

GLOBAL RICE TRADE:

What does it mean for future food security?

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Rice is different from other major field crops such as wheat, maize, and soybeans because of its high geographical concentration in production and consumption (around 90% in Asia), literally making it an Asian crop. Historically, a very small proportion, around 5–7%, of total rice production has been traded compared with 20% for wheat, 13% for maize, and 30% for soybeans. More importantly, four of the top five exporters, with a 70% share of total global rice trade, are from Asia, for which domestic food security comes first and trade is a distant second (Fig. 1). For these rice-producing countries, trade is an afterthought when domestic need and an adequate buffer stock are secured. However, on the import side, the top five rice import-dependent countries accounted for only 29% of the total trade in 2007-08 (Fig. 2). Even the top ten importers accounted for only 45% of the total trade in the same year.

After almost two and a half decades (the 1960s to late 1980s) of being stagnant, rice trade zoomed upward in the wake of trade liberalization by many countries in the late 1980s and the General Agreement on Tariffs and Trade (GATT) in 1994.

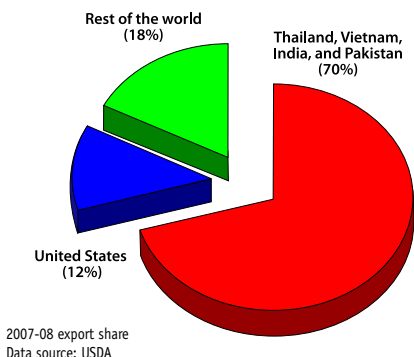


Fig. 1. Dominance of Asian rice producers in the global market.

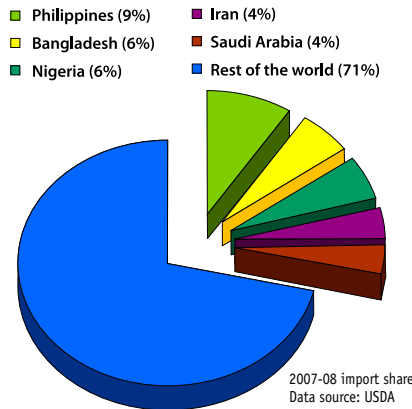


Fig. 2. Countries dependent on rice imports.

As part of the GATT market access commitments, countries partially opened up rice trade, which caused the volume to rise more than 50% in the past decade. Rising trade flows in the 1990s, characterized by a growing dependability between exporters and importers, contributed to the high degree of price stability during this period.

Political repercussions of the rice crisis

The recent crisis that triggered riots and protests in different parts of the developing world has put a big question mark on the future of global rice trade. The market was primed for such a crisis with the drawing down of stocks in the last few years to fill the supply-demand imbalance arising from the slowdown in yield growth, drought, and pest problems. However, the situation did not warrant the tripling of rice prices in the span of six months between November 2007 and May 2008. Rising wheat prices due to the expansion of biofuel crops put pressure on rice, which led to trade restrictions in many rice-producing countries and unprecedented rises in prices.

Measures taken by many exporting countries to ensure the

availability of rice in the domestic market have affected many importing countries that rely on rice in the world market. In many rice-consuming countries, rice self-sufficiency has become a sensitive political issue, prompting policymakers to implement programs to reduce dependence on the global market.

Since rice is a staple food for about half of the world, it is understandable on the part of rice-consuming countries to protect domestic supply in uncertain times either by imposing trade restrictions or by expanding domestic production. These actions of both the exporting and importing countries are likely to reverse the recent upward trend in rice trade. The United States Department of Agriculture's rice outlook report now projects 2009 global rice trade to be 8% below the record level witnessed in 2007. All this points to lower trade and the risk of making shortages and high prices more frequent. It may sound odd to argue in favor of free trade in the face of the ongoing global financial crisis, but, for rice, which is highly protected and regulated, further protectionism can be severely damaging for the food security of millions of poor people.

What needs to be done?

The crisis has renewed the call for a second Green Revolution to revamp the sagging yield growth to feed the growing global population. In 2008, the International Rice Research Institute (IRRI) identified investment in agricultural infrastructure and rice research and extension as one of the keys to improving rice production. All members of the Association of Southeast Asian Nations have endorsed this position.

Several constraints, including land and water scarcity, environmental degradation, and high input prices, will make achieving higher rice yields challenging. But, we have proven our success in delivering research-driven solutions to farmers that increase yield and, with further investment, we can continue to do this. However, none of this is possible without supportive policies and institutions in place.

Apart from revamping the yield growth, the conduct of the world rice market, which played an important role in magnifying the intensity of the recent crisis, needs to be reined in if future crises are to be averted. The rice crisis starkly reminded us that the current structure, in which the majority of exporters are residual suppliers, does not bode well for the future of the global rice market. The future stability of the rice market clearly hinges on re-establishing the relationships between exporters and importers. It may be worthwhile to hold a summit of major rice-exporting and -importing countries to build those relationships, and at the same time collaboratively develop some basic rules in rice trading. Another option, which could be expensive but worth considering, is to rebuild buffer stocks in the major rice-producing countries, particularly in China and India, to have a calming effect on the market.

Aside from making investments and changes to increase rice yield within Asia, another potential long-term solution to this problem lies in developing rice exporters outside Asia where rice can be produced primarily for export. The transformation of the global soybean market three decades ago may give a clue as to what is needed in the rice market. In the soybean market, the United States used to be the big guy on the block, accounting for around 80% of world production

and 95% of total exports throughout the 1960s and 1970s. The ban on soybean exports imposed by the U.S. in the early 1970s changed the entire landscape of soybean production and trade when other countries started looking for alternative suppliers of soybeans. Although the soybean crisis ended in a few months, the confidence in the U.S. as a reliable supplier was gone. Two South American neighbors, Argentina and Brazil, emerged from this crisis to become formidable competitors for the U.S. in the world soybean market. Currently, these two countries account for around half of the global soybean trade (Fig. 3). The emergence of multiple dependable suppliers also convinced many countries, including China, Japan, the European Union countries, Taiwan, South Korea, and others, to liberalize their oilseed sector and depend on imports. This is clearly evident for China, with 38 million tons of imports in 2007-08, accounting for 76% of the

total domestic consumption (Fig. 4).

It is true that the current situation, in terms of land and water availability, is quite different from what it was in the 1970s and 1980s. Nobody expects countries to give up rice production and become dependent on the international market even if new suppliers emerge. But, more surplus rice produced by new suppliers could help stabilize the market and reassure the importing countries.

Within Asia, Myanmar and Cambodia potentially seem to have surplus rice production. Rice production in these countries can be expanded through intensification and by bringing additional fallow land into production. However, this is possible only under stable political and economic conditions. Outside Asia, the potential to increase rice production exists primarily in South America and Africa. Currently, South America is more or less self-sufficient in rice and has the land mass to expand rice

production if the underlying economics make sense. Africa, on the other hand, probably has more potential than even South America because of its underused land and water resources. But, Africa requires a stable political environment and the necessary investment for infrastructure and market development to boost its rice production.

Nonetheless, the bottom line is that the rice supply needs to increase to improve future food security. Rice yields within existing rice-growing regions in Asia can be increased if technology-driven solutions are delivered to growers through effective extension mechanisms, and if investments are made. Better agricultural infrastructure and policies must support this to improve the reliability of supply. Finally, new international suppliers of rice could also play an important role in providing new sources of rice to importers. 🍚

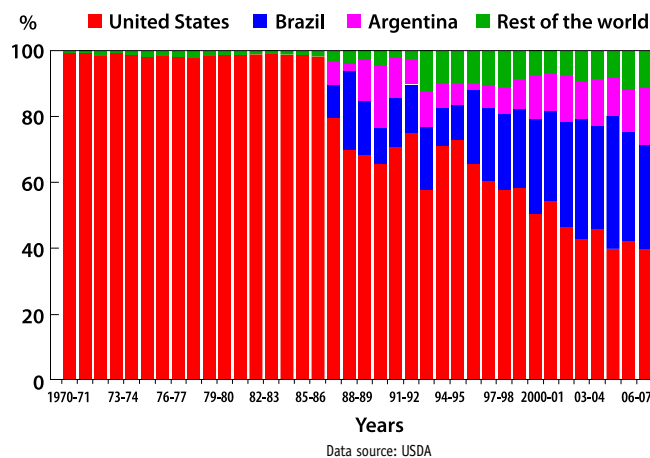


Fig. 3. Transformation of the global soybean market.

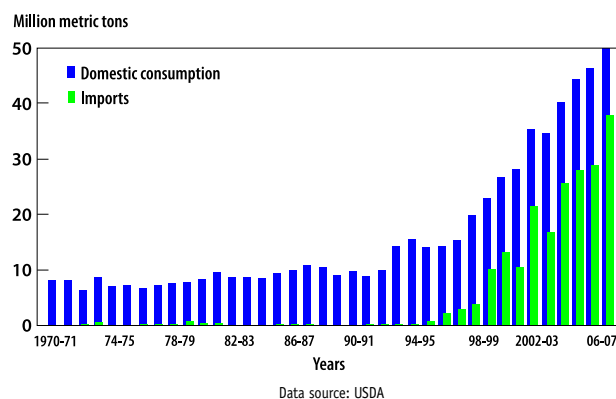


Fig. 4. Chinese dependence on foreign soybeans.