

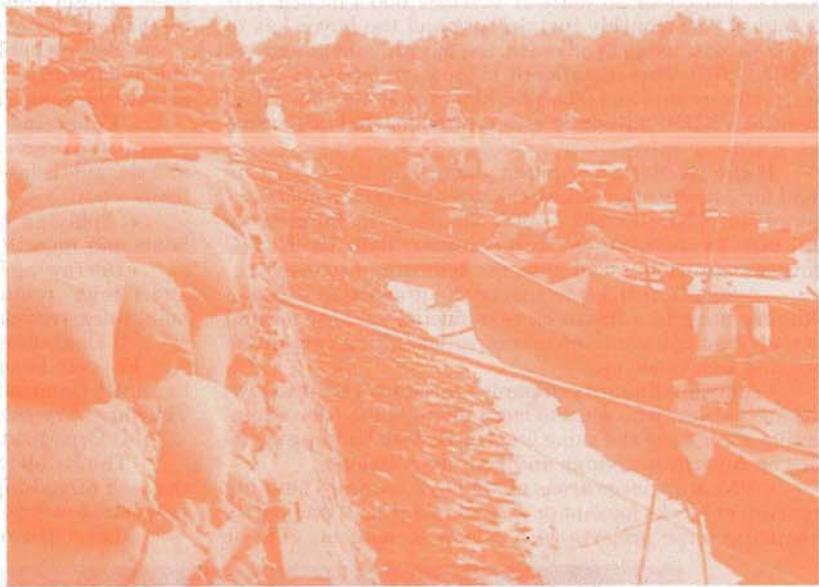
The Mekong Delta produces the best part of rice output and rice for export comes mainly from this region. A study of the supply of and demand for rice in this delta will help work out policies to rise the rice output and export of rice.

We have conducted a survey and collected data for the 1990s from various sources, and then established a model for analyzing the supply of and demand for rice in the Mekong Delta by using various calculating methods.

International experts estimate that the world rice output is to rise by 70% by 2030 to meet the demand. In Asia, any changes in rice output from China, India and Indonesia will affect the world rice market because they are main rice producers.

- In China, the population rises by 1.3% while the rice farming area reduced from 33 million hectares in 1990 to 31 million in 1995. In the long run, China will become a rice importer.

- In India, the estimated short-



age of rice by 2005 will rise to 17 million tonnes.

- The Indonesian rice output has

n't been steady in spite of many progressive policies adopted by the government and they have suffered a

A LOOK AT FACTORS AFFECTING RICE MARKET IN THE MEKONG DELTA

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shortage of rice in recent years because of bad weather.

The trade in rice in the world market rose by 5.1% in the years 1989-95. Commercial rice represents some 4% or 5% of the world food output, as compared with 20% for wheat and 11% for other grains.

In the Mekong Delta, many policies have affected greatly the production of rice. The most important of them is the Land Law.

From 1988 on, the right to use land within 15 years is recognized by the Land Law of 1988. The Revised Land Law of 1993 allows individuals to transfer, rent or mortgage the land they use and the rent term is fixed at 20 years for planting annuals and 50 years for perennials. This law set a limit of three hectares of land used by a family and many people are of the opinion that this limit prevents the

agricultural production on large scale.

In February, 2000, the Government remove this limit by allowing formation of larger farms and granting the land use certificates. Prices of farm products are determined by market forces but the government can intervene easily by using tax, quota on export of rice, exchange rate, etc. Many banks have been established to serve farmers and agricultural production.

1. Supply of and demand for rice in the delta

a. Supply: The supply of rice is affected by current selling price, selling price in the previous year, prices of fertilizer, birth rate, changes in farming area and average rainfall.

- Reactions of supply force to selling price: Available data show that the price elasticity of supply is insignificant, the selling price in the previous year has almost no effect on the supply, that is, the supply isn't price-elastic (the t value of 0.151 is very small). The 1995 data show that rice is grown on 92% of the farming land area. In other words, changes in market price lead to no remarkable changes in the production of rice.

- Reactions of supply to prices of inputs: The most important input is fertilizer. Results of our survey show that the price index of fertilizer is 0.222, that is, when the fertilizer price rises by 1%, the supply still increase by 0.222%. This value is very small and significant statistically only. The most likely explanation is that the export and exchange rate policies have encouraged the rice production in spite of some rise in prices of fertilizer.

- Effects of population on supply: Our survey shows that increases in population affect greatly the supply of rice. When the population rises by 1%, the rice output rises by 0.57%.

- Farming area: In the Mekong Delta, when the farming area increases by 1%, the output rises by 1.56%. This is likely the result of land reform and more public investment in irrigation.

- Annual rainfall: It's difficult to quantify the effects of rainfall on rice output because the need for rain water differs from zone to zone.

b. Demand:

- Exporting price: Our estimates show that a 1% increase in the exporting price leads to a 0.885% increase in the amount exported. This reaction means that the Mekong Delta has great potential for rice export.

- Exporting price in the previous year: The index of the exporting price in the previous year is high (4.367).



This means that the potential for rice export and need to export rice is high in the Delta. The great effect of the exporting rice also reflects comparative advantages in rice production in the Delta.

- Effects of the volume exported in the previous year: Estimated results reveal that this factor is insignificant. Increases in export of rice mean that Vietnamese rice is increasingly acceptable to foreign consumers.

- Relations between prices in domestic and international markets: The price of rice in the world market affects directly the exporting and domestic prices. Our calculations show that a 1% increase in the exporting rice results in a 0.694% rise in the domestic price.

In cases of changes in rice export and exporting price when there is no quota system, effects on the supply and demand are various and could be worked out easily.

- When the rice export increases by 10%, the domestic price rises VND109 per kilo (or 3.75%) and the rice output rises by 1.1% (or 101,000 tonnes). Farmers' income is improved and local consumers suffer some loss which is made up for by profit from the rice export (5%). The higher price causes almost no change in the demand (that is, the demand is price-inelastic) because expense on rice by an urban family is very small in comparison with its income. The same results take place when the exporting price rises by 5%.

- If the exporting price falls by 5%, the loss could be made up for by an increase of 10% in the rice export.

2. Policy implications

- The farming area affects

greatly the supply of rice. To increase the supply, various measures could be taken to encourage intensive farming and commercial farming on larger scale. The 3-hectare limit on the land area for a farmer family seems unsuitable for the Mekong Delta because canals and ponds represent some 50% of the land area managed by a family. Development of large-scale farms is the best way to promote the commercial farming based on farmers' resources and experience.

- The export of rice could improve farmers' living standard. Many problems, however, should be solved to increase the exporting price: researching and developing new strains of rice, applying new techniques of harvesting, storing and processing rice for export, etc.

- Farmers will suffer losses when the selling price falls remarkably. In this case, the Government had better give price support (20% at least) and purchase rice for reserves.

- The Government should expand export market for rice and help rice exporting companies purchase rice after harvests (by offering soft loans or interest-free credit).

- State-run banks should adopt new lending policies to provide farmers with necessary loans and other financial services.

- Exporting companies should launch marketing campaigns, reduce transport and storing costs and improve product quality.

- Land and agriculture taxes could be cut or reduced to support poor farmers, and tax payments could be turned into public investment in rural infrastructure ■