# Chapter III

## Research Methods

With the objectives of the study raised in Chapter 1 and conceptual base discussed in Chapter 2, this chapter will discuss about how to achieve these objectives. The conceptual framework will be designed and interpreted as the guideline for the study. Likewise, the way of collecting and analyzing data will be presented in this chapter.

## 3.1 Conceptual framework

In light of theoretical understandings and on scientific inheritance of senior researchers' works, the framework for the study is shown in Figure 3.1 below.

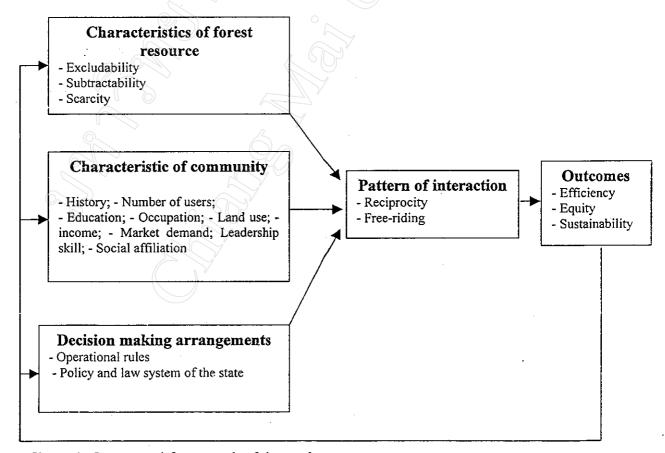


Figure 1. Conceptual framework of the study

For the precise community, the study focus on analyzing not all factors of the forest resource, community and local organization as set forth in Chapter 2, but some factors really affect forest management by the community as shown in the framework.

In this Figure 1., the toward-arrows trace the development of the logical process that is described here. The characteristics outlined above create incentives that lead people to make certain choices that make the pattern of interaction among the members of community, which in turn result in an outcome (positive and negative) on the resource base. The backward feedback arrows are that these outcomes may provoke further changes in the characteristics of the community and rules.

For the outcomes, there is no complete differentiation between efficiency, equity, and sustainability when evaluating because of the trade-off among them. So the common set of indicators is used to evaluate performance of the process. It consist of:

- User's satisfaction with the rate of use of the forest resource: whether or not the villagers satisfy with the rate of use of the forest resources they are allowed under the local management system?
- The status of the forest resource: changes in area, degreed of rich or scarcity of the forest resources through different period of time related to changes in the local management regime.
- Communal decision-making: degreed to which villagers are able to make decisions communally
- Control over access to forest: ability of people to define who is entering the forest and use the forest products. It presents ability of people to monitor.
  - Compliance with forest rules: degree to which people adhere to the forest rules
- Distribution of benefit from forest among the villagers: whether or not the distribution of benefit from the forest is fairly among the community.
- Role of local peoples in management: degree of influence that villagers have in decision-making processes regarding forest management. It also means that whether people-made decisions are respected or not.

- Equal access to the forest resources: Whether or not individuals in the community have the equal right to accesses to the forest resources is equal
- Satisfaction of individuals toward the livelihood security under the regime of community based forest management.

#### 3.2 Data collection

Data for research can be divided into tow group- secondary and primary data.

## Secondary data

They include information on the geography of the research area such as the territory, climate, soil and land use, forest resource status and socio-economic conditions, reports, official records, research paper, maps, documents, national and provincial policies related to forest management, etc. They were collected from different sources at commune and district and province. In addition, some other information such as background of forest resources in Vietnam was taken from the previous researches and national reports on forest resource and its management.

## Primary data

To collect adequate data for achieving the objectives mentioned above, a survey team of 4 members was established including 1 from commune's section for forest and agriculture, 1 from commune council, 2 who are a villager having much knowledge on the community and the author. The survey conducted two times - first, from May to June 2001, collected information for objective 1,2 and 3; second, from October to November 2002, for objective 4.

#### \* First round

The strategy for primary data collection can be divided into different steps as following orders

- 1. Baseline survey: to get general information. These information were divided into three group (1) characteristics of community such as history of the community and local institution, social structure of the village related to forest uses; (2) physical attributes of forest resource related to subtractability, excludability, and scarcity and proxy; (3) forest resource use such as demand for forest products, conflicts in using forest resource; (4) local institution on forest management such as rules at work in the community, organizational structure, and decision-making process. This information was collected thought group discussion. There was some group discussion held with different participants, depending on what kind of information to be expected.
- 2. Key-informant interviews: The semi-structure interview method was used, seeking to collect information with respect to subjects as set forth in the group discussions. The interviewee included old people, village leaders and some commune staffs.
- 3. Household survey: Information collected includes household economic, attitude and perception of villagers, and their participation in forest management activities of the community. To collect objectively information, the team of survey included only the author and villager because some information is personal such as violation of rules, opportunism, etc. From the list of households in the village, sample of 70 was selected randomly for interviewing. The structured questionnaire was used as tool for interviews.

Besides, the locally participatory wanders with consciously observations on every day activities of the people in term of using and managing the forest was done to gather other necessary information.

#### \* Second round

In order to collect data for objective 4, the questionnaire was designed for all indicators. The 1-5 score ranking was applied to designed the questionnaire as here. For each indicator, one question is designed with the expected answer of one selected

score out of five scores (from 1 to 5). Five different scores stand for five different levels of evaluation for each indicator as follow

- 1: unacceptable,
- 2: acceptable,
- 3: acceptable but unsatisfiable,
- 4: satisfiable,
- 5: good

As a result, the higher the score is selected the higher the indicator is evaluated.

For each indicator, the villagers were brought to different periods of time to evaluate (give a score). The time was divided into three periods based on changes of the local institution - period of before 1990, period of from 1990 to now, and in the future.

# 3.3 Data analysis

Data collected was classified into groups – quantitative one (household income, land area, etc.) and qualitative one (perception of villagers on forest status, their accepting the rules; etc.).

Quantitative data were processed by using excel software for descriptive statistic. The scores of indicators were calculated for different time periods and their difference among different periods was tested by using t-test.

Qualitative data from the survey were processed by codifying all text information into numeric data, and then computerized by using SPSS package. Chi square test was employed to test association between one variable and other associated variables. Besides, qualitative analysis method was employed to explain phenomenon in more detail.