ABSTRACT

Atuhaire Rodgers, 2008. ECONOMIC ANALYSIS OF SMALLHOLDER RUBBER AGROFORESTRY SYSTEM EFFICIENCY IN JAMBI (Bonar M. Sinaga as the Chairman, and Suseno Budidarsono as the Member of the Advisory Committee).

The objectives of this research were; (1) to analyze production efficiency and profitability of smallholder rubber monoculture and smallholder rubber agroforestry systems, and (2) to find out the effects of policy distortions towards rubber production under smallholder monoculture and smallholder agroforestry. Smallholders are not only judged by yield per hectare; economic efficiency is not only a matter of returns to land and returns to labor but smallholders can adopt low input strategy, continue making profits at prices that would be economically viable. Such flexibility offers the possibility of efficient resource allocation in response to diversification of economic opportunities.

The Policy Analysis Matrix (PAM) with the Domestic Resource Cost (DRC) results under the baseline scenario indicated that the use of domestic resources in production of rubber was efficient and socially profitable under the two systems but more desirable under monoculture system given the current prices for physical inputs, outputs, technologies and policy transfer. However, even with sensitivity analysis of 10% increase in the price of rubber holding other factors constant does not make rubber agroforestry system more efficient than its counterpart and a 20% fall in price of rubber made rubber production under agroforestry system less efficient and undesirable. All measures are compared to the alternative policy indicators currently used. Therefore, recommendations made from this study relate to the need for diversification into better practices that can sustain efficient rubber production under the agroforestry system, encouraging private sector participation and reducing disincentives to rubber production.

Key words: Smallholder Rubber Agroforestry, Economic Efficiency, Policy Analysis Matrix