FOOD POLICY OF BANGLADESH

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LOW RICE PRICES

Is there a Reason for Concern?

by Sajjad Zohir

CROP sector in Bangladesh had always experienced shocks; but this time it originated from the market rather than from natural disasters. Sharp declines in prices occasionally occurred for jute, however, the experience of 1985-86 suggests that such declines generally follow above-trend increases in prices and the farm economy is quite capable to absorb such shocks even in the absence of government support. "Crisis" due to sudden declines in rice prices is only a recent phenomenon, and their implications are yet to be fully understood.

Aman paddy prices declined by 25.4 per cent (during December-January) in 1992-93 and Boro prices (during May-June) declined by 33.6 per cent. Price declines were more in rice surplus regions (e.g. north-west) and much less in other parts of the country. There has however been a long history of declining trend in real prices of rice, devoid of which, any assessment of the current situation may be misleading.

Increased adoption of modern variety rice and expansion in Boro acreage had raised rice productivity in Bangladesh from a mere 0.50 mt of rice per acre

Can a bumper harvest assure maximum security to a farmer?

in 1978-79 to 0.72 mt/acre in 1991-92. It is therefore no wonder that the real prices of foodgrains in the country had been declining that essentially distributed part of the benefits of productivity increase to the consumers.

Year-to-year fluctuation in prices are common in crop-based economies. Wider fluctuations in rice prices prevailed in the seventies. This, however, diminished in the eighties, and therefore, recent price declines came as a major shock to many onlookers. A good Boro harvest in 1992 associated with unanticipated significant decrease in post-harvest loss (due to dry wether) and increase in marketed surplus may have partly caused price decline. Decline in price of last Boro harvest may also be partly explained by decline in quality of paddy/rice marketed since weather was not favourable. The more important factors, however, appear to be the long term ones. Real rice prices were above their trend values during most of the eighties. Thus, it is likely that policies of the eighties did not adequately account for the structural changes within the crop economy, and had artificially sustained price levels above their trend path. The long due policy changes in 1992 triggered off an adjustment process in the rice market; and initial out comes of any shock in an economy are generally extremes. There are already signs of price recovery. No one is, however; certain as to whether the future prices will settle in their trend path; or, at some levels below the past trend path.

Changes in relative prices of commodities always lead to redistribution of real income in the society, and in the very short term, it is always a zero-sum game. Since rice accounts for more than 70 per cent of total value of crop production in Bangladesh, decline in its price has resulted in significant transfer of income from the producers to the consumers. A recent BIDS Poverty Study (January 1993) suggests that 42 per cent of the rural households are landless or functionally landless who depend largely on wage income. Estimates from Agriculture census suggest that 70 per cent of the farming households (who constitute the rest 58 per cent of rural households) are net purchasers of rice. Thus, low rice prices are likely to have benefitted about 83 per cent of rural households. Furthermore, it needs no mentioning that decline in rice prices lead to transfer of income from rural to urban sectors, especially benefiting the urban poor. Thus, price declines had primarily affected, at least in the short term, the middle and large farmers. Some of the marginal and small farmers may also have been partially affected to the extent that many of them may be forced to sell their produce immediately after harvest and purchase later during months of higher prices. Since the time difference between Aman and Boro harvests in relatively short and, more importantly, low prices had prevailed over the period, adverse effects on marginal and small farmers are likely to have been minimal.

From a short term perspective, returns form Aman and Boro rice cultivation have decreased due to decline in rice prices. The decline in returns have been accentuated due to increases in fertilizer prices during last growing seasons. Given that overall Aman rice yield had increased by about 3.13 per cent, some calculations show that returns to land (gross revenue minus costs due to non-land inputs) from modern variety Aman cultivation decreased from Tk 4855/acre in 1991-92 to Tk 2146/acre in 1992-93. It is however to be noted that farmers are quick to respond to variations in market prices. Various studies of BIDS and IFPRI show that, given a harvest, marketed surplus responds negatively to prices. Preliminary information suggest that stocks at farm level have increased significantly and volume of paddy/ rice transactions had been below normal during periods of extremely low prices. In the absence of concrete empirical evidence, more precise estimation of income loss is difficult. However, decline in cash earning and thereby, shortfall in liquidity at the level of farmers is an unavoidable outcome of a sudden decline in rice prices.

Short term responses to decline in rice prices and increases in fertilizer prices have been observed in farmers' decision during the last Boro season. One estimate suggests that Boro acreage had declined by almost 3 per cent; and there were increases in wheat and other non-rice acreage. Furthermore, there are indications of declines in the intensity of fertilizer application on land; total fertilizer sales in the country increased only marginally (by 1 per cent) during 1992-93 with significant declines in the sales of TSP and MP. Such responses from the farmers may also have been due to shortage of liquidity as a result of decline in cash earnings. The net outcome may not have reduced gross output during last Boro season; however, the pace of growth is likely to have declined.

While the short term declines in rice prices have benefitted many and hurt the farmers (especially,the medium and large ones); the shocks are unlikely to be destabilizing for the latter group. If such shocks are indicative of desired adjustments in relative prices, the transition will be better facilitated if farmers do have the option to effectively make alternative choices.

Last season's switch to wheat is likely to be a temporary phenomenon; and is not indicative of the relative profitability of wheat vis-a-vis other non-rice crops. There are many vegetables and spices that are more profitable than modern variety rice. Their adoption are, however, constrained due to risks associated with marketing and non-suitability of land. Increased efforts by policy makers to ease the marketing of non-rice crops and investments on land development may reduce the vulnerability of farmers facing declines in rice prices as well as foster the process of crop diversification. Furthermore, opening up the rice for export may help in ensuring higher returns to farmers in the future.

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Evolving Food Markets and Food Policy

by Steven Haggblade

REAL rice prices have fallen steadily over the past 20 years (Figure 1) as a result of improved farm technology and regular increases in foodgrain production per capita. They dipped a further 30 per cent in the past year alone, though most observers consider this drop a temporary deviation from trend. The resulting low rice prices have induced a series of adjustments by farmers, millers, consumers and government. Hence the ongoing major changes in food production, food markets and food policy.

Technological Change in Agriculture

Dramatically increased agricultural productivity has fueled increases in per capita rice production, and consequently real rice prices have fallen substantially in recent years (Figure 1). New agricultural technology laid the foundation for this steady growth in rice production as early investment in agricultural research produced a stream of new high-yielding rice varieties (HYVs) suitable for irrigated dry season cultivation.

Subsequent input market reforms made the new foodgrain technology accessible and attractive to farmers. The removal of citing restrictions and import duties on shallow tubewells (STWs) in the late 1980's stimulated a surge in minor irrigation.

Fertilizer distribution has been privatized, in the process making fertilizer widely available to farmers. Occurring gradually, over the past decade and a half, the liberalization of fertilizer markets has resulted a 260 per cent increase in fertilizer use since 1980.

The package — of HYV rice, irrigation and fertilizer — doubles farmer yields as they switch from local varieties to this HYV package.

Marketing Revolution

Driven by emergence of the Boro rice crop, the revolution in dry season irrigated rice production has spawned a marketing revolution of even greater proportion.

• Growing marketed surplus: Twenty years ago, farmers marketed only 15 per cent of their rice production. Today they market over 50 per cent.

• Increased competition: Numbers of traders have at least tripled since independence, increasing the intensity of competition at all levels. The largest rice market in Bangladesh, the Badamtoli wholesale market in Dhaka, opened with only 4 wholesalers in 1968. It now houses over 300. Meanwhile, rival wholesale markets have emerged in Mohammadpur, Savar and Nyarangang and throughout the Northwest. Direct dial telephones integrate these growing markets in a way unimagined 20 years ago. Over 20,000 rice mills now operate throughout Bangladesh. Formerly thin, fragmented rice markets are now highly competitive.

• Private stocks increase: Along with growing production, privately held grain stocks have increased. They have roughly tripled since the late 1960's. Private stocks now exceed those held in government godowns by about a factor of four. Farmers hold 75 per cent to 90 per cent of all private foodgrain stocks, while traders' stocks account for the remainder.

• Dampened price seasonality: The introduction of a winter rice crop has completely altered the annual pattern of price seasonality (Figure 2). Instead of a single price peak in September-October, before the Aman harvest, twin peaks have emerged, the second in April-May, before the Boro harvest. And the amplitude has diminished. In the early 1960's, the peak-to-trough price spreads were about 25 per cent. Today seasonal price increases lie closer to 10 or 15 per cent. Both the frequency and severity of seasonal price hikes is now greatly reduced.

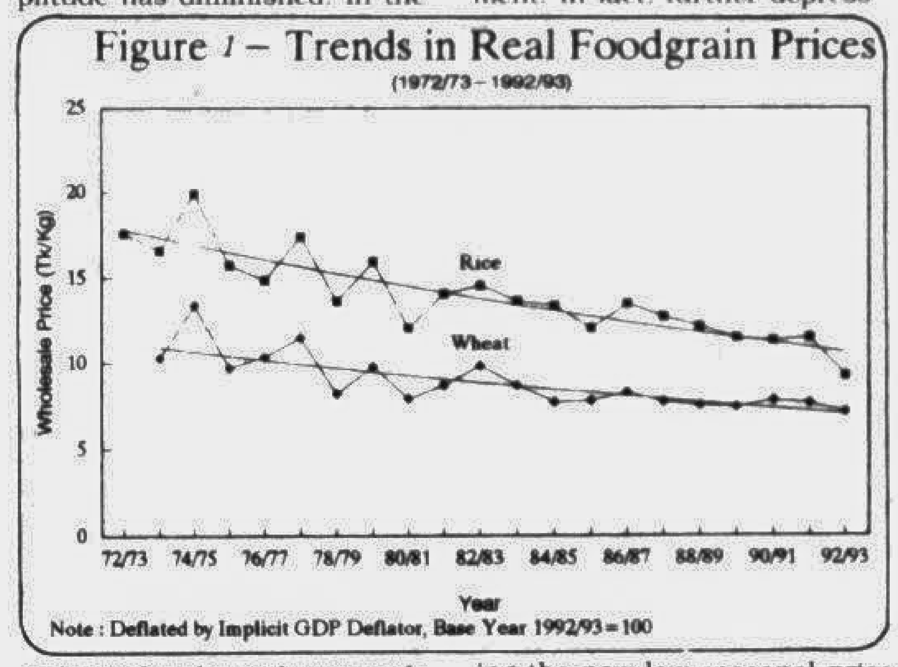

Figure 1 – Trends in Real Foodgrain Prices (1972/73 – 1992/93)

Note : Deflated by Implicit GDP Deflator, Base Year 1992/93 = 100

Consequences

For consumers, dampened price seasonality has diminished nutritional stress in the lean season. Falling foodgrain prices have increased real income, increased nutrient intakes and, sometimes modestly, sometimes more perceptibly, reduced poverty and undernutrition. Net purchasers of foodgrains include landless, urban poor and marginal farmers, altogether about 85 per cent of the country's population. The past one year, with it's 30 per cent fall in foodgrain prices, has brought the clearest signals yet of improved nutrition among this group. As a result of the recent price fall, between 10 and 15 million people have moved above the poverty line.

Farmers are both producers and consumers of rice. In fact, 70 per cent of all farm households are net purchasers of foodgrains. Mostly marginal and small farmers, they benefit from a falling rice price which reduces the cost of purchasing their family's supplementary requirements. Their consumption from own production likewise costs less, given their access to the new, more productive farm technology.

Large and medium farmers, who market the major foodgrain surpluses, and absentee landlords bear the brunt of falling rice prices. Lower rice prices diminish returns to their land and thus require a response, either a switch to more productive rice technology or diversification out of rice.

For government's food policy, these major changes in the private foodgrain marketing system lead clearly to a case for decreased government intervention.

• Security stocks: Rapidly growing private foodgrain stocks, mostly widely dispersed on-farm stocks, offer prospects for a substantial decrease in public security stocks.

• Price stabilization: Likewise, the advent of a large Boro harvest, and consequently reduced price seasonality, diminish the need for consumer protection through seasonal price dampening by government. In fact, further depressing the now-low seasonal price spreads may be counterproductive; it may merely squeeze out any remaining incentive for the private sector to hold stocks.

• Targeted relief: Decreased foodgrain prices have clearly eased hunger pangs of the poor. Yet at least 35 million hard-core poor still remain hungry. So government's mandate for poverty alleviation remains, albeit slightly diminished.

Evolving Food Policy

The changing structure of foodgrain production and marketing suggests that government's presence in food markets can decrease. Heavy fiscal pressure has motivated government to realize these economies by scaling down the size of the public food system. Consequently, Bangladesh's food policy has evolved gradually but perceptably over the past 15 years. The central themes of this policy evolution involve reduced consumer price subsidies, decreasing government intervention, and an expanded role for the private foodgrain trade.

The pace of policy change has accelerated noticeably in the past year and a half, since December 1991. The present round of reforms began then with the suspension of Palli Rationing, the largest and costiest ration channel in the PFDS, with measured leakage between 70% and 90%. The suspension of this costly and ineffective ration channel launched a series of adjustments that still continue, as government strives to re-balance a leaner, more efficient public good system. As part of these reforms, government has opened up international trade in foodgrains to private traders. Import is welcome, and export now actively encouraged. Government has abolished or drastically scaled back its largest and leakiest ration channels. They have correspondingly reduced procurement and thus substantially reduced their share of annual foodgrain purchases, from 10 per cent of domestic marketings in 1990 to 2 per cent in 1993. In addition, their method of procurement has changed substantially. Government has abandoned the old millgate contracting system and experimented, albeit cautiously, with market-based procurement pricing through tenders. They have introduced major management reforms at the DG Food and are in the process of reducing manpower there by about 25 per cent, from 11,500 to 8,500. Total savings from these reforms exceed 400 crore Taka per year. With some of these savings, government has launched a new Food for Education programme, targeted at the poor.

The Road not Taken

Though many despair at falling rice prices, they should not. Foodgrain prices have fallen for the right reason — because of an increasingly productive agriculture. Landless and other poor consumers have been the principal beneficiaries of the resulting steady decline in real foodgrain prices. But farmers are eating better too, as the new HYV technology roughly doubles their yields.

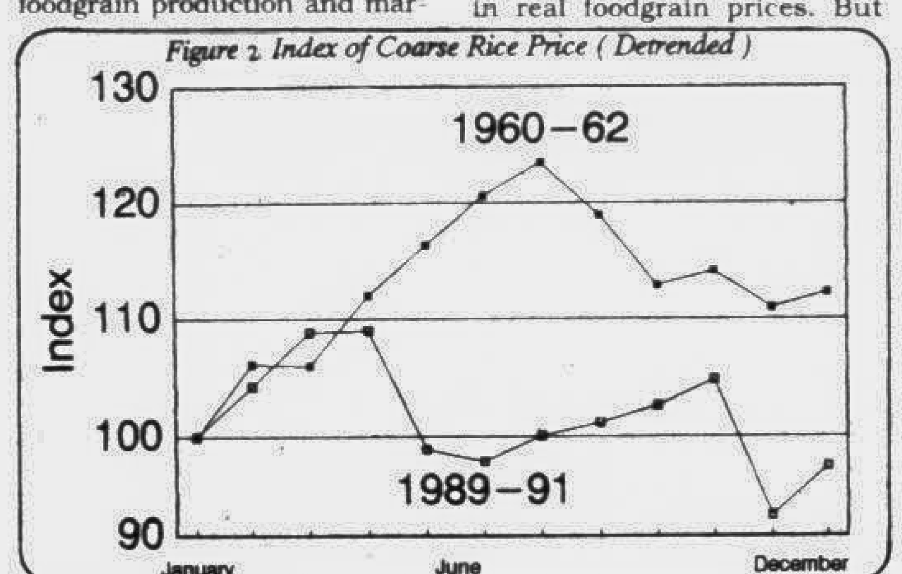

Figure 2. Index of Coarse Rice Price (Detrended)

Other countries have achieved temporarily low food prices through an alternate route, through heavy consumer price subsidies. But these ambitious programmes inevitably overwhelm public resources and require politically costly dismantling. Instead, Bangladesh has opted for the less costly, more sustainable, high productivity route to food security.

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Impacts of Falling Rice Price on Consumption and Nutrition of the Poor

by Akhter U. Ahmed

RICE accounts for about 40 per cent of all spending by low-income families in Bangladesh. Because of this, rice price is a powerful determinant of real income, consumption and nutrition of the poor.

How much did the rural poor benefit from the recent steep fall in rice price? To answer the question, this article compares the consumption and nutritional status of the same families between the lean season (September-October) of 1991 and the lean season of 1992, when rice price fell by 20 per cent. This comparison is based on detailed household data collected over that period by IFPRI researchers. These data provide direct weighed measurement of individual food intakes as well as physical measures of nutritional status.

Consumption

The survey findings suggest that welfare indicators other than consumption and nutrition, such landholdings and employment, were quite similar in the lean seasons over the one-year period. However, compared to 1991, the households paid about 20 per cent less price to purchase rice in 1992. This fall in rice price offered increased consumption opportunities to the poor families. They availed those opportunities by not only consuming about 38 per cent more rice, but also more high-protein foods, such as milk, meat and eggs. Moreover, these families increased their purchases of nonfood commodities, such as clothing, by 17 per cent.

The rural poor, however, drastically reduced their wheat consumption. Because rice is their preferred cereal, poor families responded to falling rice price by shifting from wheat to rice. Nevertheless, this decrease in wheat consumption was more than offset by the large increase in rice consumption, and the net effect was a 23 per cent increase in total foodgrain consumption.

Calories

The combined effect of the change in the food consumption patterns resulted in about 12 per cent increase in calorie intakes by the low-income families. Among the family members, children appears to have gained considerably more than the adults in percentage terms.

Nutritional Status

Data on physical measures of all family members provide the basis for comparing their nutritional well-being. The findings reveal that the gains in body-weight of the adults were only marginal between 1991 and 1992. The percentages of severely malnourished children (based on middle-upper arm circumference measures) suggest a modest decline in child malnutrition from 1991 to 1992. The findings of Helen Keller International (HKI) also show improvements in children nutritional status during the recent period of falling rice price.

Poverty

Finally, an attempt has been made here to estimate the changes in rural poverty incidence between 1991 and 1992 lean seasons. In most poverty analyses, a common poverty line is usually set on the basis of recommended daily caloric requirements of the population. The availability of data on individual calorie intakes and physical measures enabled the present analysis to estimate the poverty incidence more precisely by calculating each individual's actual caloric shortfall from his or her estimated requirement. The results suggest that poverty was alleviated quite significantly from 1991 to 1992. About 15 per cent of the low-income sample population moved above the poverty level. Using the entire IFPRI survey population that includes randomly drawn households from all income groups, an inference is made on the overall poverty situation in rural Bangladesh. The estimates indicate that this reduction in poverty roughly translates into about 10 per cent alleviation of rural poverty. That is, about 10 million rural population probably moved above the poverty line from 1991 to 1992 as a result of falling rice prices.

Conclusion

The recent sharp decline in rice price and its consequential benefits were most likely a temporary phenomenon.

Nevertheless, real foodgrain prices have declined steadily over the past two decades as input liberalization and investment in agricultural research have payed off in the form of major increases in per capita foodgrain output. The landless and other poor consumers have been the principal beneficiaries of declining real foodgrain prices.

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Changes in consumption and nutrition of low-income rural people

Indicators	Changes from 1991 to 1992 lean seasons
Rice price	— 19.6%
Food consumption	
Food grains	— 23.0%
Rice	— 37.9%
Wheat (atta)	— 68.3%
Dal	— 6.5%
Meat, milk and eggs	76.6%
Calorie intakes	
All family members	12.2%
Adults	10.2%
Children under five	19.7%
Nutritional status	
Body-weight of adult male	0.6%
Body-weight of adult female	0.8%
Undernourished children (MUAC < 125 MM)	— 2.2%
Poverty incidence	— 15.3%

Source: IFPRI, "Consumption and Nutrition Survey 1991/92," Bangladesh

Bangladesh hesitantly Enters the World Rice Market

by Rashed Mahmud Titumir

AGAINST the backdrop of increasing stock position and downward trend of price level of rice, the experts feel it necessary to expand market facility through export of rice to keep the supply of rice steady.

It is also revealed by a Bangladesh-Canada Agriculture Sector Team's latest study on 'Cereal Self-sufficiency and the Prospects for Rice Exports' that with the achievement of cereal self-sufficiency by 1995, as projected by the Ministry of Agriculture, Bangladesh might find itself with a long-term surplus, which would necessitate the export of rice.

However, the report remains skeptical, saying that current rice export markets are very thin and the prospects for exports in the immediate term do not look particularly promising.

Then, the report concludes in its 'export opportunities' chapter, "the current export parity price gap, depending on varieties, is closing and the prospects of export development should not be too quickly discounted".

Meanwhile, only fine variety of rice in a sample quantity was exported to Canada, USA, UK and Saudi Arabia.

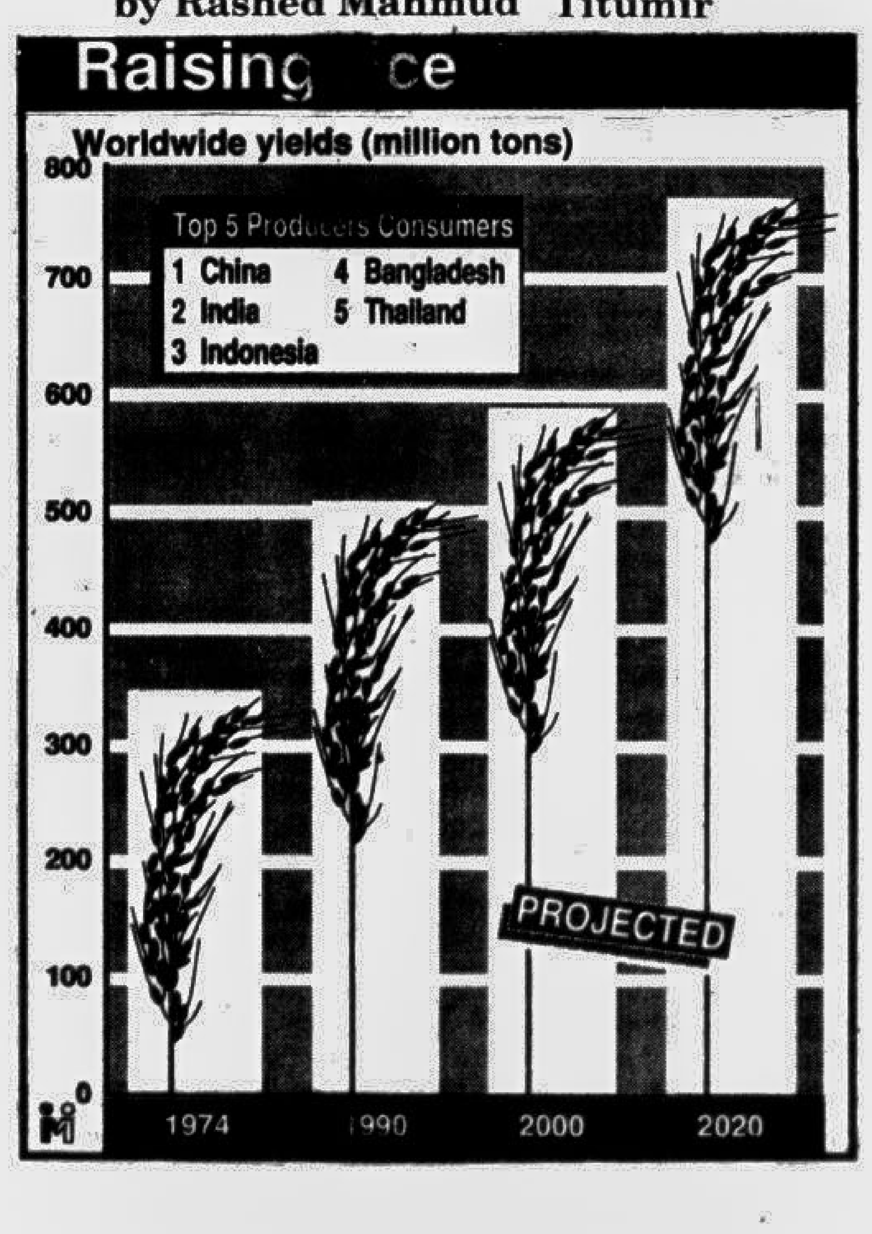
According to Dr Taufique Elahi Chowdhury, Food Secretary, a sizeable quantity involving 52 metric tons of fine variety rice was exported to USA by a private enterprise this year.

He also informed that an initial agreement was reached to export rice to Shri Lanka, Malaysia, Kuwait and Senegal through private entrepreneurs and the trading corporation of Bangladesh.

Recently the government has waived restriction on exporting all varieties of rice from Bangladesh, which was categorically banned in its earlier export policy (1991-1993).

Earlier, an inter-ministerial meeting to study the feasibility of export of rice expressed concern about the possible reaction of the different donor countries and agencies in the context of Bangladesh usually receiving 11 to 14 lakh tons of foodgrains yearly as food aid.

"If Bangladesh exports rice, under this circumstance, it will be a matter of concern whether the donor agencies will continue their regular help or discontinue".



The US officials in Dhaka, in an exclusive interview with The Daily Star categorically said that they would not stop the flow of food aid, rather they would supplement with other foodgrains, of which Bangladesh has a shortage.

When asked with the citation of the policy determination of the USAID, largest food aid donor, which says "AID does not intend to support production for agricultural commodities for export that are likely to have a significant impact on competing US exports", the USAID officials at Dhaka said "we will encourage it, but this is commonsense, we cannot support the entrepreneurs, who are exporting rice."

To explore the possibilities of exporting rice, the Ministry of Food has set up an Export Cell. A total of 34 countries covering the USA, the EC, Africa, Asia, and Australia were approached by the cell of its operation during the past one year, where samples of three major varieties of rice have been sent.

Meanwhile, several entrepreneurs listed with the cell are either general exporters who have understandings of international trade or the rice-millers.

However, it is reported, that the traditional foodgrain traders showed little interests as they have neither experience of international trader nor have institutional capabilities to compete in the international market.

The prospective export market for Bangladesh, according to "Feasibility of Export of Rice by Bangladesh" prepared by M Nurun Nabi Chowdhury and M Abdul Aziz, are 'Asia (including former Soviet Union) and Africa'.

"Export from November-July period will be a good option for Bangladesh when possibility of an increase in rice production is higher in the short run via higher supply elasticity of boro rice".

To protect the reasonable price of rice and maintain a constant production of rice expansion of market is essential.

The sample export has created much optimism, but that has remained confined within the fine varieties, which are an insignificant amount of the total rice output. Some researchers have, however, kept their finger crossed about the prospect because the major varieties — the coarse ones are hardly expected to enjoy a good international market.