

Policy responses to the rice crisis: Past practices and recommendations for South Asia

Jeevika Weerahewa and Karthiyayini Rajmohan*

Brief No. 21, July 2009

South Asia¹ produces approximately 32 per cent of the world's rice and accounts for 31 per cent of global consumption. Rice is the main food staple for Asians and accounts for more than 40 per cent of their calorie consumption. The poor in Asia spend around 30-40 per cent of their income on rice, and it is a major source of income for a majority of the poor residing in the rural areas (International Rice Research Institute, 2008). For all these reasons, even small changes in the global rice markets can have a significant impact on the well-being of large numbers of people in South Asia.

Among South Asian countries, India and Pakistan are net rice exporters, while Bangladesh and Sri Lanka are net rice importers (Table 1). From 2000 to 2008, rice production in South Asia grew at a slow pace of 0.2 per cent per annum, while consumption grew by 2.4 per cent per annum. India, South Asia's largest rice producer, accounted for 71 per cent of the production in the region in 2008, with a healthy production trend during 2000-2008 (World Bank, 2008).

Significant changes occurred in the global rice market in the recent past. As shown in Figure 1, a significant upward trend in the global rice price has been observed since 2005, with prices accelerating since January 2007. Prices continued to rise throughout 2007 and sharply increased in the first quarter of 2008 to reach a global peak. The world price of standard Thai rice (5 per cent broken) tripled from US\$ 362 per metric ton in December 2007 to US\$ 1,000 per metric ton in April 2008. While rice prices decreased since May 2008, in August 2008 the international price of rice was still 128 per cent higher than the average price in 2006 (World Bank, 2008). This sharp increase of rice prices thus became a major cause for concern among the Asian countries. Food price inflation for Bangladesh, Pakistan and Sri Lanka was 13 per cent, 21 per cent and 31 per cent, respectively, between March 2007 and March 2008 (Asian Development Bank, 2008).

The immediate policy response of the exporting and importing countries to the rice crisis was to lower domestic rice prices through various domestic and trade policy measures. Although many of the policies helped to make rice affordable for the urban poor, they deprived domestic producers of the opportunity to sell rice at higher prices. Furthermore, these policy responses have led to further increases in world market prices of rice.

¹ South Asia includes Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

Table 1. South Asian rice production and consumption

(Unit: '000 mt)

Country	Production				Consumption			
	2004/05	2005/06	2006/07	2007/08	2004/05	2005/06	2006/07	2007/08
Bangladesh	26 600 (6.63%)	28 758 (6.87%)	29 000 (6.90%)	28 600 (6.67%)	26 900 (6.62%)	29 000 (7.05%)	29 764 (7.14%)	30 600 (7.25%)
India	83 130 (20.72%)	91 790 (21.94%)	93 350 (22.22%)	96 000 (22.38%)	80 861 (19.89%)	85 088 (20.67%)	86 940 (20.85%)	90 760 (21.51%)
Pakistan	5 025 (1.25%)	5 547 (1.33%)	5 200 (1.24%)	5 500 (1.28%)	2 550 (0.63%)	1 896 (0.46%)	2 257 (0.54%)	2 450 (0.58%)
Sri Lanka	1 974 (0.49%)	2 100 (0.50%)	2 145 (0.51%)	2 200 (0.51%)	2 139 (0.53%)	2 150 (0.52%)	2 152 (0.52%)	2 287 (0.54%)
South Asia	119 009 (29.66%)	131 367 (31.40%)	132 861 (31.62%)	135 875 (31.67%)	115 934 (28.52%)	121 509 (29.52%)	124 526 (29.86%)	129 052 (30.58%)
World	401 298 (100%)	418 313 (100%)	420 164 (100%)	428 989 (100%)	406 545 (100%)	411 629 (100%)	417 017 (100%)	421 962 (100%)

Source: United States Department of Agriculture Database.

Values in parentheses are production and consumption as a percentage of the global production and consumption, respectively.

* Jeevika Weerahewa is a senior lecturer and Karthiyayini Rajmohan is a former lecturer at the Department of Agricultural Economics and Business Management, Faculty of Agriculture, University of Peradeniya, Sri Lanka. The technical and financial support provided by ESCAP and the International Development Research Centre (IDRC, Canada) during the preparation of this brief are gratefully acknowledged. The views presented are those of the authors and do not necessarily reflect the views of the United Nations, the authors' employer or other ARTNeT members and partners. Usual disclaimers apply.

Figure 1. Rice standard export price, based on Thai rice (5 per cent broken), 1961-2008



Source: International Rice Research Institute, 2009.

This policy brief describes the South Asian rice market and comments on the policies implemented in response to the 2008 increase in rice prices, in order to provide suggestions for appropriate rice policy reforms in South Asia.

Policy responses to the rice crisis

Many of the immediate policy interventions during the current food crisis have focused on directly reducing the price to consumers, mainly through four main types of measures: (a) trade policy measures; (b) marketing policies (stock management and public distribution); (c) input and output policies; and (d) safety net measures. Table 2 provides a summary description of the policies implemented in South Asia in response to the rice crisis.

Table 2. Government policy responses to the rice crisis in South Asia

Policy response	Bangladesh	India	Pakistan	Sri Lanka
Trade policies				
Reduction of import tariff	✓	✓	✓	✓
Export bans	–	✓	✓	–
Marketing policies				
Building of food reserves	✓	✓	–	✓
Input and output policies				
Input subsidies	–	✓	–	✓
Minimum price support to farmers	✓	✓	✓	–
Safety net programmes				
Cash transfer programmes	✓	–	✓	✓
Rice provided at subsidized prices	✓	✓	–	–
School feeding programmes	✓	✓	✓	✓
Rural employment guarantee scheme	✓	✓	–	–

Source: Country authorities and World Bank, 2008.

(a) Trade policy measures

The main objective of the reduction of tariffs or taxes on food is to lower domestic food prices as well as to increase domestic consumption and consumer welfare through increased agricultural trade liberalization. However, such a policy response unintentionally results in lower government revenue, net food sellers receiving a lower income, food production reductions in the long term and shrinking availability of food in world food markets. Almost all the countries in South Asia reduced import duties on food items after the food crisis. India lowered import tariffs on semi/wholly milled rice while Sri Lanka eliminated the tariff on rice imports. In Sri Lanka, when the domestic rice prices started rising, the Government initially waived the tariff; however, the tariff was subsequently re-imposed due to fiscal reasons (World Bank, 2008).

Export restrictions, including taxes, minimum export prices and export bans, are aimed at lowering domestic food prices as well as increasing consumption and government revenue. However, according to the International Food Policy Research Institute (2008), these policies could also lower the income of producers, thus reducing incentives for food production and food available in global food markets, thereby triggering further price rises. As a key player in the international rice market, India, among others, imposed bans on rice exports to protect domestic consumers, including an indefinite ban on non-basmati rice in October 2007 that was later replaced by the application of a minimum export price of US\$ 425 per metric ton.

This has further contributed to the recent increase in rice prices, disrupting the world market supply of rice. The hoarding of rice stocks by exporters coupled with the increasing demand for rice among importers have aggravated the crisis. Bangladesh, which had traditionally maintained a low food stock, was affected by India's export ban, which led to a rapid increase in the domestic rice price. Hoarding by traders for speculative purposes has added fuel to this burning issue in some countries (International Rice Research Institute, 2008).

(b) Marketing policies

Building food reserves as a policy option stimulates production in the short term while enabling governments to accumulate stocks and buffer food price instability, thus assuring reliable supplies for the exporting countries (International Food Policy Research Institute, 2008). In South Asia, India has the most extensive public food grain distribution system. Anticipating food shortages, India quickly moved to build up its rice reserves through public procurement, enabling it to successfully stabilize domestic rice prices.

Following the price hike in Bangladesh due to the export ban by India, the Government of Bangladesh intervened by importing food, despite the rising cost, and distributing 500,000 metric tons of coarse rice at subsidized prices in Open Market Sales through official channels and authorized dealers. The Government also helped to build up its rice stock from 400,000 metric tons in June 2007 to 900,000 metric tons in June 2008 through imports as well as domestic procurement.

In Sri Lanka, the Government purchased about 90 million kilograms of paddy in 2007, equivalent to 4.5 per cent of the total harvest. Recent information suggests that the Government of Sri Lanka is considering the gradual establishment of strategic rice reserves to better control future price fluctuations (World Bank, 2008). These strategies have increased demand for rice globally, further contributing to the price hike. This, in turn, has led to a boost in global production despite high fuel and fertilizer costs, and a scarcity of quality seeds, giving a bumper harvest of rice in 2008 (Food and Agriculture Organization of the United Nations, 2009).

Governments could also release food from stocks in response to a food crisis in order to reduce consumer prices and thereby increase consumer welfare. However, this type of policy intervention could lead to reduced incentives for production and lower income for producers, undermining private storage activities (International Food Policy Research Institute, 2008).

(c) Input and output policies

Different types of input and output policies were implemented by governments in South Asia in order to ease the adverse effects of the food crisis. Almost all agricultural inputs, i.e. water, power and fertilizer, are subsidized in various degrees in most South Asian countries. All the South Asian countries subsidized diesel to reduce transport costs and irrigation costs, as well as fertilizers, whose prices increased four-fold between 2002 and August 2008.

India and Pakistan have tended to provide support prices to farmers through public procurement on the output side. In India, the procurement price of rice was raised from Rs.6.50 per kg in 2007 to Rs.7.75 per kg in 2008 to create an incentive to farmers to sell their produce to the domestic market and thereby stopping the black market activities and hoarding. In contrast, Bangladesh set a procurement price for rice of around 15 per cent lower than the prevailing market price, which has created a floor price domestically. It was unnecessary for Sri Lanka to provide any incentives to farmers as the producer price was approximately 70 per cent higher than it was in 2007 (World Bank, 2008).

(d) Safety net programmes

All South Asian countries provided some form of safety net programmes among their vulnerable populations to tackle the adverse effects of the food crisis. These interventions include generalized public food distribution, targeted food distribution, conditional and non-conditional cash transfers, and employment guarantee schemes.

A range of targeted food distribution programmes exists in South Asia. In India (Andhra Pradesh State), rice is provided through government-run fair price shops at a highly subsidized rate to 18.7 million families living below the poverty line by means of ration cards. The Government of Bangladesh has authorized Open Market Sales of coarse rice in urban townships at subsidized rates, a self-targeting approach, where only the poor are attracted, given the low quality of rice and the long queues. Further, Bangladesh has intensified the use of the vulnerable group feeding programme to reach the poorest of the poor. All the South Asian countries have used school-feeding programmes to reach children, one of the groups most vulnerable to the food price shock. Also, Bangladesh and India have expanded their food for work programmes to provide a safety net to the unemployed (World Bank, 2008).

In 2007, India initiated the National Rural Employment Guarantee Scheme as a means of addressing the poverty issues of the ultra-poor, who do not have any alternative job opportunities. Bangladesh also implemented a rural employment guarantee programme, to provide employment to the rural poor in economically depressed areas during lean agricultural seasons (World Bank, 2008).

How can rice policies be improved?

Although governments implemented various policies in order to mitigate the adverse impacts of the rice crisis on the poor in South Asia, substantial adverse effects were still created. This illustrates the importance of ensuring the right balance in policy choices. The restrictive policies that were implemented accentuated price volatility, especially in the thinly traded rice market, and created added uncertainty in rice importing countries. This ultimately increased the cost of food security as countries built larger food stock reserves than usual (World Bank, 2008; Meilke, 2008).

In considering policies related to building up food stocks and public distribution systems, it is important that the right balance between stocks and trade is maintained. A sound policy decision would be to maintain some level of stocks to meet emergency and crisis situations while remaining vigilant with regard to fiscal costs, theft and stock wastage. Further, it is suggested that participating in the global food market through trade is better than imposing trade bans or prohibitive tariffs.

Countries that have the comparative advantage of producing rice should continue to do so in order to reap the positive effects of trade. This is important to South Asia since the countries within the region are highly interdependent in terms of the rice market. This will allow producers to enjoy the benefits of high rice prices by increasing the level of production that would help cater

to local and export market demand. However, regional trade agreements and the World Trade Organization should set appropriate regulations to cushion the impact on net importers during such crisis situations, without allowing exporters to make ad hoc policy changes. Further, the rising cost of energy, emerging water shortages and the frequency of natural disasters such as drought and flooding, suggest the need to pay attention to climate change, cross-boundary water sharing agreements and regional energy trade. Thus, more and better regional cooperation is needed for better management of this issue.

As pricing policies have tended to reduce the efficiency of farm production and divert attention away from addressing the productivity challenge, they cannot be considered as policies that will improve the long-term prospects of developing nations (World Bank, 2008). Further, input and output pricing policies to smooth fluctuations in the rice prices are expensive policies for governments in South Asia. They also have adverse implications for efficiency and resource allocation in the long term. Thus, it is not advisable that these policies be continued. Rather, the introduction of more long-term-oriented policy options that address the supply problems in South Asian rice production is needed. Thus, it is vital to formulate strategies for increasing farm productivity together with more effective, coherent and targeted safety net actions that cater to the food needs of the most vulnerable in South Asia.

The International Rice Research Institute (2008) has suggested a nine-point programme of implementation for the improvement of productivity that includes: increasing yields by adopting new post-harvest technologies to reduce losses; adopting higher yielding rice varieties; strengthening rice breeding and research pipelines; accelerating research on the world's thousands of rice varieties; developing a new generation of rice scientists; and increasing public investment in agricultural infrastructure. An effective safety net system would better tackle the problem on the demand side. However, South Asian governments could be well-advised to look into more effective safety net programmes for the short term and medium term, and

the use of productivity improvement programmes for the medium term and long term.

Conclusion

In light of the above discussion, the national governments should intervene to safeguard the poor and the vulnerable from escalating prices as a short-term measure to combat the rice crisis. In this regard, targeted interventions are recommended instead of interventions that distort prices in the whole country, not only because the latter are costly, but also because such interventions lead to resource misallocations that create economic inefficiencies in the system. As a medium-term measure at the regional level, the countries should plan to maintain buffer rice stocks. Furthermore, the imposition of export restrictions should be moderated through regional trade agreements and the World Trade Organization, as is already the case for import restrictions. The ideal long-term measure is to increase investment in agricultural research and rural infrastructure.

References

- Asian Development Bank, 2008. "ADB's response to the food crisis". Manila.
- Food and Agriculture Organization of the United Nations, 2009. See www.fao.org. Rome.
- International Food Policy Research Institute, 2008. "Global food crisis: Monitoring and assessing impact to inform policy responses". Washington, D.C.
- International Rice Research Institute, 2009. See http://beta.irri.org/solutions/index.php?option=com_content&task=view&id=250. Los Baños, the Philippines.
- , 2008. "The rice crisis: What needs to be done?" Background paper. Los Baños, the Philippines.
- Meilke, K., 2008. "Does the WTO have a role in the food crisis?" *Estey Centre Journal of International Law and Trade Policy*, vol. 9; pp. 53-62.
- World Bank, 2008. "Global food price inflation: Implication for South Asia, policy reactions and future challenges". Washington, D.C.



What is ARTNeT? The Asia-Pacific Research and Training Network on Trade (ARTNeT) is an open regional network of research and academic institutions specializing in international trade policy and facilitation issues. Network members currently include over 25 leading national trade research and academic institutions from as many developing countries from East, South, and Southeast Asia and the Pacific. IDRC, UNCTAD, UNDP, ESCAP and the WTO, as core network partners, provide substantive and/or financial support to the network. The Trade and Investment Division of ESCAP, the regional branch of the United Nations for Asia and

the Pacific, provides the Secretariat of the network and a direct regional link to trade policymakers and other international organizations.

ARTNeT aims at increasing the amount of policy-oriented trade research in the region by harnessing the research capacity already available and developing additional capacity through regional team research projects, enhanced research dissemination mechanisms, increased interactions between trade policymakers and researchers, and specific capacity-building activities catering to researchers and research institutions from least developed countries. A key feature of the network's operation is that its research programme is discussed and approved on an annual basis during a consultative meeting of policymakers, research institutions and other stakeholders. For more information, please contact the ARTNeT Secretariat or visit www.artnetontrade.org.