THE ROLE OF NON-TIMBER FOREST PRODUCTS (NTFP) IN THE HOUSEHOLD ECONOMY: THE CASE OF SINGHARAJAH

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ABSTRACT

Non-Timber Forest Products (NTFP) are not only an important category of forest products; it represents a vital link in human-forest interrelationships. The objective of this study is to assess the role played by NTFP in peripheral economies, and to identify the important socio-economic factors related to household demand for NTFP.

There are several difficulties in the study of NTFP using market-based concepts due to the non-market nature of subsistent activities related to NTFP. To overcome this problem, an alternative conceptual framework has been developed based on the Household Production Theory. The model suggests that opportunity cost of time involved with demand decisions for NTFP products can be a useful tool to study non-market extraction activities. Using this conceptual framework, hypotheses have been derived regarding the impact of several socio-economic factors on household demand for NTFP. These hypotheses were tested using primary data gathered in a survey conducted at peripheral villages around Sinharaja Man and Biosphere Reserve. Multiple regression analysis was used to test the hypotheses and two aspects of household demand namely: quantity and product diversity have been investigated. Tabular analysis was carried out to assess the role of NTFP in the peripheral economy. Contingent valuation was used to study appreciation of NTFP products.

According to the results NTFP plays an important role in household money income, nutrition, energy, health, minor constructional purposes, agricultural and ornamental uses. Money income of the household has a negative impact on quantity of NTFP extracted whereas involvement with regular forest-based activities such as Kithul tapping tend to increase both quantity and number of NTFP extracted. Further with increased formal education households tend to gather few number of products. In contrast higher share of seasonal crops (paddy) among agricultural activities and difficulty in access to public transport lead to increase the number of NTFP products gathered. Study suggests that when the household economy is mobilised more towards markets by adopting cash earning activities, wage work or better education and there is a tendency that such households gather less number of products in relatively high quantities. WTP analysis suggests that peoples' appreciation does not always coincide with actual demand for different products, through willingness to pay has a positive relationship with quantity demanded. Respondents less appreciated some commonly gathered products whereas the opposite was observed for products, which have legal restrictions on their extraction. Further, a complex relationship was found for personal appreciation of NTFP and actual demand by the fact that both money income and education has shown a positive relationship with WTP for NTFP.

Important implications of the findings have been examined in a forest management perspective and recommendations have been made. Introducing cash income sources, which can be practised outside the forest, is suggested. Providing



on the natural forest. For certain forest products such as fuelwood and minor constructional materials, the promotion of the domestication of suitable forest species or increasing the availability of alternative means by introducing improved homegarden models and other agro-forestry practices is suggested. Strengthening formal education facilities and awareness programs that are designed to develop conservation oriented attitudes among peripheral communities and to improve the existing land tenure system for the benefit of people owning limited land, are also proposed. Although the study indicates that providing better road transport facilities would lead to reduce demand for forest products and thus reducing the pressure on natural forests, provision should be done only after careful planning.