

## **Chapter IX**

### **Performance of the Community-based Forest Management in Van Tien Village**

The pattern of interaction as discussed in the Chapter 8 results in outcomes of the management and use of forest resources that embody the performance of the forest management of the village community. In this chapter, I will do analysis and evaluation of the performance in the different periods of time corresponding to the change in the management regime. The performance is partly determined by the state policies that were mentioned in Chapter 7. This chapter will also examine the impacts of the state policy on the practice of forest management by the village.

#### **9.1. Performance indicator measurement**

According to Berkes (1989), the common-property regime ensures sustainable use and conservation, equitable access to the resource, and livelihood security in the local community. Therefore the concepts of: efficiency; equity; and sustainable livelihood are used as the evaluative criteria.

In the study, these criteria are not separated precisely from each other because of their trade-off, this is, the efficiency results in the equity and vice versa. These criteria were assessed by using the set of indicators as mentioned in Chapter 2. In practical field study, the evaluation of these criteria is based on two sources. The first is from the investigator's observations. The second is based on the resource user's perspectives obtained by interview and conservation.

With the questionnaire designed in the way as explained in Chapter 3, we had respondents evaluate the indicators in question. The process was conducted as follows. Firstly, we organized several group meetings to make clear interpretation of all indicators to be evaluated for the respondents. After being clear, the respondents brought the questionnaire home and complete it. Then, we conducted interviewing these respondents based on their result of evaluation to collect additionally

explanative information for each evaluated indicator. From the survey, through such participatory evaluation approach, the total score of each indicator in three different periods of time were found as in the table underhere.

Table 27. Result of evaluating indicators

Indicator	Average score		
	Prior 1990	1990 to now	Future
Villager's satisfaction with the rate of use of the forest resource	2.93	3.04 <sup>b</sup>	3.72 <sup>b</sup>
The status of the forest resource	1.97 <sup>a</sup>	3.11 <sup>ab</sup>	4.07 <sup>b</sup>
Villager's participation in decision-making process	2.2 <sup>a</sup>	3.06 <sup>ab</sup>	3.63 <sup>b</sup>
Villager's control over access to forest	3.16 <sup>a</sup>	2.6 <sup>ab</sup>	3.88 <sup>b</sup>
Villager's compliance with forest rules	3.12	2.94 <sup>b</sup>	3.54 <sup>b</sup>
Fare distribution of benefits from forest	2.11 <sup>a</sup>	3.04 <sup>ab</sup>	3.87 <sup>b</sup>
Equal access to the forest resource	2.55 <sup>a</sup>	3.15 <sup>ab</sup>	3.87 <sup>b</sup>
The role of local people in management	2.02 <sup>a</sup>	3.14 <sup>ab</sup>	3.72 <sup>b</sup>
Villager's satisfaction toward the livelihood security	2.27 <sup>a</sup>	3.30 <sup>ab</sup>	4.14 <sup>b</sup>
<b>Total</b>	<b>22.28</b>	<b>27.40</b>	<b>34.47</b>

(a, b: indicate the significant difference between the pair of score number with the same letter at the significant level of 0.01.)

Source: Survey, 2002

Prior to making the comparative analysis of the performance indicators through time, t-test was used to test the significantly difference in score of the indicators between the periods of time.

As in Table 27 shown, the average score of the indicator of villager's satisfaction with the rate of use of the forest resource is not significantly different between the period before 1990 and period from 1990 to now. This implies that villager's satisfaction with the rate of use of the forest resource is similar in these two periods. The question raised here is why that is?

As discussed in Chapter 4, prior to 1990, under the collective stage's management regime, the open forest was almost open access to villagers. They could get as much of forest products as they needed. The villagers, in this context, just thought of short-term benefits such as timber, hill land for cultivation and other minor forest products. Therefore they felt satisfactory with the rate of use although they had to be at the expense of their overexploitation that it often happened natural disasters such as drought and flood causing the fault of crops.

On the other hand, in the period of 1990 to now when the management system has operated over the whole forest within the village, the strict rule system has not allowed the villagers to exploit the forests as previous. Their previous needs have certainly not been met for forest products. However, they, instead, have gained the collective long-term benefit that they have enough water for cultivation and the previous disasters have been limited.

Through weighting two kinds of trade-off benefits, my respondents came up with such scores for this indicator. This partly implies that the villagers can be able to accept ignoring the individual short-term benefit in order to reach the collective long-term one. Presently, the degree to which the villagers satisfy with the rate of use of forest resources is not yet high with average score of 3.04. This is certain because the villagers have to limit their needs for forest products in the settings in which it is not easy for them to find other alternatives. However, that most local people chose to cooperate rather than defect or free ride as mentioned in Chapter 8 means that overall they tend to be satisfied with the rate of use of forest resources under the present circumstances. This is the promising prospect of community-based forest management.

It is undoubted that the past-period average score of the indicator of status of the forest resource is higher than the present-period average score of this indicator. When managed well, the forests have gradually recovered. This has been revealed through the progress of the forest mentioned in Chapter 4.

Under the collective stage's top-down forest management mechanism, the villagers had few rights and chances, if any, to participate in decision-making process. However, in the present circumstance, the villager's participation has been considered central and given much attention. So the indicator of villager's participation was evaluated more highly in the present period than in the past period. The more the villagers participate in the decision-making process, the more they pay the decisive role in managing their forest. Therefore, the average score of indicator of villagers' role in management in the past period is higher than its average score in the present period.

The indicator of villager's control over access to forest was given the higher score in the past period than in the present one. This can be explained based on the given information from the survey. In the past, the management just was limited to the village forest that has the clear boundary, small area and proximate to the village residential area. Therefore it was easy to control over access to it. But since the management was expanded over the whole forest, including the open forest, the control over access to the forest has become more difficult. This is because of the limited force of monitoring and because of the complicated characteristics such as very big area, bordered with many outside communities and so on as mentioned in Chapter 4. The result of evaluation for this indicator implies that for the forests to be protected better, it is necessary to promote the monitoring task.

Villager's compliance with forest rules was evaluated the same between the past present periods. However, this is a good signal for the present forest management regime. In the past, the villager's cooperation to comply with the rules was evaluated

to be very good. In a part because the rules were enforced highly effectively and in another part because the villager's needs for forest products were still satisfied by exploiting the open forest. Today, the rules imposed for the whole forest. The villagers' compliance with the rules indicates that they have accepted ignoring such needs. It is still quite difficult for households who still not yet find other alternatives, to comply with the rules completely.

The indicator of fair distribution of benefit from the forest has the average score in the past period higher than in the present period. In the period before 1990, benefits in which villagers were interested were the short term ones as mentioned above. Their distribution was not constrained by the rules. Normally households who had more labors obtained more of benefits than those who had less ones did. Meanwhile, in the present period, benefits from the forests have been emphasized as environmental functions of and water source from the forests. These are the collective benefits. Every villager has the same right to enjoy these benefits as stipulated.

Access to the local forest resource in the past period was the competitive occupation. Villagers who came first would occupy the more fertile land areas for cultivation than those who came late. It was similar for other forest products such as timber, honey, and so on. Nevertheless, at present, access to the forest has been controlled by the rules. Every body has equal access to the forest. So this indicator was evaluated more highly in the past than in the present period.

Regarding the indicator of villager's satisfaction with the livelihood security, its average score of the past period is significantly higher than its average score of the present one. As discussed in the previous chapter, the most important innovation for villagers to manage their forest is to protect water source for cultivation, particularly rice cultivation that is very important to their livelihood. In the past, the villagers much depended on the forest categories, such as timber, cultivated land, wild animals, fuelwood and other minor forest products (herbal plants, homey, and etc.) for their livelihood. Although the open forest was open to them and they could appropriate these forest products for their livelihood, they still felt that their livelihood was not

secure. This is because that their cultivation was frequently threatened by disasters while the forest resources was increasingly too degraded to meet their needs.

In the present period, since the forests was managed well, the villagers have had enough secure water for cultivation and at the same time the natural calamities have been considerably reduced. Moreover, going with the development of technology, the productivity of the crops, especially rice, and raised animals has steadily increased. It has importantly contributed to sustain the villager's livelihood. Likewise, the development of the economy of the country as a whole has given the villagers increased chances to find the second jobs to earn additional income. These make them feel that their livelihood is more secure no matter how the forest is placed under the more strict management system.

For all evaluated indicators, the average scores for the future are very high in comparison with that for the past and present periods. This reveals that the villagers are very much optimistic to hope the good prospect of the community based forest management. This in turn encourages their cooperation for the collective benefits, which is fundamental for the vitality of the community based forest management. According to information collected from the interview, the important basis for their hope is the state policy. The villagers believed that under the forestland allocation policy of the state, the forests, soon or late, would be allocated to households and their village. At that time, the forests would be owned by their owners, who are recognized by the state. The clear right on the forest areas the villagers have will encourage the villager to manage the forests well. Moreover, they hoped that the technical and financial support by the government would help the community in particular and the common in general to manage the forests better.

In short, although there are some indicators whose average scores are not significantly different between the past and present period, the average total score of all indicators is significant different between three period. The total score tend to increase from the past to present and to future. This proves that the community based forest management tends to be better.

## **9.2. Future performance of community-based forest management**

Although the CBFM has gained favorable achievements and was evaluated to be progressive, these are fundamental conditions to advance to sustainable management and use of the forest resources. There are still many things the CBFM need to perform in order to reach sustainable forest management. On experience with the present situation of the village, the researcher would suggest some significant works the CBFM should carry out as soon as possible in the coming time.

Under the existing regime, the villagers in the Van Tien village have indeed participated in managing the forests while people of the whole Quang Luu commune have been recognized the eligible users. This has resulted in the ineffective enforcement of the rules on the member of other villages of the commune, because they have had a few responsibilities to the forests. Moreover, this has made difficult to persuade the villagers to participate in collective actions aimed at protecting the forests. Because they thought those who did not participated also could be entitled to the forests.

It is certainly impossible to exclude people of other villagers from benefits of the forests. In such situation, it'd better to involve other two villages to manage the forest. The existing organization of forest management should be made into the inter-village organization; all members of two other villages must participate in managing the forests as new partners with the same rights and duties as the villagers'. At the same time, the existing CBFM should step by step be expanded over the whole forest of the commune.

Monitoring is the vital task in managing the common forests of the village. However, the monitoring of the village have been facing with problems. In order to manage the forest sustainably, these problems needs tackling soon.

With the large forest area and the modest number of 17 protectors, it is difficult to do monitoring well if without villagers' participation. Because of limited fund for

forest management, the village can not increase as much of the number of protectors as needed. Therefore, the important things the village should do are to consolidate the existing protector team and encourage villagers to participate in the monitoring task.

For consolidation of the existing monitor team, the village should replace the incompetent monitors, who have ever had bad behavior, such as taking bribery, abusing power, and so on, being complained by villagers. At the same time, the village should maintain one monitor group for the whole forests rather than two distinguished groups as at present and their allowance should be paid the same. This will gradually help villagers to consider the open forest to be theirs other than the state. In addition, the village should add rules related to sanction and reward for monitors.

Involving villagers' participation in monitoring task is an important way to reduce cost to the forest management of the village and to change their perception and behavior on the forests. So far, the villagers have given much monitoring on the village forest but a little on the open forest. Thus, attracting their monitoring is necessary on the open forest. In order to do that, the village should make specific rules related to interest the villager should be enjoined when they discover violators. At the same time, the competent persons such as forest protector and communal leaders should commit to secure good relation between the villagers being violators and others being discoverer. Likewise, it should subdivide villagers into some groups based on the village's features and assign each group to protect each specific forest area. Attached with this, the control mechanism of the monitoring should be set up. Additionally, the village should allocate on contract forest to households to protect, giving priority to households who had legal cultivable land in the forest. This task needs supports from relevant agencies and high authorities.

The increasing area of forest is the important achievement in the forest management of the village. However, the CBFM, throughout the last time, did not pay attention on improving forest quality. This is an indispensable task to help the forests



to grow sustainably. In order to improve the quality of the forests, some work have to be included in the forest management in the coming time.

The forests are almost the ones that regenerate from shoot with uneven density. So thinning of the forests needs to be worked, which helping to reject the weak and diseased trees and maintain the forests in the proper density. This is the necessary condition for the forest to grow well.

Being regenerating forests, the forests are complicated complexes including target trees and non-target ones. In order to limit the nutrient competition of the non-target trees and give good condition for the target tree to grow, cutting off the non-target tree and regularly making "clean" the forest is necessary.

In one way or another way, people protect forest is because they are dependent on it for their livelihood. The degree at which people depend on forest affects their exploitation and use of forest, which in turn determine the sustainability of the forest. In case of the village, the forests are poor and secondary forests, therefore being vulnerable to any exploitation of villagers. In the short-term, the good way to protect the forests is to limit as much exploitation as possible. This can be implemented when the livelihood of villagers is less dependent on forest products.

As mentioned in the previous section, development of agricultural cultivation helped to reduce the dependence of villagers on the forest products for their livelihood. In the present situation of the village, to develop further agricultural cultivation closely relates to using of hill land, one of important resources of the forests. As a result, the resulting problem is how to use the hill land resource effectively.

Firstly, the village and commune should be interested in improving the productivity of the hill land area that has been used for cultivation. As discussed in previous Chapter, this land has been used ineffectively. There were reasons for that. This land has been in hands of some households with the so large areas while these

households had not enough labor and their necessary for this land was low. This led land to be used extensively or even left unused. In addition, households who have this land have been no certificates of right on it from the government. This discouraged them to invest in and use this land for long-term objective. Moreover, they lacked investment and technical knowledge on cultivation. Another reason is that the farmers have not found any crops that have high economic value and stable with market in order to replace their traditional crops. Therefore, the local authority should solve these existing problems soon.

Developing agroforestry on this hill land area is the adequate direction in the condition of limited hill land area and increased population, to improve the productivity of hill land. It can both make income and provide products that can substitute for forest products needed. In order to encourage farmers to develop agroforestry, the first important thing is that the local authority has to define the main crops, which both are suitable with local conditions and have high economic value, to replace the traditional crops. Secondly, the hill land areas should be reallocated to households according to their available labor force and needs for this kind of land, being prior to households who had this land. In parallel, the right of households on this land should be secured by the government. Furthermore, the government should provide the villagers with financial and technical supports.

Secondly, the local authority should pay attention on using hill land resource in the long-term. The solution of increasing the forest cover by using the cultivable hill land of households for plantation the commune have implemented is not the proper solution to reach sustainable forest management in long-term. Because this solution have not taken into account of the potential needs for hill land of the population for cultivation. Instead, to prevent illegally encroaching into the forests or the land reserved for forest regeneration for cultivation, the local authority should review and make the long-term plan of using hill land for cultivation as well as for plantation or regeneration. Based on estimating the population growth of the locality, the local authority should appropriately estimated necessary area of hill land devolved for

cultivation, to secure the food needs of the whole local population. Likewise, it should make additional rules on effectively using hill land.

Besides, the propagation and education of the villagers need to be regularly conducted in order to improve their awareness of the role of the forest as well as forest management.

### **9.3 Impacts of state policy implementing**

Recent evolution of the forest policies of the state has offered opportunities for the community-based forest management of the village. Although the forest has been considered to be of the state, the government has devolved many of its property rights to people. The forest development law recognizes the legitimate rights of the village community as the forest owner. The issuance of Circular 56/1999/TT/BNN-KL is the opportunity for the village's conventional rules on forest management to be legally institutionalized. This in turn would make increase in the legal power of CBFM.

However, there has been the gap between the policies promulgated and its implementation in practice. The recent forest policies have appreciated the pattern of forest management by communities and encouraged this pattern. However, the legal bases for this forest management pattern have been short in practice. The Decree No.02 issued in 1994, Decree No. 202 issued in 1994, and Decree 661 issued in 1998, all not state the village community as the legal entity to be allocated with forest and forest-land. The village community studied, even though has legitimately managed their forests for a long time, has not become the legal forest owner. Not being the owner, the village has the limited property rights on the forest managed. It manages the forests as the client. As such, it has been assigned to manage the forests by the government with the only right of management, without the right to exclusion and more without the right of alienation on its forests. These rights belong to the government. Lack of legal claims to the stock or flow of benefits from the resources can generate incentive structures that discourage locals from constructing or maintaining rules or institutions at the local level to regulate their resource use

(Gibson and Marks, 1995). This is one of the reasons why the majority of the members of the village who considered the forests as the state rather than common property. This affects the choice of strategy villagers make in using the forests as discussed in Chapter 8.

The Program 327 is the first large one that reveals the changes in the strategy of forest management of the state from state's forest to people' forest. The Program was implemented in the Quang Luu commune since 1992. Activities of the program implemented were plantation, forest protection, and sedentarization of farming and development of agroforestry models.

The Program considerably contributed to greening the barren hill and recovering the forests locating on the commune' territory. Likewise, it offered employment and created additional income for the villagers through its forest activities. This in turn more or less helped to reduce the pressure on the forests.

The activity of planting forest from the program was carried out through the projects held by the state forest enterprise situating in the local territory. These projects just operated on the forest areas belonging to the enterprise. As the holder of project, the enterprise got fund from the government and then employed villagers to make plantation on agreements. The villagers participated in the Program as the employees, despite that the principle of implementing the Program is to involve people' participation as much as possible. In order to have bare land areas for plantation with its behind purpose to withdraw as much of the fund as possible from the government, the enterprise confiscated all the occupied land areas of the villagers. This made the existing conflicts between the villagers and enterprise became serious, which affect badly forest protection later.

The same as the plantation, the forest protection has been leased to villagers by the enterprise. The enterprise has paid villagers for forest protection in accordance with Decision No. 327, 50.000 VND/per ha/year. This activity more or less reveals the forest co-management between the enterprise and village and commune authority.

Villagers who were employed as protector were selected by the commune authority. Organizing protecting the forests has been left to the village.

The state forest enterprise really wanted to coordinate with villagers to protect its forest areas stretching on the commune's territory. Nevertheless, in addition to short-term benefits such as payment for protection and plantation, the villagers had not any secure property rights. This discouraged them to cooperate in the co-management of forests. On the contrast, the villagers might compete with each other in a race to extract as much short-term benefit from the resources as possible. People who live nearest these forests still have ample opportunity to use them, but when they lose secure property rights in the resource to others, they also lose incentives to manage these resources for maximum long-term benefit (Gibson et al, 2000). Therefore, it is possible that once the forests of the village is managed well, the forests of the enterprise will be at risk to be threatened by villager's illegal exploitation, which will be able to affect the wealth of the whole forest in the commune.

The forest protection funded by the program has just been limited to the forest area of the enterprise. Meanwhile, the rest of areas including another part of the open forest and the village forest, their protection has not been paid with any fund from the government, but rather with the local budget. The difference that the payment by the enterprise is higher than by the local authority has made it difficult for the village to call for its members as protectors.

Other activities of the Program were sedentarization of farming and development agroforestry model. Under the Program, the commune encouraged the villagers to reclaim and settle in the unused hill land and previously occupied land areas. The attractively financial support by the Program gave the villagers incentive to follow the encouragement. However, because of a variety of reasons, the effectiveness of production in those areas was too low to meet the daily needs of the dwellers. So, after the subsidy by the Program was cut, the dwellers tried to survive by illegally exploiting the forest products. A short time later, they returned to their old residential area for not being able to exist once the forest products became scarce. In general, it

can be concluded that the program failed with these activities. The consequence of that is the forests were illegally exploited and degraded. The free ridding behavior by these dwellers affected negatively the forest management by the village.

All activities, except the forest protection, of the Program in the commune ended before 1996. The activity of forest protection, which originated from the Program 327, presently becomes one of a range of activities of the 5 million ha Program, called the 661 Program. Additional to this activity, no activities of the 661 Program has been carried out in the commune up to now. However, the commune authority has made the proposal for fund from the 661 Program for plantation of the rest of bare hill land and protection of the existing forests, for which there has been no payment by the government. The proposal, if approved, will give favorable conditions to the village in particular and the commune in general in managing their forests.

The policy on forestland and forest allocation plays an important role as a means to involve people in forest management. The success in allocating the barren hill land to households in the village is the import factor for the success of the Vietnam-Germany project on afforestation. About 500 hectares of hill land were allocated to households. These households gained grants from this project to plant on their owner land. So far, the forest on these hill areas has been growing well. In the future, if the rest of the open forest (except for the areas being of the enterprise) is allocated to the households according to the commune's proposal, the open forest will be under two levels of management, household and community. Such as, the forest would be managed well.

Besides the success, the failures in implementing this policy in the local have brought about some problems in the forest management of the village. In respond to the Decree No. 02, the commune authority coordinated with the district's cadastral department to make a survey of the forests and delineate them in the practice as well as in the map, and then conducted allocation of some forest areas to the households in the village in 1995. The households allocated, however, have still not gained any

certificates from the government up to now. This slow process is due to the complicated procedure by the high authorities, which is beyond the commune's mandate.

This failure has led CMBFM to face with certain problems. Having no secure certificates has discouraged households to protect their allocated forest areas. Insecurity of land and tree tenure discourages local participation in forest management and forest protection activities (Gibson et al, 2000). Whilst the other villagers have paid little if any attention in those areas because they thought those forest areas had their owners. This has created incentives for opportunistic or shirking and free ridding behaviors of the villagers toward the forest managed. These behaviors cause degradation of the forest and obstacles for the cooperative actions and reciprocal relationship in managing the forest.

The slow process in delivering the certificate to households is also one of the reasons for the failures of Program 327. No certificates discouraged the dwellers to invest in their land for developing production and agroforestry models although the favorable credit of the Program was available to them.

The incomplete implementation of Decision No. 02 has caused the wastage of hill land or its ineffective use. Some households occupied and held the large hill land area without any certificates from the government. Because of inadequate labor, they have extensively used this land, sometime left it unused, while many other households have needed additional land for cultivation. Up to now, there have not been any solutions for this problem, even though the Decision No. 02 allows the claiming of the land without eligible owners and reallocating it to households who need it.

Another important effect of the intervention of the state policy leaves for CBFM is the recognition by the government in the villager's perception. From the survey, it was found that 100 percent respondents are optimistic about the positive role of the government in acknowledging the rights, some de facto, and capacities of local community. In fact, the government has increasingly recognized the forest management

regimes by communities unless they are not suitable with the legal framework of the state. The government's recognition is the necessary condition for the sustainable viability of the local institution of CBFM.

In addition, the law on management of water resource has created favorable conditions to CBFM. Until now, the government assigned the right of management and use of water sources from the forests for cultivation to the commune authority. The irrigation fees collected from the water users have been partly used for forest protection. This is the essential advantage to CBFM.

In short, although the government has increasingly paid much attention on the community forest management, there has been lack of legal bases for this management type. No matter how the policies are good, their incomplete implementation will result in negative impacts. The implementation of the state policies in practice had both positive and negative impacts on the forest management of the village community. These positive ones lead CBFM to the advantages and opportunities while these negative ones bring the difficulties and threats to CBFM. It is necessary to pay more attention in implementing the policies in the practice in order to limit their negative impacts.