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The Influence of Market Access on Land Use Patterns of Rural Households in Central Sulawesi, Indonesia

ADHITYA WARDHONO, STEFAN SCHWARZE, MANFRED ZELLER

Georg-August-University Göttingen, Institute of Rural Development, Germany

Abstract

Farmers living in remote areas of developing countries often lack adequate access to agricultural input and output markets, which is particularly restricted during rainy seasons when tracks and roads are impassable. Due to changing price relations at the farm gate level and high transaction costs, market access influences land use decisions. This is the case for many villages near “Lore Lindu National Park” (LLNP). We will empirically test these relationships in the vicinity of the national park, which is characterised by the conversion of tropical rainforests into agricultural land, particularly for the cultivation of cocoa.

Based on the above problem, this paper will particularly address the following questions: **(1)** describe and classify households’ access to markets **(2)** explore the relationship between households’ access to market and land use **(3)** analyse the influence of market access on land use using an econometric model. Data was collected in 2004 through standardised formal questionnaires from 265 randomly selected households out of 12 villages around the LLNP.

The research area is characterised by strong differences in access to market. While 66 % of the households need less than ten minutes to reach market, 12 % of households live more than an hour away from the closest market. During the rainy season, only 13 % of the households need longer to get to the market compared to the dry season. The main crops grown are paddy rice, cocoa and coffee. The influence of market access on the cultivation of these three crops will be analysed using econometric modelling.

Keywords: Econometric modelling , Indonesia, land use, market access