

Pawan Panyakampol 2012: Total Factor Productivity Growth of Agricultural Sector and Poverty in Northeastern Thailand. Master of Science (Agricultural Economics), Major Field: Agricultural Economics, Department of Agricultural and Resource Economics. Thesis Advisor: Associate Professor Suwanna Praneetvatakul, Ph.D. 170 pages.

A continuous growth of economic development is essential to alleviate poverty in the agricultural sector. An important factor that may help reducing poverty is the total factor productivity growth of agricultural sector because this factor can contribute to a sustainable economic development in the agricultural sector. Therefore, it is interesting to find out whether the total productivity growth of agricultural sector can reduce poverty or not. This study aims to analyze the issue of total factor productivity growth of agricultural sector in Northeastern Thailand affecting on the poverty, using Growth Accounting method. The data in 1981-2009 were used and analyzed factors affecting the total factor productivity growth of agricultural sector using OLS multiple linear regression. In addition, an analysis of the effect of total factor productivity growth of agricultural sector and other factors on poverty reduction in Northeastern Thailand using 2SLS multiple linear regression is performed.

The results show that the growth rate of agricultural production in the Northeast with an average of 2.38 percent per year resulted importantly from the expansion of the labor factor with an average of 1.10 percent per year. However, after the economic crisis in 1997 until 2009, the total factor productivity growth of agricultural sector played an important role for helping country to increase the growth rate of production with an average of 4.93 percent per year. It was found that the growth rate of investment in agricultural research and growth rate of labor education in the Northeast are the significant factors explaining the total factor productivity growth of agricultural sector in Northeast (TFPG). This TFPG is a significant factor helped reducing the proportion of the poor in the Northeast. Moreover, the increase of growth rates of irrigated area and the decrease of growth rates of debts for agriculture in Northeast can also help reducing the proportion of the poor significantly.

Therefore, related policy makers should enhance labor education in agricultural sector and increase investment in research and development of agricultural sector for a sustainability of economic growth in the agricultural sector and can reduce poverty significantly. Moreover, to reduce poverty the government should support the expansion of irrigated area and the financial management training to farmers based on the concept of sufficiency economy.

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Thesis Advisor's signature