Thesis Title Value-added assessment of non-timber forest products for local

community in the context of biodiversity conservation in Tabhing

Commune, Vietnam

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## **ABSTRACT**

Non-timber forest products (NTFPs) have been studied in various contexts related to a particular aspect of villagers' livelihoods: poverty, business or biodiversity conservation. However, past research has yet to integrate analysis of all these aspects of NTFPs at the same time. This research aims to do so, studying in an integrated manner the relationships between these varied aspects of NTFPs in Tabhing Commune, Vietnam. In this study area, NTFPs contribute in important ways to people's livelihoods but ongoing reduction in both quality and quantity which seriously and negatively affects biodiversity conservation. Moreover, local people who engage in excess collection and sale of NTFPs as raw materials receive less benefit from this activity than would be true if they found ways to add other components in the NTFPs value chain.

Market analysis and development methodology helped to identify potential high-value products among the list of available NTFPs in Tabhing Commune. Several key criteria were used to select potential products: market and economy issues, resource management and environmental

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factors, social and institutional elements, and technical or scientific components. By ranking the score of each criterion as a result of discussions with groups of local people, the three products that received the highest scores were chosen for the next step in the study. Calculations of net present value from cost benefit analysis were then used to compare changes in value-added steps between current harvesting and sales practices and new value-added options.

Broom grass, lansat, and rattan were identified that would add the most value. Long term options such as new rattan and lansat planting were considered to add stable sources of raw materials. Short term options include broom making and rattan semi-processing to make broom and rattan peel/core. Comparing the different options showed that although short term activities such as broom making and rattan semi-processing can generate immediate benefits in the first year. In the first year, rattan semi-processing increases incomes by 126%; broom making can increase incomes 193% compared to current harvesting-only efforts. However, these changes remain stable over time for broom making and show only small increases for rattan semi-processing. In contrast, rattan and lansat plantings generate extensive benefits once the payback period has been reached. Value then increases up to 455% by the 20<sup>th</sup> year.

In addition, the research found by planting rattan and lansat as long term sources can reduce impacts on forests from NTFPs harvesting. Instead of harvesting in the forest, local people can collect NTFPs from their planted areas. From another perspective, if local people were to increase their income from NTFPs to the same level as with proposed options, the extra NTFPs harvesting from forest sources required would range from 6 times to nearly 10 times current harvesting levels. Without processing, the quantity of harvesting needed would be double or three times again. These figures mean that to add the same amounts of value would impose much more impact on local forests in terms of harvesting more.

**Keywords:** Tabhing Commune/ NTFPs/ value-added forms/cost benefit analysis/ local community/ biodiversity conservation.