

## Chapter I

### Introduction

For millions of people living in forest environments, the forest forms a dominant part of their physical, material, economic and spiritual life. Thus, its importance is not most appropriately described and assessed in terms of the individual products or services that the forest provides. The forest, while providing a wealth of material outputs of subsistence or commercial value, is the basis for livelihood systems based on hunting and gathering, or of rotational agriculture systems that depend on the ability of bush fallow to revive the productivity of the land. The forest thus constitutes an integral part of the habitat and of the social and cultural life of numerous indigenous and tribal groups. At the national level, the forest provides timber and other resources needed for economic development, while export of forest products can help earn foreign exchange.

The term “forest products” includes all products from forest including timber, fuelwood and non-timber forest products (NTFPs). Non-timber forest products are all forest products other than timber. In reality, plant and animal products may originate from areas not strictly classified as forest, e.g. wooded lands and trees outside forest. The most commonly exploited NTFPs in Southeast Asia are wild vegetables, mushrooms, bamboo, rattan, fuelwood, insects and their products and wildlife (Traynor *et al.*, 2002).

There are numerous uses of NTFPs. They may be consumed as food, used as medicines, dyes and construction materials and during cultural events. Poor farmers particularly count on forest products for food and household income, especially during bad crop years (FAO, 1996; FAO, 1998 ; Ireson and Ireson, 1996; World Food Summit, 1996). It is estimated that about 200-300 million people in the world are directly or indirectly dependent on forest for food (Pimentel *et al.*, 1997; FAO 1998). NTFPs are also very important to increase income at the national level.

Vietnam covers 33,169,000 square kilometers. The uplands (hills and mountains) cover more than 75% of the national territory. It is long and narrow country stretching from 8<sup>0</sup>30' N to 23<sup>0</sup>32' N latitude with a complex topography from sea level to about 1444m in elevation. The country comprises seven ecological regions: Northern Mountains and Midlands, Red River Delta, Northern Central Coast, Southern Central Coast, Central Highlands, Northeastern part of the South, and the Mekong River Delta.

Forest currently covers 35 percent of the national territory. Being located in a region where physical conditions are favorable, Vietnam's forest is endowed with over 7,000 plants species, 800 species of mosses and algae, and some 600 species of fungi. Overall, there could be some 12,000 species of plants of all kinds in Vietnam (Long and Quang, 1997), and the NTFPs resources are quite diverse both in plants as well as animal species. The NTFPs derived from more than 2,000 plants sources include resins, essential oils, various fatty oils, tannins, medicinal preparations, starch and fiber. However, Chu (2001) stated that the number of species which can provide

NTFPs is much larger than that (more than 4,000 species), including 113 species of aromatic resins, 458 species of essential oils, 473 species of fatty oil, 800 species of tannin, 242 species of fibre, 1,863 species of medicinal plants, 200 species of dyeing agents, and 27 species producing starch.

A wide range of NTFPs are collected and captured for a variety of purposes, not only for household use but also for the national market, or export. Together with farming, NTFP collection provides local people with food, medicine, fodder, fuel-wood, as well as house building materials and raw materials for handicraft industries, and are a source of supplementary income. Wild foods (e.g. wild animals, jungle vegetables and wild roots) are an especially important substitute for rice at times of food shortage or crop failure (Rambo, 1995a). According to Sam (1994) forest in Vietnam is home for at least one-thirds of the national population. It is widely recognized that most residents farm for a living, but their agricultural livelihood is enhanced and supplemented by nearby forests (Ireson, 1995). In ethnic groups such as the Thai and the Tay, their livelihood depends heavily on the forest as they spend up to 235 days per year on hunting, and collecting forest products (Nao, 1987). As is the case elsewhere in Southeast Asia, gathering, hunting, and fishing are all vital adjuncts of traditional forest farming. These activities, together with farming, form an integrate system of resource utilization.

## **1.1 Problems**

### **1.1.1 Population and its growth**

Vietnam's population increased rapidly from 36.3 million in 1961 to 78.7 million in 2001. It is growing at an annual rate of 1.8%, and is projected to reach more than 110 million by the year 2025 (UNDP, 2002). The growth in population leads to an increase demand for food and other resources from a fixed base of land and water. This is exerting great pressure on both natural resources and the environment throughout the country.

The uplands in Vietnam are considered by the government to have potential for expanding agricultural production. Many new economic zones have been established there to resettle lowlanders. This has resulted in an influx of voluntary and government-sponsored migrants into the uplands. The migrant population together with a high rate of population growth among upland ethnic groups has exerted tremendous pressure on forest resources and forestland. This has led to the reduction of the forest area and biodiversity loss, which in turn, is having negative effects on the livelihood system of people who rely on the forest as their source of subsistence.

### **1.1.2 Land and natural resource management**

More than 75 percent of Vietnam's population is rural and thus heavily dependent on natural resources. Resource degradation and depletion adversely affect the livelihood of rural people. Economic growth and rapid industrialization and urbanization have all led to increased environmental pressures on the country's forests

and biodiversity. Natural resources are being degraded and depleted leading to a loss of upland natural forests and associated biodiversity. There are also expanded soil problems due to inappropriate cultivation practices.

According to Bien (2001), in 1943 the average forest cover of Vietnam was estimated to be as high as 43% of the total area. It seemed much higher in parts of the Northern Uplands where virgin tropical forests covered large areas. After half a century (1990), the forest cover was reduced to 28%, leaving behind more than 13 million ha of bare land and denuded hills. Recently, the forest area has been gradually increasing to 35% in the year 2000 (Figure 1). However, the natural forests continue to seriously decrease in both quality and quantity. According to FORIS (2000), the annual loss of natural forest cover of Vietnam is estimated at about 28,000 hectares per year. This loss of forest cover has reduced the availability of subsistence food, decreased sources of income, and has greatly affected forest residents.

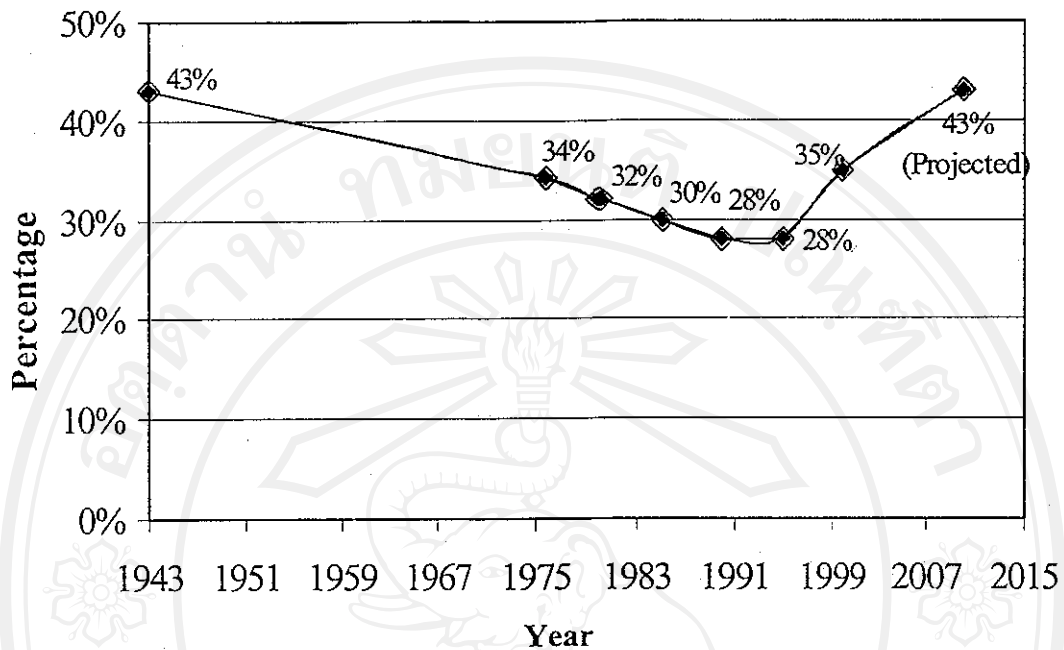


Figure 1: Change in forest cover in Vietnam

Source: Developed from Bien (2001)

According to Figure 2, Vietnam has less agricultural land and natural forest than other Southeast Asian countries. The average areas of forest and agricultural land per capita are very low, only 0.12 hectares in comparison with those of some other countries in the region such as Cambodia, Thailand, Indonesia and the Philippines. Thus Vietnam has to deal with high pressure of population on natural resources which are very meaningful to local people's livelihood, particular forest dwellers.

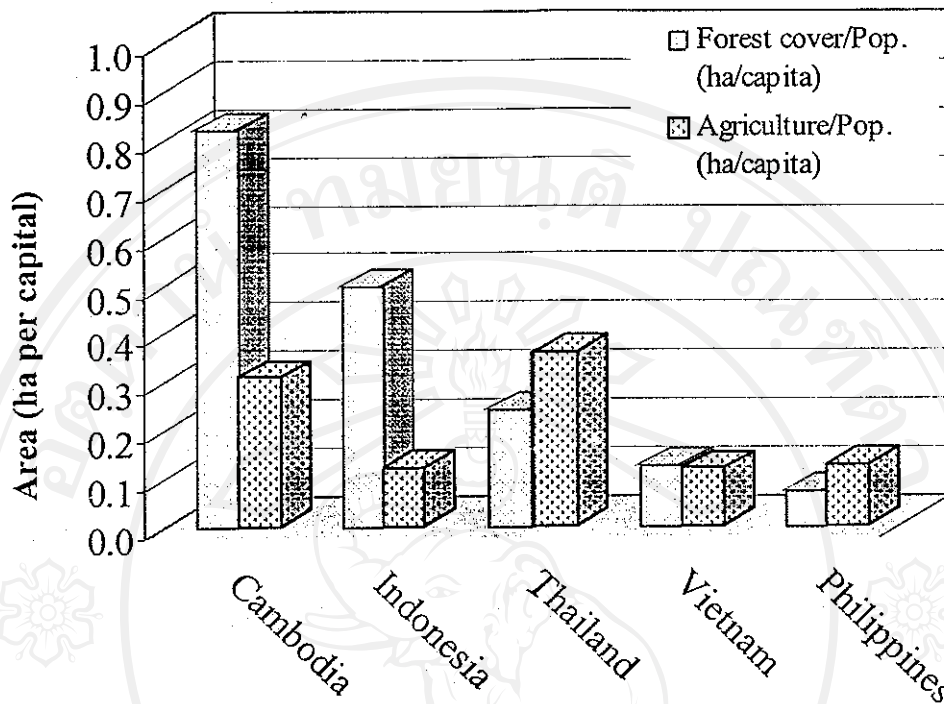


Figure 2: Area of agricultural and forest land per capita of some countries in Southeast Asia

Source: FAO, 2001

## 1.2 Rationale

NTFPs are increasingly considered as one of the important sources of income for the rural poor, particularly ethnic minority groups living in the mountainous areas.

Their livelihood system is highly dependent on the forests to sustain it. Their utilization of NTFPs, and the importance of these resources in their household economies, however, are still poorly documented and assessed.

The lack of information about the importance of use of NTFPs in the livelihood of rural households is a critical problem for policymakers and rural

economic development agencies. It creates a danger that well-meaning projects could displace existing livelihood strategies even as they try to improve the economic well-being of communities. Thus, it is an urgent task to seek fuller understanding of the existing patterns of NTFP uses and to investigate the contribution of NTFPs to the household economy of upland people in Vietnam.

### 1.3 Objectives of the study

This study aims to examine the role of non-timber forest products in the household livelihood system of the Da Bac Tay ethnic people in Tat hamlet of Hoa Binh province. Specifically, objectives of the study are:

1. To understand how non-timber forest products are utilized at the local level;
2. To investigate the contribution of non-timber forest products to the household economy;
3. To identify the factors that affects the use of non-timber forest products

### 1.4 Usefulness of the study

Many rural communities in Vietnam living in or near forests are heavily reliant upon NTFPs for their daily subsistence. In the past, the government paid scant attention to NTFPs because timber was seen as the main income generator. An enhanced understanding of the value of the NTFPs to local communities will assist in evaluating the true value of the forest.



Understanding the utilization and the importance of NTFPs in the household livelihood of local people is also important. Hopefully, planners and policy makers can make use of the results from this study for more effective planning of projects relating to biodiversity conservation and rural development in the uplands.

### **1.5 Scope and limitation of the study**

This research focuses on the importance of non-timber forest products in the livelihood of the local people. The research especially emphasizes the utilization of non-timber forest products by the Da Bac Tay ethnic minority group for household consumption and other purposes, as well as the contribution that NTFPs make to the household economies.

The research was conducted in one upland community in the Northwestern Mountains of Vietnam where the Da Bac Tay reside. The findings from Tat hamlet may thus be representative of the similar Tay communities elsewhere, but do not represent the situation of all ethnic minority people in the upland areas of northern Vietnam. The Da Bac Tay in Tat hamlet employ composite swidden farming as their major mode of cultivation and have demographic characteristics, community values, and ways of living differing from those of other upland groups. Thus, the study's results can only be applied to other ethnic groups in upland Vietnam those have similarities to the Da Bac Tay.