Rice Market Liberalization and Poverty in Viet Nam

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Agricultural market liberalization has been the subject of numerous studies by IFPRI and other research organizations. Recent and forthcoming IFPRI research reports on this topic include studies of maize marketing in the Philippines by Meyra Mendoza and Mark Rosegrant, of the ASEAN Free Trade Agreement by Dean DeRosa, of groundnut market liberalization in Senegal by Ousmane Badiane et al., and of Egyptian wheat market reforms by Mylène Kherallah et al.

The case of rice market liberalization in Viet Nam is interesting and distinctive in three ways. First, Viet Nam is in the midst of a transition from a centrally planned economy to a market-oriented one. The very success of this process in stimulating economic growth and rice exports created a situation in which policymakers and researchers had only a partial picture of the newly transformed rice marketing system.

Second, rice is both the most important export crop in Viet Nam and the dominant staple food. The dual role of rice in the economy created an apparent contradiction between food security objectives and the desire to promote exports. The political sensitivity of rice export policy is heightened by the memory of rice exports in the first half of the 20th century that coincided with periods of deprivation and even famine.

Third, Viet Nam’s agroclimatic diversity and long distances imply that the effects of rice policy will vary widely by region. This diversity further complicates the task of anticipating the effect of changes in rice policy on poor and vulnerable households.

In this study, Nicholas Minot and Francesco Goletti examine the new patterns of rice marketing in Viet Nam and study how liberalizing both internal and external rice markets has affected food security and poverty. For the first task, they make use of a comprehensive set of surveys carried out by IFPRI in 1995–96. These surveys, covering rice producers, traders, millers, and state-owned enterprises, provide a detailed picture of the new rice marketing system in Viet Nam.

For the second task, they assess the household-level impact of rice policy by combining a spatial equilibrium model with household survey data. The spatial equilibrium model is used to simulate the effect of rice policy on food markets in seven agroclimatic regions of Viet Nam. The survey data are then used to estimate the impact of simulated price changes in each region on real income and poverty among different groups of households.
The results suggest that export liberalization does raise rice prices within the country, but that the effects are smaller (in percentage terms) as one moves away from the rice export zone. Furthermore, the higher prices have a positive effect on rural income and a mixed but slightly favorable impact on poverty. Furthermore, relaxing restrictions on the internal movement of rice from south to north also generates net benefits for the country without increasing poverty.

The results of the analysis in this report were presented to Vietnamese policymakers in late 1996, leading them to enact a succession of increases in the rice export quota and to lift restrictions on internal rice trade. In the wake of these reforms, rice prices have been stable or declined and internal trade in rice has risen, showing that sound policy research can lead to beneficial policy actions.

It is important to stress that the specific findings of this study are not necessarily applicable to other countries that export a staple food crop. Under different circumstances, policymakers may face a more serious trade-off between exports and rural poverty. The study does, however, indicate that the effects of market reform on poverty are not always intuitive. More important, it provides a methodological tool for examining the impact of agricultural trade and marketing policy on poor households in developing countries.

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This report focuses on market liberalization in the rice sector of Viet Nam and its impact on income and poverty. This topic is of interest for several reasons. First, the transition from central planning to a market-oriented economy in Viet Nam has been more extensive and more rapid than in many other nations. Second, on an aggregate level, the reform of the rice sector has been successful in transforming the country from a rice importer to a major exporter. Third, rice policy is important to the 76 million inhabitants of Viet Nam because rice accounts for three-quarters of the caloric intake and is grown by more than two-thirds of Vietnamese households. And finally, since Viet Nam now supplies 9 to 17 percent of world exports, the prospects for exports have important implications for world rice markets.

The main objective of this report is to examine the new set of food policy issues facing Viet Nam as a result of its transformation into a major rice exporter and its transition toward a market economy. In particular, the report aims to shed some light on two key issues: (1) What would be the effect on income and poverty of further liberalization of rice markets in Viet Nam? (2) What lessons can other countries learn from market liberalization in Viet Nam?

The liberalization of Vietnamese agriculture has proceeded in a series of small steps in response to poor agricultural performance and reduced assistance from the Soviet Union. Reforms began in 1980 with the introduction of the contract system, accelerated in 1988 with the devolution of decisionmaking to the farm household, and were complemented by liberalization of other sectors in the early 1990s. These reforms have generated impressive results, with rice production and the agricultural sector growing at close to 5 percent per year.

Rice production in Viet Nam is characterized by small irrigated farms, multiple cropping, labor-intensive practices, and growing use of inorganic fertilizer, though there are substantial regional differences. The Mekong River Delta is the rice bowl of Viet Nam, producing about half of national output on relatively “large” farms of 1.1 hectare. The Red River Delta is one of the most densely populated agricultural areas in the world. Although farms average only 0.25 hectares, the Red River Delta manages to produce rice surpluses, though they are much smaller than those of the
Mekong. Rice cultivation is less intensive in the other regions, but rice is by far the most important staple in every region.

More than 57 percent of the rice production growth during 1985–95 was accounted for by yield growth, with rice area actually declining. Crop intensification (increasing the number of crops per year) and interaction among these factors accounts for the rest. Although all regions have seen impressive rice production growth, the Mekong Delta accounts for two-thirds of national growth.

There is little potential for expansion of rice area and only minimal potential for further intensification. Rice output growth will increasingly rely on yield expansion. Yield growth has far exceeded the Asian average, probably reflecting lagged response to liberalization. Thus, yield growth can be expected to fall in the coming years.

The structure of the rice marketing system in Viet Nam suggests that it has rapidly developed into a complex system without the central management that policy-makers once thought was necessary. Tens of thousands of traders handle millions of tons of rice every year, channeling it from surplus farmers to urban consumers, rural rice-deficit areas, and exporters. Furthermore, the channels are numerous and differ from one region to another. The role played by the state-owned enterprises in the rice marketing system is minimal, except in the area of long-distance trade, where it dominates, and exports, where it has a legal monopoly.

As the overall economy has stabilized, rice prices have become less volatile, but market liberalization does not seem to have had a noticeable effect on marketing margins between paddy and rice prices, between farm and retail prices, or between prices in the north and south of the country. Spatial market integration analysis indicates that the degree of market integration has increased somewhat since the late 1980s, but it remains weak.

Two types of restrictions on trade affect the performance of the marketing system. First, internal trade was restricted in 1995, as indicated by the responses of traders in a 1995–96 IFPRI survey and by the large price differential between rice prices in the north and south. Second, the rice export quota is used by the government to ensure adequate domestic supplies. This report compares domestic and border prices, finding that the rice export quota was binding at least over the period 1990–95 and that it was equivalent to an export tax of 20 to 25 percent.

Rice is by far the most important staple in the Vietnamese diet, accounting for more than 60 percent of the caloric intake in every region. Per capita rice consumption is lower among urban households than rural ones. In addition, rice consumption rises with income at low and middle income levels, but it falls as income rises further. Econometric analysis of household data carried out in this study suggests that the expenditure elasticity of rice demand is 0.38 at the mean income level, while the price elasticity is –0.24.

In order to understand how a rice policy affects the poor, the distribution of poverty in Viet Nam is examined. Poverty is almost four times as widespread and five times as severe in the rural areas as in the urban areas. Furthermore, poverty tends to be concentrated in the more remote, hilly regions, namely the North Central Coast,
Northern Uplands, and the Central Highlands. Household survey data suggest that the two delta regions, with 45 percent of the population, are surplus regions that would gain from higher rice prices; the other five regions are rice-deficit areas that would lose on average. Higher prices would also benefit the average rural household at the expense of urban households.

A uniform 10 percent increase in rice prices would hurt urban households, non-farmers, and residents of the five deficit regions, although the effect on real income would be less than 2 percent on average. On average, the price increase would benefit farmers, particularly those in the Red River and Mekong deltas. Somewhat paradoxically, in spite of the higher average income, the poverty rate would rise slightly from 25.0 to 25.2 percent in the long run.

A simulation model, the Viet Nam Agricultural Spatial Equilibrium Model, was constructed to examine the impact of alternative rice marketing policies on prices, production, consumption, and income. The impact on poverty is estimated by combining the results of the simulations with household data on rice marketing patterns.

With regard to the rice export quota, the model indicates that there is some justification for the concern of the Vietnamese government that eliminating rice export quotas would raise prices and hurt some Vietnamese households. The model confirms that rice prices would rise 14 to 22 percent (depending on whether internal restrictions were also removed) and have an adverse effect on urban households, nonfarm rural households, and households in the Central Highlands. For example, according to the 1992–93 Viet Nam Living Standards Survey, the poorest quintile of urban households spends almost one-third of their income on rice.

At the same time, the model shows that the net gains to rice farmers and consumers would be around US$200 million. Three-quarters of this gain would represent a transfer from state-owned enterprises exporting rice and one-quarter a net gain to the country. Furthermore, poor households tend to gain both in absolute terms and relative to nonpoor households because they are predominantly rural farmers who benefit from higher rice prices.

The government could liberalize rice exports slowly by replacing the quota with an export tax and gradually reducing the tax rate. The model indicates that a 22 percent tax would be equivalent to the 2.5 million tons quota. This option has the advantage of generating revenue that could be used to alleviate the impact of higher rice prices through targeted assistance.

With regard to restrictions on the internal movement of food, the model suggests that the impact on average prices and incomes would be relatively small. Nonetheless, the absolute gains are large compared with the negligible costs of such a policy. Removing restrictions on internal trade would have substantial regional effects, however, lowering prices in the north and raising them in the south. The distributional effects are relatively small and tend to cancel each other, so there is no change in the national poverty rate.