

## Chapter III

### Study Methodology

#### 3.1 Scope of the study

The study focuses on the significance of NTFP's in the daily life of the Tay ethnic minority people in Tat hamlet. The study places emphasis on the utilization of NTFP's by the Tay for household consumption and for other purposes. This study is an attempt to measure the economic contribution of NTFPs to the local households either as cash income or non-cash income.

#### 3.2 Data collection

The analyzed data were gathered from both primary and secondary sources.

The data collection process that was conducted mainly from March to May 2002 is illustrated in figure 3.

##### 3.2.1 Primary data

The primary data were collected by means of interviews with key informants, structured interviews, and household record keeping.

**Key informants interview:** Key informants were interviewed in order to get general information about the village, the local administrative system for natural

resources, the utilization of NTFPs, socio-economic and environmental conditions, land use systems and socio-economic aspects of households in the region and study site etc. This method was applied to interview the village leaders, old people, and the forest administrative officer.

**Household record keeping:** Three households were selected to keep detailed daily records on their collection and use of NTFPs. All were households that were known to utilize NTFPs to a high degree. These three households were given record forms and asked to keep daily records of their own behavior or their activities from April 2002 to November 2002.

In this way, types, quantities, sources, objective and timing of collection and other activities are recorded. The daily income and expenditure as well as sources of income and purpose of expenditure were also recorded. These data provide insight into existing livelihood patterns in general as well as the specific role that NTFPs play in household livelihood. This allows the estimation of the value that NTFPs contribute to the economies of these households. Using this method, the data can be collected over a long period of time without the researcher being present.

**Structured interviews:** Random sampling method was used to choose 60 households for the interview (57% of total households of Tat hanlet). Farm households were identified and classified in equal size into three categories of better-off, medium, and worse-off households. In doing so, criteria of the local people in classifying household economic status was used. More details are described as follows:

HH category	Criteria
Better-off	<ul style="list-style-type: none"> <li>- Rice is sufficient to eat</li> <li>- Large piece of land for the house and area for paddy</li> <li>- Owning animals such as cows, buffaloes, and pigs</li> <li>- Owning radios, television, bicycles, or motorbikes</li> </ul>
Medium	<ul style="list-style-type: none"> <li>- Enough rice to eat or one or 2 months of food shortage</li> <li>- Owning small piece of land for their house and area for paddy</li> <li>- Fewer animals</li> </ul>
Worse-off	<ul style="list-style-type: none"> <li>- Rice is insufficient or three to four months of food shortage</li> <li>- Owning little or no land area for paddy</li> <li>- Few or no animals</li> <li>- Working as farm labor (not their own farm) or wage labor</li> </ul>

Selected households were interviewed by using structured questionnaires. The variables collected include demographic characteristics, farming activities, participation in NTFPs collection and utilization, and the sources of income.

In calculating income, farm and forest gate prices were used as surrogated prices of agricultural and forest products.

The direct use value of gathered NTFPs = quantities of NTFPs × market price.

If equivalent price in the village is not available, the price at the nearest marketing center will be used. If a certain NTFP has no price in either the village or the market, prices of the close substitutes was used to value non-priced products. In some cases, the researcher has bought forest and agricultural products directly from the farmers in order to get the price of the products.

**Direct observation:** During the stay in the field site, the author spent some time with the farmers in the field and in the forest as well. The technique of participatory observation was used to help learn about their ways of living, especially the way they utilize NTFPs such as what type of NTFP they collect, how do they collect them, of which part of plants they collect, the quantity of products they gather each time and how the collected products are used.

### 3.2.2 Secondary data

Available literature and other data sources on physical and socio-economic conditions, land use systems and socio-economic aspects of households in the region and study site were collected. Up-to-date information were gathered from the statistical yearbooks, records of the local administrative system and from other previous research reports that have been done by researchers from Ha Noi National University, Ha Noi Agricultural University, and overseas partners including the East West Center, Honolulu, Hawaii.

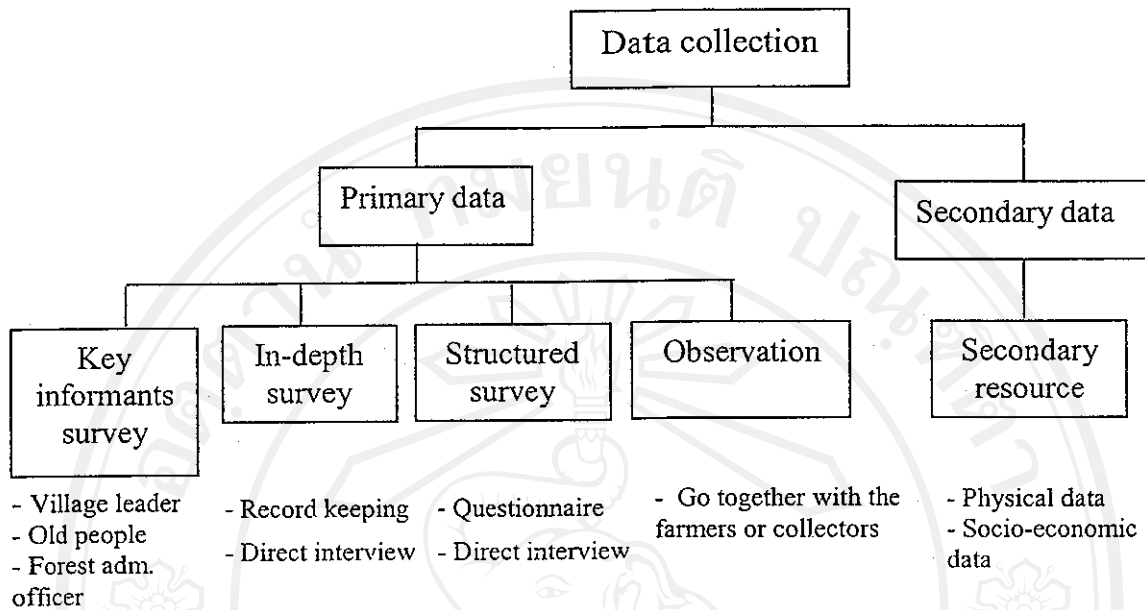


Figure 3: Data collection method

### 3.2.3 Information collected

- Household data: Family size, age structure of the household, working force of the household, education level of the family members. Family income and assets, time of food shortage and survival resources during this time.
- Information and data on agricultural production: Land size, forest area, household's land use pattern, cropping pattern, total production and output prices
- Information about forest product gathering: People in charge of collecting products, type of plants and animals they collect (part to be collected), time and location of collection, the frequency of collection and the quantity of

products they collect, labor requirement for collection, and distance to forest, purpose of collecting (home consumption or for sale), and selling price.

### 3.3 Data analysis

In order to understand the role of NTFPs in the household livelihood of the local Tat, 60 households among the three groups of the sample farm households in the selected area were analyzed in terms of the following methods:

3.3.1 To understand how non-timber forest products are utilized at the local level: The descriptive statistics was applied to analyzed the pattern of NTFPs utilization at the village.

3.3.2 To investigate the contribution of non-timber forest products to the household economy: The contribution of NTFPs to the household was measured by the percentage share of income from NTFPs to the gross farm household income from different sources. The descriptive statistics was also applied.

3.3.3 To identify the factors that affect the contribution of non-timber forest products: The relationships between NTFP uses and other factors in the household economy such as paddy size, upland size, and labour availability were evaluated by a simple regression model as follows:

$$Y = f(x_i) + e$$

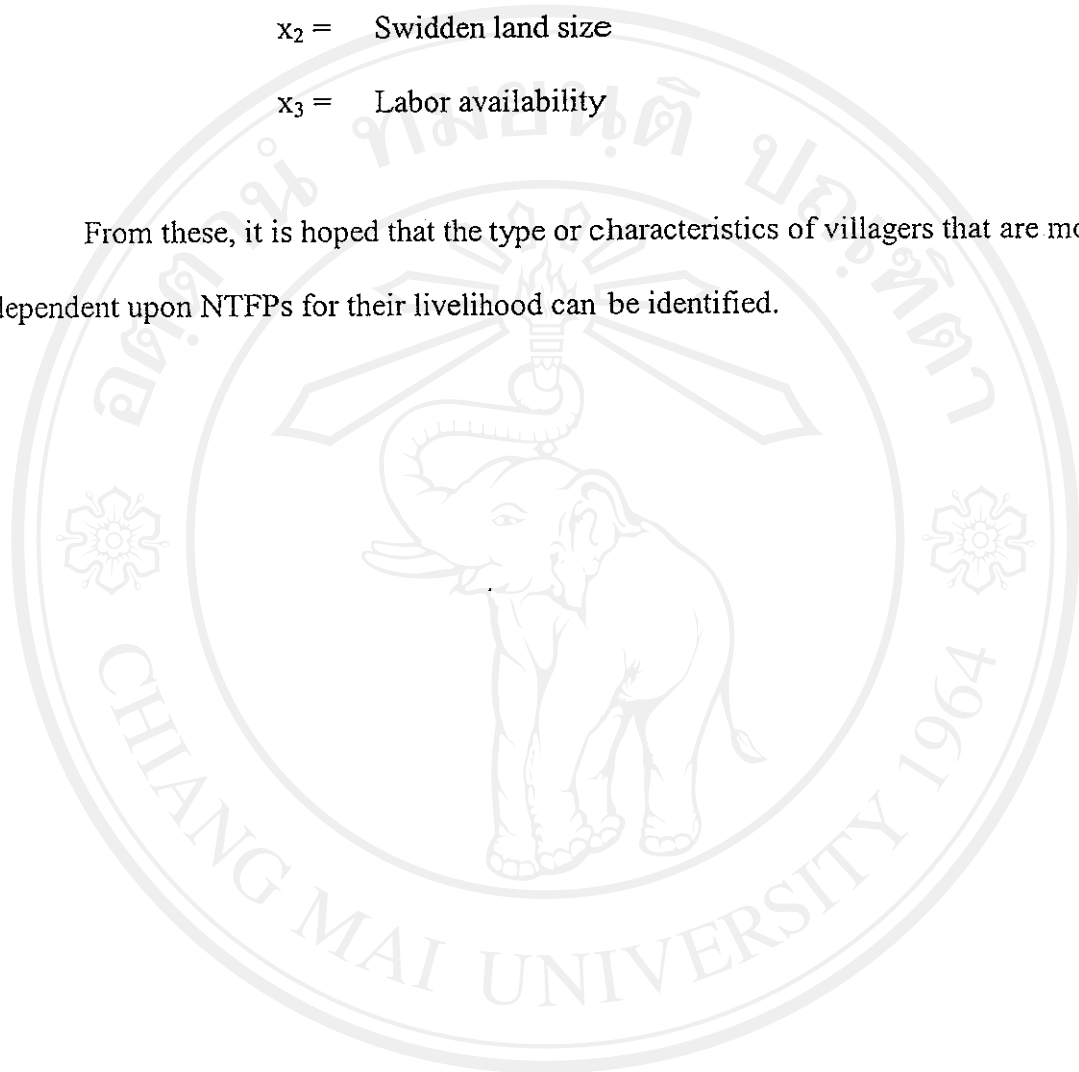
Where: Y = Income from NTFP

$x_1$  = Paddy land size

$x_2$  = Swidden land size

$x_3$  = Labor availability

From these, it is hoped that the type or characteristics of villagers that are most dependent upon NTFPs for their livelihood can be identified.



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