

Somjring Chuankul 2009: Impact of Modern Rice Varieties Adoption Level on Agricultural Households Income. Master of Science (Agricultural Economics), Major Field: Agricultural Economics, Department Agricultural and Resource Economics. Thesis Advisor: Mr. Jaruk Singhaprecha, Ph.D. 104 pages.

This paper analyzes the income of agricultural households with the emphasis on rice income. As most agricultural households in Thailand are rice producers, increasing rice yields would increase farm income from rice cultivation, improving income inequality. The main objectives of this paper are to explore factors contributing to higher farm yields and household income and to analyze the impacts of modern rice variety adoption level on income, assumed to estimate factors determining farm yields and household income using a multiple regression model. The Gini coefficient and Pseudo Gini coefficient is developed to analyze the impacts of modern rice variety on income. The data is collected from 32 rice-farming households around the Ubon Ratchathani Rice Research Center, Ubon Ratchathani, during the crop year 2007/2008

The results show that factors determining average farm yields include sizes of land holdings for agriculture, average chemical fertilizer per rai and the adoption level of modern rice variety. In addition, this research finds that factors influencing household income are composed of average years of education of labor in the households, prices of rice, numbers of household laborers who work outside the villages. Moreover, the main source of rice-farming household income are from non-farm income, accounted for 63.91 percent of total net income. The overall Gini coefficient of total household income is 0.394. The decomposition of income inequality among agricultural households shows that rice income is the greatest sources of inequality with the value of Gini coefficient of 0.527 whereas the Gini coefficient of other agricultural income is 0.521.

This paper recommends that government should promote new variety adoption in order to increase rice productivity and household income as well as stimulate non-farm activities other than rice farming.

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