded, are now recovered. This in turn leads to the security of the water sources for cultivation and reduction of disasters, which is the villagers' desire. Once their desire became realistic, the villagers appreciated the role of the forest and the necessity of CBFM. This is the opportunity for the sustainable vitality of CBFM

In addition, there are other advantages and opportunities that are created by the state policies, programs and legal environment. These will be discussed in detail in the Chapter 9.

7.3.3. Difficulties and threats

The monitoring task plays an important role to the CBFM. This task was authorized to the forest protector group. With the quite large forest area (around 2,500 hectare) and the limited number of protectors (17 persons), it is really difficult to obtain well monitoring. However, the limited budget for forest protection, supported by the government and contribution of the villagers, does not allow raising the number of protector as many as needed. Furthermore, the present payment for protectors (100 VND/person/month) is not high enough to encourage them to do their task well.

Protecting the forest from fires is the first priority in managing the forest, especially for the provinces of the central Vietnam where the climate is so severe. However, the people have not any professional equipment for this task. The persons who are responsible for forest protection have a little, if any, knowledge about their jobs. This is the difficulty for CBFM to perform good forest management.

In the commune in general and the village in particular, there is still some fraction of the poor whose livelihood is much dependent on the forest resource. It is difficult to stop their violation on the forest resource except when creating other alternatives to secure their livelihood. Moreover, the penetration of the market economy in to the village makes increase in the needs of the villagers. They need more cash income to meet this need. This can bring about the pressure on and cause threats to the forest management of the village.

The market demand for fuelwood and charcoal tend to increase. This increases the pressure on the forest. The impact of the market is beyond the capacity of the local institution and causes threats to the CBFM. The large-scale illegal exploitation of fuelwood and charcoal from people coming from the neighboring communes is the big threat to the CBFM. The commune authority seems not to be able to solve this problem. The reason is that the commune authority has not the right to solve the violations by the member of other communes while the higher authority still not yet gives rise to the solution for this situation.

Other difficulties and threats to the CBFM resulting from the state policies that have been implemented in the locality will be discussed in the chapter 9.