Piti Chrowprechachan 2006: An Analysis of Longan Supply Response in Northern Region of Thailand. Master of Science (Agricultural Economics), Major Field: Agricultural Economics, Department of Agricultural and Resource Economics. Thesis Advisor: Associate Professor Banlu Puthigorn, M.S. 105 pages. ISBN 974-16-2022-5

The main objectives of this thesis were to study the existing situation of production and marketing of longan, to analyze the longan supply response and estimate the supply response of longan in northern region of Thailand. The study was conducted by using time series data from 1989-2003.

The results of the study indicated that factors affecting longan planted area in northern region of Thailand in the current year were the longan planted area in northern region of Thailand in the lagged three years and the farm price of longan in the lagged three years. The elasticities of the longan planted area in northern region of Thailand in the current year with respect to the mentioned factors were 0.8565 and 0.3071, respectively. In addition, the factors affecting yield per rai of longan in northern region of Thailand in the current year were yield per rai of longan in northern region of Thailand in the lagged three years, the longan planted area in northern region of Thailand in the lagged three years, the farm price of longan in the previous year and the retail price fertilizer (15-15-15) in the current year. The elasticities of yield per rai of longan in northern region of Thailand in the current year with respect to the mentioned factors were -1.1863 4.0363 0.7760 and -8.9364, respectively. The supply of longan in northern region of Thailand in the current year depended on the longan planted area in northern region of Thailand in the current year, the farm price of longan in the previous year, the retail price fertilizer (15-15-15) in the current year and the quality of the pontential output in the current year. The elasticities of supply of longan in northern region of Thailand in the current year with respect to the mentioned factors were 3.2784 0.0121 -4.3141 and 0.1825, respectively.

From the study, it is recommended that the government should control the longan planted area, and have policies to support the fertilizer price and the longan price received by the farmers.

Piti Chronorechachan

Student's signature

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