ABSTRACT


The main objectives of this research are to construct a model for sustainable smallholder rubber development within upland transmigration areas. The study was conducted at Batumarta Transmigration Area, located in Kabupaten Ogan Komering Ulu and Ogan Komering Ulu Timur, South Sumatra Province. Classification and visual analysis was used to interpret the land use change, and descriptive analyses was used to explain people perception on the land use change. Need assessment and prospective analyses was used to analyse need of stakeholders and key factors of rubber plantation development, and dynamic system was used to analyze scenario for land utilization and strategy for implementation. The results of the study reveal that: (1) Batumarta Transmigrasian Area which is formerly planned as a Transmigration Food Crops Model has shifted smoothly to Tree Crops Model with rubber as a major commodity. It is indicated by evidence in the field that rubber plant area are increasingly huge by almost 20 times in year 2010 compared to year 1978, (2) The land use change have been influenced by internal and external factor i.e farmers earning from rubber more than food crops, accessibility of market product, farmer experience in food crops was less benefit, the increase of farmers skill in rubber plant, soils are highly suitable for rubber, man-days allocation for rubber more appropriate, rubber cost production more appropriate, and riskless, (3) the land use change from other commodities to rubber begin from land clearing, food crops farming, then rubber planting activities, (4) key factors of sustainable smallholder rubber plantation development are land suitability, farmer income, and acceptability to the commodity, (5) simulation result on small holder rubber plantation in Batumarta show that man-days work per year available from farming itself in 2009 is 6,635,125 or equal to 25,520 man-power, and potential rubber production of the area is 111,252 tons or about 86% of total actual rubber production of Kabupaten Ogan Komering Ulu and Kabupaten Ogan Komering Ulu Timur in year 2009, and (6) it is required the policy of increasing rubber plantation productivity and farmers capacity in sustainable farming through commodities zoning, rubber replanting and maintenance, increasing of farmers skill and knowledge, strengthening of micro economic institution, and determining of conservation areas.

Keywords: model, smallholder rubber plantation, transmigration, upland, sustainable