Title: Increasing rotation periods of acacia plantations: Implications for the livelihoods of small-scale forest owners in Central Vietnam

Recent reforestation efforts undertaken in Vietnam (e.g., “5 Million Hectare Reforestation Program” (Program 661)) combined with forest decentralization reforms have led to significant land use changes and an increased forest cover in the country with important implications for rural livelihoods and small-scale forest management. During 1990-2005, Vietnam experienced 38% increase in forest cover, mainly through the establishment of forest plantations to meet the growing demand for raw material for domestic wood-based industries. Today, a majority of forest owners focuses on acacia plantations with a short rotation period (4-5 years) and sells their output for woodchip production, although potentially higher financial returns could be attained from the production of sawlogs through an extended rotation period (6-10 years). The goal of this study is to understand the constraints and trade-offs that small-scale owners of acacia plantations could face in switching to longer rotation periods, as well as its potential effect on rural income. Primary data for 306 households were collected using structured interviews in the provinces of Quang Tri, Quang Nam, and Thua Thien Hue in Central Vietnam. First, we run a probit model to understand the factors that influence the adoption of a long rotation period for acacia by forest owners. In the second stage, we estimate the impact of adopting a long rotation period on household income, including crop income, livestock income and non-farm income using a multivariate regression model. Our preliminary findings show that one of the main reasons preventing small-scale forest owners from adopting longer rotation periods is a potential shortage of cash due to longer payback period. Furthermore, the smallness of land size makes the investment in long rotation systems for acacia plantations less feasible. Additional concerns are related to increased risk exposure to natural disasters associated with longer rotation periods. Results from regression estimations show that switching to long rotation periods for acacia can lead to a loss in other crop income, probably due to limited land and labor resources. Our findings indicate at a number of uncertainties that will have to be addressed by policy-makers in order to promote longer rotation periods for acacia plantations.