

THREE ESSAYS ON RICE MARKETS AND POLICIES IN SOUTHEAST ASIA WITH A FOCUS ON
RICE CONSUMPTION PATTERNS IN VIETNAM

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ABSTRACT

The purpose of this dissertation is to analyze rice markets and policies in Southeast Asia with a focus on rice demand in Vietnam. The first essay explores the impacts of removing rice tariffs in the region's three largest importing countries, i.e. Indonesia, Malaysia and Philippines, using a partial equilibrium approach. Results from the study indicate that the removal of AFTA tariffs has the largest impacts on Indonesia and Philippines' net trade and modestly affects domestic prices as well as world prices. Relative to the baseline, the removal of AFTA tariffs leads to an 8% increase in the world price and an increase by 8%, 13% and 48% in Malaysia, Indonesia and Philippines' imports, respectively. If all tariffs were eliminated, imports would increase significantly in Indonesia and Philippines, by about 137% and 130% relative to the baseline. The world price is projected to increase by about 33% under this full liberalization scenario, leading to a modest rise in exports from Thailand and Vietnam but a significant decline in imports by African countries, by about 1 million tons. Results from this study suggest that the likely sizeable impacts of full trade liberalization would prevent governments of the importing countries from removing tariffs completely but some level of tariff removal would be viable.

The second essay examines dietary changes in the consumption of rice in Vietnam using recent household survey data. Two demand systems, AIDS and QUAIDS, are employed for analysis. Robust test results suggest that QUAIDS outperforms AIDS in fitting data although both models yield similar outcomes. In addition, rice consumption patterns differ greatly by income class as well as between rural and urban areas. At the national level, the expenditure elasticity of rice is estimated to be positive but very small in magnitude, 0.05. Interestingly, rice appears to be a normal good for rural consumers but an inferior good for urban consumers with expenditure elasticities of 0.14 and -0.18, respectively. Rice is also found to be an inferior good for consumers at higher income quintiles in both rural and urban areas. Findings of this study imply that effective food, nutrition and poverty policies need to take into consideration the heterogeneity in demand responses with regard to price and income shocks across different demographic groups.

The third essay extends the results of the second essay by using the estimated QUAIDS model to project at-home food demand in Vietnam through the years 2020 and 2030 taking into account the effects of food expenditure, food prices and urbanization. Results indicate that budget shares of rice decline significantly while those for meat and fish, drinks and miscellaneous food group including out-of-home food increase at higher levels of food expenditures. On a per capita basis, rice demand shows a fall in 2020 from the 2010 level and continues to decline in 2030. Demand for pork on a per capita basis continues to increase at higher levels of food expenditures but its growth rate is slower than that of meat and fish, suggesting consumers' high preference for non-pork meats

and seafood as their incomes rise. Interestingly, the effect of urbanization on the national average consumption is found to be remarkable for rice while modest for other food groups. Results of this study highlight the importance of considering the effects of income distribution and urbanization on food demand projections.