Chantamanee Samatee 2006: An Analysis of the Supply Response of Durian in Thailand. Master of Science (Agricultural Economics), Major Field: Agricultural Economics, Department of Agricultural and Resources Economics. Thesis Advisor: Associate Professor Vute Wangwacharakul, Ph.D. 71 pages. ISBN 974-16-2818-8

The main objectives of this study were to study a change in Durian production pattern and its supply response in Thailand. Time series data of 21 years from 1984 to 2004 were used.

The study showed that there were 4 major varieties of Durian in Thailand – Monthong, Chanee, Kanyaw and Kradumthong. The most important ones were Monthong and Chanee. The production trend of Monthong increased while that of Chanee declined. Production technologies and practices in site selection, land preparation, planting and crop maintenance had not been changed much from the early period. Observable change was planting technique in which more advanced technologies of Spliced approach grafting and Apical cleft grafting had been applied. Another technological development was the harvesting period. New techniques were used to expand harvesting period from 4 months to 9 months per year. The more important Durian planted areas were in the Central and Southern regions of the country. The export market of Thai Durian was mainly in Asia. Seasonal fluctuation of Durian prices remained the key source of price variation.

The results of Durian supply response model showed that the main factors affecting Durian planted areas were its planted areas in previous year and two years before with elasticities of 0.35 and 0.5 respectively. Factors affecting yield per rai of Durian were retailed prices of 15-15-15 chemical fertilizers in the same year and the previous-year prices of Mangosteen, Durian substitutable crop. Their elasticities were -0.49 and 0.29 respectively. Factors affecting the actual supply of Durian were prices of Mangosteen in the previous year and prices of Durian received in four and five years earlier. The elasticities of these factors were 0.93, 0.78 and 1.03 respectively.

The policy implication of this study was that support to reduce cost of fertilizer, enhancement of product qualities such as development of good varieties, extension of proper planting techniques and stabilization of Durian prices would increase the supply response of Durian.

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Thesis Advisor's signature

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