

**AN ECONOMIC ANALYSIS OF  
THE MALAYSIAN RICE SECTOR :  
PROSPECTS AND POLICY ALTERNATIVES**

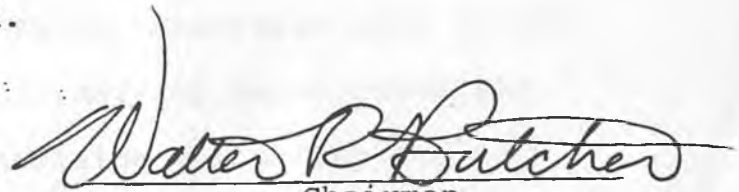
***BY***

***NIK FUAD BIN NIK MOHD KAMIL***

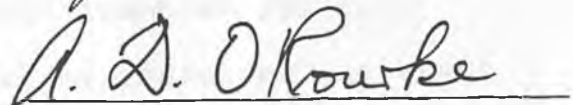


To the Faculty of Washington State University:

The members of the Committee appointed to examine the dissertation of NIK FUAD BIN NIK MOHD KAMIL find it satisfactory and recommend that it be accepted.

  
Chairman





## ACKNOWLEDGMENTS

I would like to express my gratitude to my parents, Haji Nik Mohd Kamil and Hajjah Nik Fatimah for their sacrifices, commitment and patience in providing an education for all their children. Their persistent belief that education is the most precious gift has certainly been graciously awarded.

Many individuals have contributed in making this dissertation a reality. First and foremost my thanks go to Dr. Walter Butcher. As chairman of my committee, he has been extremely helpful in guiding my Ph.D. program and this dissertation. His constructive ideas and suggestions have helped to make this research beneficial to the Malaysian rice sector. His vast professional experience in several Asian countries has certainly been useful in recognizing the policy making process in that part of the world. In addition, his sense of humor has somewhat lessened the pressure of research.

To Dr. Leroy Blakeslee, I feel indebted for his interest, involvement and guidance in my research. He spent countless hours in the quantitative aspect of the study and in getting things "straightened out." His versatility in conducting and supervising research is fully acknowledged. Thanks are also due to Dr. Desmond O'Rourke for his valuable suggestions and comments in various stages of this research.

The efforts of Mr. Frank Pirnique in computer programming are greatly appreciated. My appreciation also goes to Sharon Baum for her willingness to type the final draft despite her other committment.

Thanks are also due to the government of Malaysia, the World Bank and MARDI for financial support and for allowing me to pursue my education.

To my brothers and sisters, I would like to express my gratitude for their moral support and encouragement. To my in-laws, thanks for their prayers and my apology for the separation from their first few grandchildren.

Finally, my special thanks go to my family, Nurlia, Nazim and Syahida for their sacrifices, patience and understanding throughout my graduate program. They provided a source of inspiration to my career.

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ABSTRACT

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Washington State University, 1984

Chairman: Walter R. Butcher

The Malaysian rice sector has social and political significance far greater than its share of the national economy would indicate. The Malaysian government attempts to influence the supply and demand for rice through infra-structural development and market interventions, the principal objectives being to increase incomes of farmers and the national rice self-sufficiency rate.

The objectives of the study are to establish a complete supply and demand model for the Malaysian rice sector and to evaluate the impacts of policy instruments on the outcomes of the rice sector. The model consists of regional and seasonal area planted and yield equations, a consumption plus private stock change equation, an import equation and an ending government stock equation.

The parameters of the econometric model suggest that rice production is relatively unresponsive to price but that technological development can have a strong effect on rice production. Rice imports are affected by the domestic price

level and government trade regulations. Consumption demand for rice is characterized by rice price elasticity of -0.5 and an income elasticity of -0.3. Ending government stock reflects the policy of securing adequate supply of rice to the population.

Validation of the Malaysian rice model suggests reasonable success in using the model economic simulations involving selected policy alternatives. Induced technological development, irrigation investment, price policy and trade interventions were introduced in the model and their impacts on key variables of the rice sector were calculated.

The results of the policy simulations indicate that past rice policy has been producer oriented although both producers and consumers would gain under induced technological development and an effective price support policy. A stringent control on rice imports would hasten the realization of complete self-sufficiency but would result in large losses to consumers. The simulation results indicate that a policy involving a more strict control on imports along with enhancement in technological development would provide a more balanced achievement of competing policy objectives.