ABSTRACT

SUSETYANTO. Soybean Farm Household Economic Model in Indonesia: Policy Impact Analysis on Labour, Income and Expenditure (BONAR M. SINAGA as Chairman, HARIANTO, ANNY RATNAWATI, BUNGARAN SARAGIH, and DJOKO S. DAMARDJATI as Members of the Advisory Committee).

Soybean as a source of protein was processed to several products such as soy-cake, tofu, soy-paste, waste-soy cake, soy-sauce, soy-layer, milk, yoghurt, soy-oil, and soy meat-like. The interesting issue of the farm household is the complex interactions between production and consumption decisions. The soybean plantation status is the secondary crops after paddy. The simultaneous production and consumption decisions of the farm household can be analysed by inter-relations among labour, income, and expenditure. The low soy productivity and the slow extent suggested studies soybean farm household economic model. The objectives of the research was to: (1) identify the dominant factor that influence to farm household decisions, (2) analyze the inter-relations among labour, income, and expenditure, (3) analyze the impact of input technology production, and (4) analyze price policy impact on soy production and farm-household income. The procedure analysis was formulated by simultaneous equation, which has inter-relations among endogenous and exogenous variables, with Two Stage Least Squares (2SLS) estimation method and Newton solution.

The study was conducted in Pasuruan and Ponorogo–East Java, Wonogiri–Central Java, Gunung Kidul–Yogyakarta, Garut–West Java, and Central Lampung–Lampung province. The location and farmers were determined and selected by purposive and stratified random sampling method (250 persons). The price changes policy covered to food commodity (soybean and paddy), input-technology production such as seed, fertilizer, and pesticide (growing stimulant and rhizoplus), paddy price, labour wage, and the sinergies of soy price with farm production facilities. The result showed that the best policy of increasing soy production and farm-household income were the policy increasing of soy price 25% and 37.5%; combination of soy price 25% and paddy price 15%; combination of soy price 25%, paddy price 15%, and labour wage 10%; combination of soy price 37.5% and farm production facilities prices 10%; and combination of soy price 37.5% with paddy price 15%, labour wage 10%, also farm production facilities prices 10%. These scenarios could be done to determine the basic price of paddy and secondary crops, also recommended to diminish or to abort fertilizer and pesticide subsidy. The policy impact of this scenario, influenced to increasing of soy production and farm-household income, were expected to improve the soybean plantation for processing industry, and to introduce product diversification in order to reach food security and soy self-sufficiency.

Keywords: soybean, farm household economic model, food-commodity, input-technology, price policy changes, fertilizer subsidy, self-sufficiency.