

**FOOD POLICY AND FOOD SECURITY
IN BANGLADESH :
MOVING FORWARD AFTER THE 1998 FLOOD**

**Proceedings of the
Second Annual FMRSP Workshop**

Editors

Dr. Paul A. Dorosh
Chief of Party, FMRSP-IFPRI

Dr. Quazi Shahabuddin
Research Director, BIDS

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Ministry of Food, Government of the People's Republic of Bangladesh

International Food Policy Research Institute

House # 9A, Road # 15 (New), Dhanmondi R/A
Dhaka – 1209, Bangladesh

Telephone : (88 02) 8123763, 8123765, 8123793, 8123794

Fax : (88 02) 9119206

Email : fmrsp1@citechco.net

Web : <http://www.citechco.net/ifpri>

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ABBREVIATIONS

<i>Bangladesh Agricultural Development Corporation</i>	<i>BADC</i>
<i>Bangladesh Agricultural University</i>	<i>BAU</i>
<i>Bangladesh Institute of Development Studies</i>	<i>BIDS</i>
<i>Bank Performance Guarantee</i>	<i>BPG</i>
<i>Cost and Freight</i>	<i>C&F</i>
<i>Centre for Monitoring Indian Economy</i>	<i>CMIE</i>
<i>Central Supply Depot</i>	<i>CSD</i>
<i>Fair Average Quality</i>	<i>FAQ</i>
<i>Food Cooperation of India</i>	<i>FCI</i>
<i>Food for Education</i>	<i>FFE</i>
<i>Food for Work</i>	<i>FFW</i>
<i>Free on Board</i>	<i>FOB</i>
<i>Food Planning and Monitoring Unit</i>	<i>FPMU</i>
<i>Gross Domestic Product</i>	<i>GDP</i>
<i>Gratuitous Relief</i>	<i>GR</i>
<i>High Yielding Variety</i>	<i>HYV</i>
<i>Letter of Credit</i>	<i>LC</i>
<i>Local Storage Depot</i>	<i>LSD</i>
<i>Metric Ton</i>	<i>MT</i>
<i>Non Government Organization</i>	<i>NGO</i>
<i>No Objection Certificate</i>	<i>NOC</i>
<i>Open Market Sales</i>	<i>OMS</i>
<i>Public Distribution System</i>	<i>PDS</i>
<i>Public Foodgrain Distribution System</i>	<i>PFDS</i>
<i>Union Parishad</i>	<i>UP</i>
<i>United States Agency for International Development</i>	<i>USAID</i>
<i>United States Department of Agriculture</i>	<i>USDA</i>
<i>Vulnerable Group Development</i>	<i>VGD</i>
<i>Vulnerable Group Feeding</i>	<i>VGf</i>
<i>World Trade Organization</i>	<i>WTO</i>

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ACKNOWLEDGEMENTS

A large number of people contributed to the research, the discussions and the logistical arrangements for the Second Annual FMRSP workshop. Many of these people are acknowledged in the individual papers presented. We nonetheless, feel it is important to thank those who made additional contributions to the workshop, itself.

First, we wish to thank the Honourable Minister of Agriculture, Begum Motia Chowdhury, (who was also Minister of Food at the time of the workshop) for presenting the keynote address at the inaugural session of the workshop. We also thank the Secretary of Food, Mr. Mahbub Kabir, for his active participation throughout much of the workshop as a speaker in the inaugural session, as chairman of the fourth session, as a panelist in the final session, and for taking the time to attend some of the other sessions. Most of all, we want to express our gratitude for his support of the Food Management and Research Support Project throughout the past two years.

Others took on multiple roles as well. Mr. Abu Abdullah, Director General of the Bangladesh Institute of Development Studies (BIDS) spoke in the inaugural session and chaired the panel discussion. Dr. David Sprague, Leader, Economic Growth and Agricultural Development Team, USAID, spoke in the inaugural session and participated in the panel discussion. Dr. Werner Kiene, Director of the World Food Programme (WFP) in Bangladesh served as a chairman and as a panelist.

Special thanks are also due to the other session chairmen: Professor Wahiduddin Mahmud, University of Dhaka; Mr. Nurul Afsar, Director General of the Directorate General of Food; and Professor Abdul Bayes, Jahangirnagar University, who graciously agreed to moderate the discussion during the second session. The designated discussants of the sessions likewise contributed much to the sessions with thoughtful comments on the papers: Professor M. Ismail Hossain, Jahangirnagar University; Dr. M.K. Mujeri, Visiting Fellow, BIDS; Mr. K.M. Layek

Ali, General Secretary, North Bengal Rice Mills Association and Dr. Sajjad Zohir, Senior Research Fellow, BIDS.

We will not separately acknowledge the individual researchers who wrote papers for the workshop, except for Dr. Carlo del Ninno, FMRSP, who played a major role in planning and logistics, in addition to co-authoring two of the papers presented. Thanks are also due to the staff of FMRSP-IFPRI who handled the logistical arrangements for the workshop, especially Anarul Kabir and Amzad Hossain (who also worked as research assistants), Golam Rabbani, Aminul Islam Khandaker and Waheeda Ali Luna. Md. Samsuddin Sumon deserves special recognition for overseeing the power point presentations, the final edits of the papers and the production of these proceedings. Mr. Abdullah-Al-Amin also assisted with final edits of the manuscript.

Finally, we gratefully acknowledge the contributions of Mr. Abdul Aziz, the FMRSP Project Director, in the administration of the project and we thank USAID for their financial support.

FOREWARD

The flood that covered much of Bangladesh from July through September 1998 threatened the food security of tens of millions of people. Because of the flood, rice output fell 2.1 million MTs short of the target for aus and aman, combined. Nonetheless, as is described in some of the papers presented in the Second Annual FMRSP Workshop, "Food Policy and Food Security in Bangladesh: Moving Forward After the 1998 Flood", private sector imports, food aid and targeted foodgrain distribution combined to avert a potential food crisis.

Lessons from the experience of the 1998 flood thus provided one of the central themes of the workshop. The first two sessions of the conference focused on issues related closely to the 1998 flood. The first session, "Implications of Rice Imports from India for Bangladesh Food Security", focused on the rice import trade that was so crucial for supplementing domestic supply and stabilizing prices after the flood. "Trade Liberalization and Food Security in Bangladesh: The Role of Private Sector Imports from India" by Dr. Paul A. Dorosh described how the private sector rice trade stabilized domestic prices at levels equal to import parity price of rice imported from India. Professor S.R. Osmani's paper, "Aspects of India's Food Economy and Their Implications for Rice Trade Between India and Bangladesh" discussed a number of factors, including comparative advantage, agricultural investments, consumption trends and political economy considerations, and concluded that India was likely to continue to be a rice exporter in the medium-term. Dr. K.A.S. Murshid's paper, "Liberalization and Foodgrain Imports: The Evolution and Conduct of the Border Trade with India" presented data from a survey of rice importers, shedding light on the structure and conduct of the Bangladesh-India rice trade.

The second session, "The 1998 Flood, Government Policy and Rural Food Security" focused specifically on the actions taken by the Ministry of Food in response to the flood and on the impact of the flood on rural households. "Foodgrain markets and Policy in the Aftermath of the 1998 Flood", by Paul A. Dorosh, described government policy and presented data on the magnitudes of government distribution, food aid and private imports. "Impact of the 1998 Flood: Results of a Rapid Appraisal Survey" by Dr. Carlo del Ninno and Dr. Dilip K. Roy, presented community-level survey results on flood damage, household behavior and labor markets from October 1998, just after the flood waters had receded. "The 1998 Flood and Household Food Security: Evidence from Rural Bangladesh", also by Dr. Carlo del Ninno and Dr. Dilip K. Roy, analyzed household survey data from seven flood-affected thanas, presenting data on household expenditures, transfers received and severity of exposure to the flood.

The severity of the 1998 flood and the lessons to be learned from the Ministry of Food's successful management of the domestic production shortfall and emergency food needs of flood-affected households more than justifies the focus on the flood in the first two sessions. But food markets and the food situation can change rapidly in Bangladesh, as evidenced by the sizeable decline in rice prices following a record boro rice harvest in mid-1999. So this workshop did not focus only on the flood period, but on other key aspects of food policy in Bangladesh, as well. In her speech, the Honourable Minister of Agriculture (and at the time of the workshop, Minister of Food as well), Begum Motia Chowdhury touched on a number of important issues, including targeting of foodgrain distribution, food aid levels and the need to support domestic production. The third and fourth sessions, along with the panel discussion that concluded the workshop, thus covered other food policy issues, including domestic and international procurement, maize production and markets, and options for price stabilization.

Two of the papers in the third session, "Foodgrain Production and Operational Aspects of Public Market Interventions" discussed procurement issues. "Domestic Rice Procurement

Programme in Bangladesh: An Evaluation”, by Dr. Quazi Shahabuddin and Dr. K. M. Nabiul Islam, presented results of a survey of farmers, traders and government officials in analyzing domestic procurement following the 1997/98 boro harvest. Mr. Mahfoozur Rahman’s paper, “A Review of International and Local Tenders for Procurement of Rice and Wheat”, included recommendations for improvements in the performance of the Ministry of Food’s international rice tenders, particularly related to performance guarantees and the granting of extensions. The third paper of the session, “Maize Production and Marketing in Bangladesh: An Indicative Exercise”, by Dr. M.A. Quasem, discussed the results of a survey of maize farmers and traders carried out in early 1999.

The fourth session, “National Food Security Policy Options”, began with a presentation of the Food Planning and Monitoring Unit’s “Current Food Situation Report” by Mr. Ruhul Amin. Dr. Paul A. Dorosh and Dr. Quazi Shahabuddin then presented their paper, “Price Stabilization and Trade Policies for Enhancing National Food Security”, which discussed the degree of rice price instability in domestic and international markets and government price stabilization mechanisms. This paper pointed out the high costs of fixed price domestic procurement several times in recent years when the procurement price was set above the market price.

Finally, in the panel discussion, “Bangladesh Food Security: The Way Forward”, Dr. David Sprague (USAID), Dr. Quazi Shahabuddin (BIDS), Dr. Werner Kiene (WFP), Secretary of Food, Mr. Mahbub Kabir, and the chairman, Mr. Abu Abdullah (BIDS) discussed various topics including USAID’s views on food aid and food policy, the need for increased food production and rural income growth to achieve food security in Bangladesh, the importance of nutrition and utilization aspects of food security, and the roles of the private sector and the government in food markets.

We should note that in most cases, the sections in these proceedings covering the discussions in each session and the panel discussion are only summaries of what was presented.

We have tried to record the essence of the comments, questions and responses, not to preserve word-for-word transcripts.

It is the hope of the editors, and we believe, all the participants in the workshop, that the research papers presented and the deliberations that took place would be helpful to the Government of Bangladesh, donors, NGO's and others in their policies and programs to increase the food security of the approximately 60 million people of Bangladesh who lack sufficient entitlements to consume an adequate diet for healthy lives.

Dr. Paul A. Dorosh, Chief of Party, FMRSP-IFPRI

and Dr. Quazi Shahabuddin, Research Director, BIDS

Co-editors

1X-11

WORKSHOP SCHEDULE

Second Annual FMRSP Workshop

FOOD POLICY AND FOOD SECURITY IN BANGLADESH: MOVING FORWARD AFTER THE 1998 FLOOD

Venue : Conference Room, IDB Bhaban, Sher-e-Bangla Nagar, Dhaka

Date : October 18-19, 1999

Day One 18 October, 1999

OPENING SESSION

9:00 AM : Registration
9:30 AM : Inaugural Session
11:15 AM : Tea Break

SESSION – I **IMPLICATIONS OF RICE IMPORTS FROM INDIA FOR BANGLADESH FOOD SECURITY**

Chairperson : Prof. Wahiduddin Mahmud, Department of Economics, University of Dhaka

Discussant : Prof. Ismail Hossain, Jahangirnagar University, Savar, Dhaka

Presentations

11:30 AM	Trade Liberalization and Food Security in Bangladesh: The Role of Private Sector Imports	Dr. Paul A. Dorosh, Chief of Party, FMRSP-IFPRI, Dhaka
11:50 AM	Aspects of India's Food Economy and Their Implications for Rice Trade Between India and Bangladesh	Prof. S. R. Osmani, Ulster University, United Kingdom (Paper presented by Dr. Paul A. Dorosh)
12:00 PM	Liberalization and Foodgrain Imports: The Evolution and Conduct of the Border Trade with India	Dr. K.A.S. Murshid, Research Director, BIDS

12:30 PM **Open Floor Discussion**

1:00 PM **Lunch Break**

SESSION – II **THE 1998 FLOOD, GOVERNMENT POLICY AND RURAL FOOD SECURITY**

Chairperson : Dr. Werner Kiene, Country Representative, WFP, Dhaka

Discussant : Dr. M. K. Mujeri, Visiting Fellow, BIDS

Presentations

2:00 PM	Foodgrain Markets and Policy in the Aftermath of the 1998 Flood	Dr. Paul A. Dorosh
2:20 PM	Impact of the 1998 Flood : Results of a Rapid Appraisal Survey	Dr. Carlo del Ninno, Consumption Economist, FMRSP-IFPRI and Dr. Dilip K. Roy, Research Fellow, BIDS
2:40 PM	Tea Break	
3:00 PM	The 1998 Flood and Household Food Security: Evidence from Rural Bangladesh	Dr. Carlo del Ninno and Dr. Dilip K. Roy
3:30 PM	Open Floor Discussion	

Day Two 19 October, 1999**SESSION – III****FOODGRAIN PRODUCTION AND OPERATIONAL ASPECTS OF PUBLIC MARKET INTERVENTIONS**

Chairperson : Mr. A. K. M. Nurul Afsar, Director General of Food, Ministry of Food

Discussant : Mr. K. M. Layek Ali, General Secretary, North Bengal Rice Mills Association Federation

Presentations

9:00 AM	Domestic Rice Procurement Programme in Bangladesh- An Evaluation	Dr. Quazi Shahabuddin, Research Director, BIDS and Dr. K. M. Nabiul Islam, Research Fellow, BIDS
9:45 AM	A Review of International and Local Tenders for Procurement of Rice and Wheat	Mr. Mahfoozur Rahman, Program Officer/ Researcher, FMRSP-IFPRI
10:15 AM	Maize Production and Marketing in Bangladesh: An Indicative Exercise	Dr. M. A. Quasem, Senior Research Fellow, BIDS
11:15 AM	Tea Break	
11:30 AM	Open Floor Discussion	
12:30 PM	Lunch Break	

SESSION – IV**NATIONAL FOOD SECURITY POLICY OPTIONS**

Chairperson : Mr. Mahbub Kabir, Secretary, Ministry of Food

Discussant : Dr. Sajjad Zohir, Senior Research Fellow, BIDS

Presentations

1:30 PM	Current Food Situation Report	Mr. Ruhul Amin, Director (Research), FPMU, Ministry of Food
1:50 PM	Price Stabilization and Trade Policies for Enhancing National Food Security	Dr. Paul A. Dorosh, Chief of Party, FMRSP-IFPRI and Dr. Quazi Shahabuddin, Research Director, BIDS
2:20 PM	Open Floor Discussion	
2:45 PM	Tea Break	

3:00 PM

SESSION – V**PANEL DISCUSSION : BANGLADESH FOOD SECURITY: THE WAY FORWARD**

Chairperson : Mr. Abu Abdullah, Director General, BIDS

- Panelists :
1. Mr. Mahbub Kabir, Secretary, Ministry of Food
 2. Dr. David Sprague, Leader, Economic Growth and Agricultural Development Team, USAID, Dhaka
 3. Dr. Quazi Shahabuddin, Research Director, BIDS
 4. Dr. Werner Kiene, Country Representative, WFP, Dhaka

5:00 PM

CLOSING OF THE SESSION AND THE WORKSHOP

X1-A

OPENING SESSION

KEYNOTE ADDRESS BY THE HONOURABLE MINISTER FOR FOOD AND AGRICULTURE, BEGUM MOTIA CHOWDHURY

(Note: the following is an English summary of the speech given in Bangla)

[The Honourable Minister began with greetings to the participants and guests at the workshop, and then expressed her appreciation to the FMRSP team for its analytical support in coping with the food situation, following the shortfall of aman production due to drought in 1997 and the devastating flood of 1998.]

Government actions in the aftermath of the 1998 flood were highly effective. By the grace of the Almighty we have succeeded in overcoming the challenge of a very severe flood. We thank the national and international organizations and donor agencies for their assistance and sympathy to face such a severe natural disaster. We also thank the people of Bangladesh for their struggle and their patience under very difficult circumstances.

The government undertook appropriate relief activities following the flood, and market prices for foodgrain were stable. The government handled the flood situation very efficiently and no one died of hunger. Our government has established the voting rights of the people and is now striving to maintain food security of the common people. Bangladesh is an agricultural country and agriculture is the primary livelihood of the people, so the government gives highest priority to the agricultural sector. We have formulated the national agricultural policy under which the government will undertake various measures to boost domestic food production and maintain the interests of both producers (farmers) and consumers.

Food is one of the most sensitive items: any problems relating to food can cause major problems for the government. The government is aware of the importance of food issues and it handles all kinds of food distribution with care. To ensure smooth operation of the food distribution system, the government is keeping a substantial amount of food stocks. International agencies suggest that the government should maintain smaller food stocks because world and domestic markets are operating effectively; large stocks of foodgrain are unnecessary. They

argue that shortages in any one country can be immediately met by other countries since transportation facilities are now highly developed. But in a developing country like Bangladesh there is always a need to maintain a substantial amount of foodgrain stock to cope with natural disasters. Because the Government of Bangladesh had a substantial amount of foodgrain in stock at the onset of the 1998 flood, it was able to handle the situation effectively. Food is a basic necessity of the people. Any problem relating to food distribution and its availability can create serious problems and even cause the government to fall. So, my government always tries to keep a substantial amount of food stock as a precautionary measure to cope with any immediate problems, arising out of natural disasters.

Consider what happened in 1997/98, when because of a hidden draught during the aman season, grain formation was affected and production estimates fell by 1.2 million MTs. The newspapers reported unprecedented production shortfalls in the northern region. Generally in December, which is peak harvest time in Bangladesh, food prices do not increase because farmers have sufficient stocks of food. But in that year, prices started increasing at the end of December, and in January they reached Tk. 12 to 13 per kilogram. In the month of Ramadan, we had to start OMS. However, at that time, according to donor recommendations our stock was only 7 lakh MTs, and that was insufficient to prevent price increases. The traders took advantage of the situation because government stocks were equal to only the donors' so-called "ideal stock" level.

We had difficulties procuring food domestically in early 1998 because of the poor aman harvest. Ultimately, we floated tenders, imported rice, and initiated the open market sales (OMS). These months were an anxious time for us. We were running OMS, but VGF had not started due to the shortage of stock. In Dhaka city, 50 OMS centers were opened in the first week; later the number was increased to 250 centers.

We had the opportunity to increase the stock in June and July, as the 1998 boro production was good, so availability of foodgrain was not a problem during the 1998 flood. This made it easier to run the public distribution system properly. Our government performed commendably during the flood. Though poor people were not able to consume their usual amounts of food, no

one died because of a shortage of food. Yet, the foreign media anticipated deaths of thousands of people by hunger and starvation. The present government, under the leadership of Prime Minister Shaikh Hasina, took many positive steps during the flood, including increased public sector imports, encouraging private sector imports and expanding the Vulnerable Group Feeding (VGF) Program to supply food free of cost to 4.2 million poor families in the country. These steps succeeded in averting the predicted thousands of deaths and preventing migration of the rural destitute to the cities.

The people of Bangladesh are not alone; their government is always with them. Our government is a government by the people and to maintain the interest of the people is the first task of the government. Our government is doing many things for the welfare of the farmers. This fiscal year, the government will disburse Tk. 3700 crore as agricultural loans, Tk. 326 crore higher than the actual disbursement of last fiscal year. The recovery rate of these loans is satisfactory. During the last fiscal year (1998-99), Tk. 1996 crore were repaid out of Tk. 3005 crore disbursed as agricultural loans.

I do not agree that agricultural subsidies should be removed. Bangladesh's current level of support to agriculture is below the stipulated minimum set in the WTO agreement, so there is no need to reduce subsidies. Agricultural subsidies in other developing countries, and in many developed countries, are very large. When the fertilizer subsidy was withdrawn during the regime of the earlier Government, many farmers were unable to find fertilizer at a fair price. Bangladesh farmers face many problems: shortage of incomes, uneven flow of income and over dependence on the weather. Government should support these farmers with subsidies. We must make sure, however, that the marginal and the poor farmers are the beneficiaries of the subsidy.

Many donors are urging Bangladesh to reduce government support to agricultural production. But neighboring countries are subsidizing their agriculture, and unilateral reduction of subsidies by Bangladesh will reduce our farmers' ability to compete with those of the neighboring countries. We have seen that Bangladesh can contain food price increases through imports, but we cannot avoid price falls through exports, even when our price is competitive with international prices. This is because food aid donors often raise the question of whether they

should continue to provide food aid when Bangladesh is trying to export. Yet donors are still willing to supply food aid to countries like Pakistan, China and India, which export foodgrain.

Regarding food distribution, the present government has expanded the VGF program to cover 4.2 million poor families. There have been some problems, though. Most important, there is sometimes malpractice by the Union Parishad chairman and members in issuing VGF cards, so that in some cases those who are actually poor are not getting assistance. In other cases, cardholders are not getting the specified amount. The level of aid in support of this program so far is not sufficient to fund enough income-generating programs for the poor. These programs can help increase the food security of the poor, without making them dependent on aid.

At the time of the flood, the government increased the coverage of the VGF program to 20 kgs of foodgrain per cardholder. (The WFP had suggested giving 30 kgs per card.) Despite some weaknesses, the program is running well. Monitoring is very important, though. For example, during the 1974 famine, (which was caused to a large extent by problems with the foodgrain distribution system and low government stocks), only a few people died, but the newspapers exaggerated the events, bringing all sorts of problems for the government. The government is still bearing the burden of those incidents. So we are cautious about any sort of malpractice in the VGF programs. I have directed that personnel involved in any kind of misuse of VGF cards should be punished. In the future, our government plans to cover more and more distressed people under the VGF program.

To make the VGF and VGD programs a success, suppose there are nine wards and we have to decide how many people will get cards. We could make a list of the vulnerable people in each ward, then calculate the number of old men and women, number of divorced women and the number of landless people who have three or more children. Then we could select participants by lottery. If we select card holders in this manner, then no one will question the process. The card holders will get food, and the other vulnerable people can be helped through another channel.

I think the coverage of the VGF and VGD programs are not yet at a satisfactory level and that they are not yet meeting their objectives for capacity building. Though the government organizations and NGOs are claiming great success of these programs, they have not yet achieved their objectives. If these programs had reached their targets, then poverty would have

declined rapidly. Even with micro-credit programs, that I like very much, none of the recipients was able to break the poverty circle within the last 15 years, according to BIDS and other studies. Moreover, within the time frame of the program, if floods, river bank erosion or cyclones occur, then the participants again return to poverty. So I advise those who are advocating micro-credit and VGD programs, that they consider the effects of disasters. Otherwise these programs will not be successful.

As a Minister, I would like to mention another point. The attitude of our food aid donors should change. FAO is giving priority to the "right to food". On the other hand, other donors are saying that they do not understand "right to food", but only "right to market". I think this is not correct. If we fail to develop the capacity of the common people and if a large number of people live below the poverty line and remain without food, then lawlessness and social disorder will exist in the society. The market mechanism will not work in such a situation. This situation leads to market failures and gives rise to a black market. So I would like to ask the donor agencies: Do you want a black market economy or a market economy? Do you want a black market world economy or an open world economy? Since this is a workshop, it is appropriate to express these views here. These views are not meant to insult anyone, but these problems must be addressed in this type of workshop. We have to reassess these problems and we have to solve these problems.

Now it is necessary to mention that if you are reducing your own subsidies, take some of the money being saved and give it to the poor countries. If these countries fail to build up their capacity and fail to strengthen their economies, then your market will not be sustained. Where will you sell your products? So, to sell your products, use these savings for the development of poor countries. It seems that, along with food aid, the volume of other aid, like project aid, commodity aid and technical assistance, is also declining. On the one hand aid is shrinking, and on the other hand you are trying to expand your markets. This is unlikely to work. This shortsighted policy could lead to worldwide recessions in the future. So, I urge a balanced approach, a balanced view, and a balanced attitude to achieve a prosperous world for both poor and rich countries.

ABSTRACTS OF THE PAPER PRESENTED

SESSION I

**IMPLICATIONS OF RICE IMPORTS FROM INDIA FOR
BANGLADESH FOOD SECURITY**

TRADE LIBERALIZATION AND FOOD SECURITY IN BANGLADESH: THE ROLE OF THE PRIVATE SECTOR

— Dr. Paul A. Dorosh

Since the liberalization of the rice trade in early 1994, private rice imports have made a major contribution to national food security in Bangladesh. Following major production shortfalls in late 1998 and again in the second half of 1999, Bangladesh domestic rice prices rose rapidly to levels equal to import parity with India, providing the financial incentives for several million metric tons of rice imports. By encouraging this trade, the Government of Bangladesh was able to augment domestic rice supplies quickly and stabilize market prices. This paper examines the implications of private sector imports for Bangladesh food security, outlining trade policies in Bangladesh and India, analyzing recent episodes of large-scale imports, and exploring issues related to reliability of the Indian rice market as a source of supply.

THE RICE ECONOMIES OF BANGLADESH AND INDIA

The rice economy of Bangladesh shares much in common with that of India, particularly the eastern states of West Bengal, Bihar, Orissa and Andhra Pradesh. At a national level, however, rice plays a more dominant role in the food system of Bangladesh than it does in India, with rice accounting for 72.8 percent of calories consumed in Bangladesh, but only 33.3 percent of calories consumed in India. Nonetheless, given the nearly eight-fold difference in population between the two countries (966 million people in India compared with 125 million people in Bangladesh in 1996/97), total rice consumption in India is 4.3 times greater than in Bangladesh.

India's external trade in non-basmati rice up until the mid-1990s was small, and generally limited to public sector exports or imports. Private sector exports were liberalized in India in October 1994, though still subject to export quotas. Non-basmati rice exports surged to 4.54 million MTs in 1995-96, and averaged 3.17 million MTs per year from 1995-96 to 1998-99. Bangladesh was the leading importer in this period, with 26.4 percent of the total value of non-basmati exports; Africa's total share was 27 percent. Bangladesh, in contrast, has been a

consistent net importer of rice throughout the last two decades. In the 1980s, rice imports by the public sector averaged 266 thousand MTs per year. During the 1990s, rice imports fell to an average of 133 thousand MTs. As a result of the trade liberalization in India, a depreciation of the rupee, and lower transport costs, India replaced Thailand as the major source of Bangladesh rice imports.

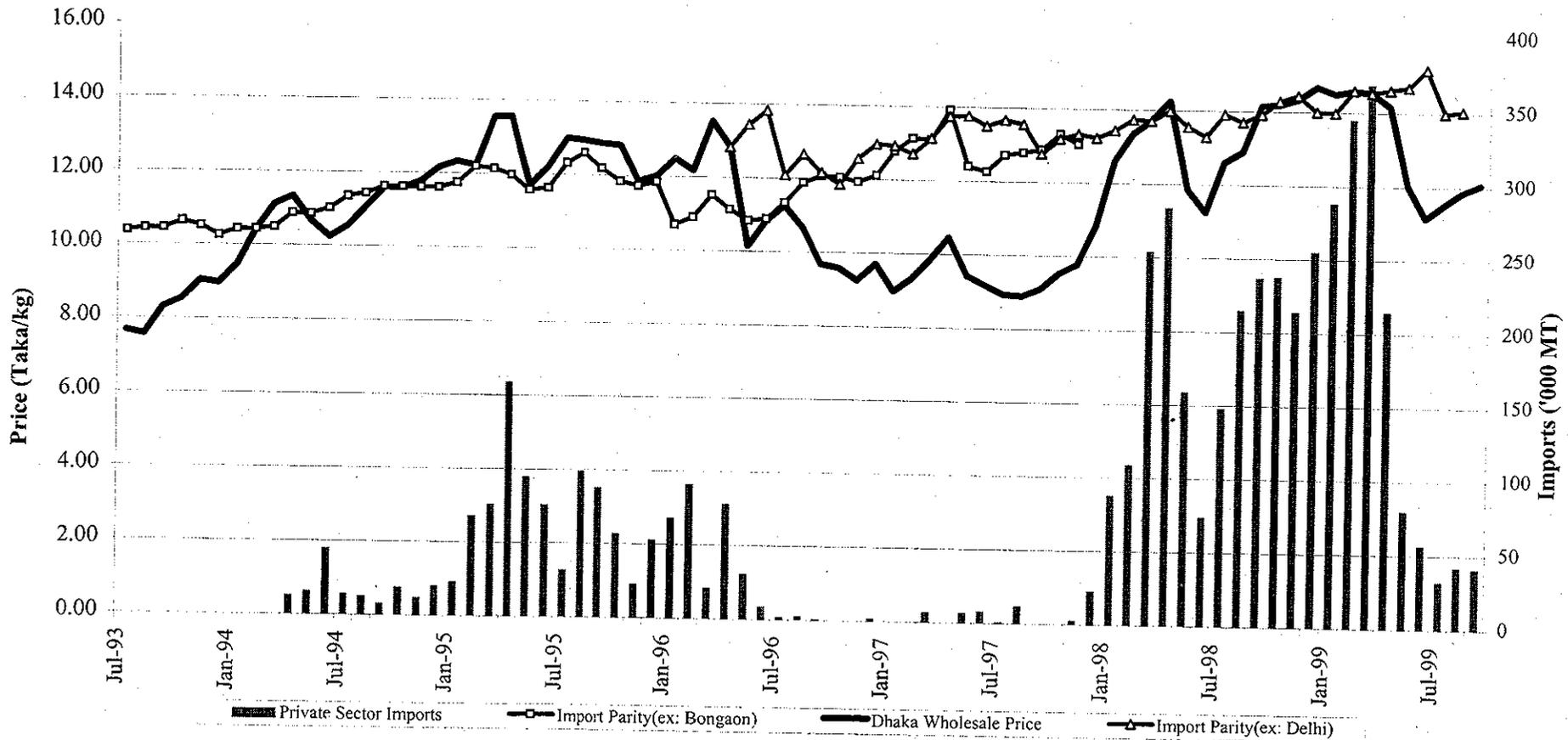
RICE TRADE BETWEEN INDIA AND BANGLADESH

Following the liberalization of private rice imports in Bangladesh in early 1994 and India's trade liberalization later that year, Bangladesh imported substantial quantities of rice from India during three separate periods of rice shortage: 1994-95, 1997-98, and following the 1998 flood. During a period of three successive poor harvests in Bangladesh, there was a substantial excess of demand over supply at import parity prices. As a result, 1.127 million metric tons, (an average of 66 thousand metric tons per month), were imported by the private sector, in addition to 704 thousand metric tons imported by the government.

Rice flows between the two countries came nearly to a halt in 1996 and 1997, however, as favorable weather and stable input supplies helped boost rice production and drop domestic market prices below import parity levels (Figure 1). But, following another poor aman rice harvest in Bangladesh in November/ December, 1997 rice prices rose sharply, and within two months of the start of the aman harvest, again reached import parity levels. Given the price incentives for imports and the large gap between domestic supply and demand, 917,000 MTs of rice were imported by the private sector through official channels from December 1997 to May 1998.

A good boro rice harvest in May 1998 brought a sharp decline in rice imports from India as prices dropped below import parity. But from July through September, floods in Bangladesh caused extensive damage to the aus and aman rice crops. As the Government of Bangladesh continued its policy of encouraging private sector imports, the private sector imported more than 200 thousand MTs of rice per month from August 1998 to March 1999.

Figure 1 — Rice Prices and Quantity of Private Imports in Bangladesh, 1993-99



Note : Price data for September 1999 is up to the second week only; private sector imports are as of 14th September, 1999. From November 1998, the carrying cost has increased by 1.1 Tk/kg to 4.1 Tk/kg.

Source : Dorosh (1999), calculated using data from FPMU, CMIE (1998,1999) and Baulch, Das et. al, (1998).

Thus, because of the poor 1997/98 aman harvest and the flood-damaged aus and aman harvests in 1998/99, Bangladesh rice prices (wholesale Dhaka) remained close to ex: India import parity prices for most of calendar year 1998. Wholesale prices after the flood were in fact remarkably stable. The national average wholesale prices of coarse rice remained in the range of 14.14 to 14.83 Tk/kg from September 1998 through mid-April 1999.

The volume of Bangladesh rice imports from India is somewhat uncertain. Bangladesh customs data indicate that 3.172 million MTs of rice were imported from India from April 1998 through March 1999, 2.827 million MTs (89.1 percent) by the private sector. Indian data on the quantity of rice exports, estimated using actual data and a value of trade between the two countries divided by the average prices of Indian world-wide exports, is only 2.215 million MTs, 958 thousand MTs (30.2 percent) less than the Bangladesh customs figures. The data for 1997-98 are similar: the calculated volume of India's rice exports to Bangladesh is 384 thousand MTs, 24.7 percent less than the figure from Bangladesh customs. Possible explanations include false declarations at customs (to avoid high tariffs on other commodities, such as cement, fruit and spices), capital flight from Bangladesh, or simply reporting mistakes in one or both countries.

Comparisons of calculated rice availability and movements in market prices in Bangladesh give another indication that the official data on the volume of rice imports from India may be overstated. Given the sharp increase in average real prices of rice in Bangladesh following the poor aman rice harvest in December 1997 and the floods in mid-1998, estimated per capita demand from December 1997 through May 1999 was 3.8 to 4.4 percent less than in 1996-97. Total demand was less than apparent availability by an estimated 2.169 million MTs over the eighteen-month period. A change in private stocks of this magnitude seems highly unlikely, given that the periods are defined to end just before major harvests. More likely is a combination of overestimates of production and imports, (the 1.083 million MT total discrepancy between Bangladesh import and Indian export data is equal to almost exactly half of the difference in estimated consumption and total availability).

PRIVATE IMPORTS AND FOOD SECURITY: IMPLICATIONS OF TRADE WITH INDIA

If rice imports from India had not been available, the next lowest cost source for private importers would have been Thailand. In the December 1997 through November 1998 period, the import parity price of 15 percent broken rice ex: Thailand in Dhaka was 16.1 Tk/kg, 20.9 percent higher than actual prices. At these higher prices, estimated rice demand would have fallen by between 4.2 and 6.3 percent, assuming an own-price elasticity of rice demand of -0.2 to -0.3 , and rice imports would have declined by approximately 700 thousand to 1 million MTs.

Similarly, if private sector imports were unavailable (or banned) from any source, then, with no change in government imports, total supply would have been 12.1 percent less (apart from private stock changes) and rice prices could have risen by 40 to 60 percent, to an average of between 18.7 Tk/kg and 21.3 Tk/kg. Such an increase in the rice price level would likely have been unacceptable to the Government of Bangladesh and public sector imports would likely have been increased.

But during the 1998 calendar year alone, private sector imports reached 2.26 million MTs. Government imports and subsidized sales of this magnitude were simply not feasible. Had the government of Bangladesh imported this grain itself, the average cost of the imported rice delivered to local delivery points would have been approximately 14.9-15.9 Tk/kg, 1.0 to 2.0 Tk/kg above the private sector import costs, due to additional marketing costs totaling 50 to 100 million dollars. And, if the government received a net price of 11.5 Tk/kg (equal to the Open Market Sales price of 12.0 Tk/kg less 0.5 Tk/kg OMS dealer's commission), the total unit subsidy would have been 3.4 to 4.4 Tk/kg, and the total fiscal cost would have been 160 to 210 million dollars.

In spite of the potentially high costs of massive government imports, such expenditures might be deemed necessary if there was evidence that private traders were manipulating the market. One indication that the rice market was competitive in Bangladesh was that the margin between wholesale prices in Dhaka and India remained relatively low and stable. Data from letters of credit from both 1994-95 and 1998 suggest that a large number of traders participated

in rice imports, another indication of a competitive market. Letter of credit data from January through mid-September 1998 indicate an average quantity of only 268.7 metric tons per letter of credit for the 3291 letters of credit issued. Moreover, these letters of credit were opened by 793 different traders, with an average amount of imports per trader of only 1115.3 MTs of rice. The largest ten traders (in terms of total imports) imported 142,369 tons, 16 percent of the total.

THE RELIABILITY OF THE INDIAN RICE MARKET

Large-scale private imports from India were possible in 1998/99 because with large government stocks of foodgrain and a good rice harvest, the Government of India was willing to allow exports. Production of India's kharif rice crop was 70 million MTs, only about 2.6 percent below the 1997/98 bumper crop. Moreover, Food Corporation of India rice stocks on 1 October, 1998 were quite high (8.7 mn MTs), nearly three million MTs above the buffer stock norm of 6 million MTs for that date. Wheat stocks were even higher: 15.8 million MTs on 1 September, 1998.

In recent years, rice production shortfalls in Bangladesh and India have not been highly correlated. From 1971/72 through 1998/99, total production of rice in Bangladesh fell below five percent or more below trend in only four years: 1971/72, 1972/73, 1994/95 and 1998/99. India's production has been more variable over the period as a whole, with six years below trend, though all these years were before 1988/89. Comparing only aman production in Bangladesh with kharif production in India, since 1980/81, only once did both India and Bangladesh have a bad aman / kharif crop in the same year (1986/87). In the two most recent years of very low aman harvests in Bangladesh (1988/89 and 1998/99), India's kharif production has been 5.50 percent above and 3.49 percent below trend. Agronomic factors help explain the lack of correlation in the harvests. India's kharif rice production is spread over a much wider area than Bangladesh aman rice production, reducing the risk of weather-related failure to the entire crop. In particular, high rainfall or excessive snow melt in the Himalayas that cause flooding in Bangladesh and parts of eastern India does not necessarily correlate with poor weather in other regions of India.

IMPLICATIONS FOR BANGLADESH FOOD POLICY

Several key aspects of private sector imports from India enabled them to make this large contribution to national food security in Bangladesh in 1998 and 1999. First, India's good harvests and ample rice stocks made large-scale exports not only possible, but actually welcome for India. Second, the private sector trade was competitive, involving many hundreds of traders importing small quantities of rice. Third, the Government of Bangladesh gave the private sector clear signals that it supported this trade, removing all tariffs and surcharges on rice imports and instructing customs officials to expedite clearance of rice imports, particularly following the floods in mid-1999. Finally, Bangladesh had ample foreign exchange reserves and access to lending to pay for rice imports, (unlike during the 1974 famine when shortages of foreign exchange severely constrained the government's ability to import).

These factors may not necessarily be in place if major shortfalls in Bangladesh production occur in the future. Moreover, the success of private rice imports in stabilizing prices and augmenting supplies in recent years in no way implies that less attention should be devoted to encouraging domestic production through appropriate price incentives and public investments, ensuring supplies of inputs, and agricultural research and extension. Chronic food deficits, if a result of a stagnant agriculture and rural economy, might be supplied by private sector imports, but would likely be accompanied by increasingly large segments of the population living in poverty and without access to sufficient food.

The large expansion of rice trade between India and Bangladesh is also a reminder of the far-reaching consequences of macro-economic and trade policy reforms. India's exchange rate depreciation was a major factor in making Indian rice competitive in Bangladesh rice markets. For Bangladesh, a substantial appreciation of the real exchange rate, caused by domestic inflation in excess of the rate of nominal exchange rate depreciation, could make Bangladesh a consistent importer of rice, as the import parity price of rice falls and sets a low ceiling on domestic prices. In the absence of offsetting trade policy (import tariffs), the resulting low real prices of agricultural goods could result in slow agricultural and rural economic growth.

Nonetheless, the most important lesson from the Bangladesh experience with private sector

rice imports in recent years is that trade liberalization can enhance national food security. By providing an automatic mechanism to increase domestic supply and stabilize prices, the trade liberalization in Bangladesh helped to ensure availability of foodgrain and stabilize prices. Combined with targeted public distribution programs that enhanced the access to food by the poor, private sector imports helped prevent a food crisis and saved government resources for future productive investments. Though increased food security may not be a primary objective of trade liberalization, the Bangladesh experience shows that the two can in fact be compatible.

ASPECTS OF INDIA'S FOOD ECONOMY AND THEIR IMPLICATIONS FOR RICE TRADE BETWEEN INDIA AND BANGLADESH

— Prof. S. R. Osmani

The prospect of importing rice from India to cope with domestic shortfalls offers Bangladesh a powerful means of achieving food security in times of crisis. In recent years this prospect has become more concrete. Both India and Bangladesh took important steps to liberalize their foodgrain trade in 1994. Since then, both India's export of rice to the world market and Bangladeshi imports of rice from India have risen to historically unprecedented levels. Whenever there was a serious shortfall in Bangladesh during this period, foodgrain flowed in from India, mainly at the initiative of the private sector, and moderated the price hike in the domestic market. This phenomenon raises a completely new dimension to the issue of food security in Bangladesh: it opens up the possibility that private trade with India may provide a relatively inexpensive way of strengthening Bangladeshi food security, in comparison with traditional methods of holding expensive buffer stocks or using inefficient bureaucratic machinery to try and import food in times of crisis.

However, this prospect also begs the question of whether trade with India can be relied upon to fulfill this role on a sustained basis. This paper addresses the potential for continued exports of Indian rice to Bangladesh in view of seven key aspects of India's agricultural economy, food policy and domestic political situation.

First, on the production front, the rice sector appears to have overcome the technological barrier that had held it back in the early days of the Green Revolution. Between 1970 and 1995, India nearly doubled its foodgrain production. Rice production grew 1.7 percent yearly in the 1970s and over 4 percent each year in the 1980s, the most dynamic decade of foodgrain production in its history. This dynamism faded somewhat in the 1990s with growth falling back to 1970s rates, but since this growth was taking place from a much higher base, the absolute increase in rice production was much larger.

This growth in rice production has not been spatially uniform. From its birthplace in the traditionally non-rice-growing states of the North-West, the Indian Green Revolution has now spread to the traditional rice-growing areas of the East and the South. One implication of this spatial spread is that year-to-year fluctuations have diminished. Another is that growth has accelerated in the Eastern states that border Bangladesh. In West Bengal in particular, increased production contributed both to the national rice supply and to smoothing of seasonal availability (by emphasizing the off-season *Rabi* crop).

Policymakers intend that growth in rice production will continue and have embarked on an ambitious plan to double agricultural output in the next ten years. Their main strategy is to devote large amounts of public investment towards irrigating area in the *Rabi* season, both to increase net area cultivated and to ensure an even more even seasonal distribution of rice production.

Second, subsidies on agricultural inputs have played an important role in the past in disseminating the HYV technology among all classes of farmers, but as the level of input use has risen manifold over the last three decades, the fiscal burden of these subsidies has become unsustainable.

Use of electricity, fertilizer, irrigation and credit has increased dramatically. As a proportion of agricultural GDP, input subsidies climbed from 3.7 percent in 1980-81 to nearly 8 percent in 1994-95. Electricity accounts for the bulk of this increase (growing nearly 20 percent per year), followed by fertilizer (12 percent), irrigation (6 percent) and credit (4 percent). The share of electricity in total subsidies rose from about one quarter in the early 1980s to 56 percent by the mid 1990s, becoming the single most important agricultural subsidy.

Although the current level of input subsidy is somewhat below the level permitted by WTO, and although Indian agriculture happens to be net taxed rather than net subsidised when all kinds of incentives and disincentives are taken into account, the sheer budgetary pressure will compel the Indian government to cut down on subsidies, albeit slowly in view of farmers' resistance.

Third, the minimum support price policy operated by the Food Corporation of India (FCI) has contributed significantly to encourage Indian farmers to adopt the HYV technology. However, the huge cost and wastage involved in maintaining the operations of FCI at its current level is becoming increasingly unsustainable. It is almost inevitable that in the near future, FCI will procure much less foodgrain than it does now, leaving the private sector to become the major player in the foodgrain market.

Procurement serves three ends: supporting farmers, supplying consumers through "fair price" shops, and maintaining a buffer stock. The government sharply increased procurement following the macroeconomic reforms of the early 1990s in order to protect farmers from the effects of the devaluation. By the mid-1990s, the carrying cost of the buffer stock was 36 percent of the total food subsidy.

Fourth, despite moderate increase in per capita income and expenditure, per capita consumption of cereals has declined in India over the last three decades. This tendency is attributable to changing preferences rather than worsening income distribution, and is likely to persist in the future, with the bulk of the new demand for cereals coming from population growth. At the same time, ambitious programmes are being undertaken to double foodgrain output. Consequently, projections of supply and demand for rice for the first decade of 2000 suggest that supply will exceed demand at current prices, so that additional price incentive will have to be provided to the farmers if the planned supply is to materialise. This implies that the government will have to either accumulate ever-increasing stock, which would place an untenable burden on the FCI, or allow excess stock to be exported abroad. Allowing free export of rice is the only feasible way to sustain accelerated production.

Fifth, of all the major agricultural commodities in India, rice enjoys the greatest comparative advantage. It is in fact the only unambiguously exportable commodity, with the potential of huge efficiency gains from its export, even after accounting for the level of subsidies.

At present, the central government's policy towards rice export is one of cautious

pragmatism; since 1994 its export has been permitted if prices at the national level seem stable or depressed, but not otherwise. For the last few years, the government's attitude has been a fairly relaxed, but it has maintained a network of regulations that allow it to restrict trade as it sees fit.

Sixth, complete liberalization of rice export could have negative ramifications for food policy. It will almost certainly raise the domestic price of rice, especially if subsidies are also withdrawn as part of the overall reform package. The domestic price of rice is lower than the world price because of an overvalued exchange rate and export restrictions. Therefore, to the extent that India's trade regime is liberalized, domestic prices will rise, and even more so if input subsidies are lifted. The combined effect of these reforms would be to raise overall agricultural prices by 15 to 20 percent, with cereal prices rising even more. The fact that the world price of rice would probably fall if India were to export large amounts could mitigate the price rise but would not offset it. Most analysts concur that the poor will be worse off as a result, at least in the short run.

In addition, exporting rice could threaten the country's ability to ensure food security in times of crisis by increasing the cost of maintaining a buffer stock. Proponents of liberalization argue that it would be more efficient to import rice in time of crisis. However, critics contend that if India were a major player in the world rice market, and the Indian price went up, it could cause world prices to rise, making imports prohibitively expensive.

Consequently, Indian policymakers are wary of freeing trade completely. It is permitting the marginal export of rice, but if there is any hint of the market price rising substantially above what is considered to be a fair price for consumers, it will not hesitate to limit exports.

Finally, since June 1997, the Indian government has introduced a Targeted Food Distribution System in recognition of the fact the erstwhile universal distribution system was both unsustainably expensive and incapable of providing a strong enough safety net for the poor. India had attempted to re-orient its PDS towards the poor in the mid-1980s. In spite of these reforms, however, the poor received a lesser share of PDS cereals than the overall population and were not given priority in access to them. This system was thus highly inefficient as an income-

transfer mechanism; one study found that in 1986-87, it cost the central government Rs 4.27 to transfer 1 rupee of income to the poor.

Since 1997, the system of universal coverage at uniform price has given way to two-tier system in which the poor pay considerably less than those above the poverty line, and receive prioritized access to the food. Attention is currently being directed towards containing leakage further by making the program more self-selecting.

These seven features sum up trends in food policy and food security in India at present. The first five features suggest that the economic and policy environment in India is likely to become increasingly oriented towards exporting rice and should create a favourable climate for sustained rice trade between India and Bangladesh. The sixth feature, viz. the likely negative impact of agricultural trade liberalization on the Indian poor, is the only potential impediment towards this tendency. If the food security of the poor is jeopardised as a result of liberalisation, it is unlikely that free export of rice will be politically sustainable, regardless of the potential efficiency gains. However, even this impediment may be offset by the final feature, namely the introduction of a targeted public food distribution system in place of the universal food distribution system which was of very little help to the poor. The offsetting force will be further strengthened if the savings made from the reduction of subsidies are used to expand the scope of Poverty Alleviation Programmes - the current climate of opinion is certainly favourable towards such of switching of resources.

One additional aspect of Indian policy that has an important bearing on the international trade is the position of state governments. All exports to Bangladesh must go through either Andhra Pradesh or West Bengal, however, these states are not predisposed to external trade.

The Andhra Pradesh government operates a very ambitious cheap rice policy for its population. This policy inevitably imposes a heavy subsidy burden on the government. Any rise in the market price will make this burden heavier, by entailing a higher procurement price, and hence a higher issue price charged by the FCI. Given this constraint, the government is naturally concerned to ensure that the market price does not rise. Therefore it tries to restrict rice exports

when the market price is up even when the central government has no such directive.

The West Bengal government is guided by other compulsions, namely the need to moderate prices for the rural poor while coping with high demand in Calcutta. In this situation, the prospect of any additional stimulus to the market that might come from export to Bangladesh is cause for concern.

But there are reasons to expect that these state-level restrictive practices may weaken in future. As noted earlier, India is embarking on an ambitious programme of doubling foodgrain production in the next ten years. If this plan succeeds, it will entail a very sharp increase in production within a relatively short span of time. There is some doubt as to whether increased production of this magnitude can be absorbed within the state without a sharp decline of prices, which might defeat the production goal itself. If producer incentives are to be maintained, export of rice to either Bangladesh or elsewhere will become a necessity. There are already some suggestions that farmers in the surplus districts of West Bengal would not be receiving a remunerative price for their HYV crops in the absence of recent exports to Bangladesh. If this claim is substantiated, then one can certainly expect smoother flow of rice from India to Bangladesh in future.

In summary, this paper finds that India is likely to continue to export rice, and that certain policy changes would allow it to reap the advantages of trade while safeguarding its own food security. Rice is India's most promising agricultural export in terms of comparative advantage, and that trade could serve to bolster rice production and consumption in India far more efficiently than present mechanisms. However, in order to safeguard the consumption of the poorest and for the policy to be politically palatable, policymakers must take steps to provide a safety net and enact other anti-poverty measures in tandem with export promotion. The Government of India could fund such policies by reducing subsidies on input use. While there is some opposition to international trade in rice at the national and state level in India, these will likely be overcome if the Government of India is able to fulfill even part of its ambitious plan to double rice production in the coming decade.

LIBERALIZATION AND FOODGRAIN IMPORTS: THE EVOLUTION AND CONDUCT OF THE BORDER TRADE WITH INDIA

— Dr. K.A.S. Murshid

INTRODUCTION

A decision was taken in the early 90s to withdraw restrictions on private food imports as part of the move towards greater trade liberalization. This has resulted in a fundamental change in the food-security regime facing Bangladesh, in terms of supply, prices, time lags for imports and ultimately, in terms of benefits to consumers. Producers too have been affected since they now have to operate within a price ceiling effectively determined by the import-parity price with India.

METHODOLOGICAL NOTES

The main objective of this study is to examine how rice imports are organized and the manner in which binding contracts are established between importers and exporters. As with any other market, the basic problem of exchange is solved by enabling transacting parties to negotiate, bargain and settle on price-quantity-quality terms, as well as delivery and payment schedules, in a fast, secure and low-cost manner. These goals pose a more serious challenge when trading occurs at a distance and across international boundaries. Both questionnaire-based survey techniques and case studies were adopted for rice importers.

ORGANIZATION AND CONDUCT OF THE RICE IMPORT TRADE

The Rice Importer Firm

In terms of the frequency distribution of age of these companies, the variation was wide. Only two firms were established after 1990, 17 in the 1980s, 13 in the 1970s and the remainder before 1970 - the oldest firm dating way back to 1950. Most firms reported entry in 1995 (45 percent), soon after the change in trade policy. A big chunk (40 percent), however, entered the trade not surprisingly, in 1998 when private imports began to accelerate following the poor aman rice crop of 1997 and the floods in July-September, 1998.

While the switch to rice imports has been recent and the majority of traders import a number of other commodities other than rice, a significant proportion was found to be concentrating in rice alone for the past one year. Non-rice commodities reported were primarily fertilizers, cement, spices and chilies.

The important dimensions related to transactions are risks and speed of execution. The data points to some interesting features: import by trucks entails much smaller transaction size and much speedier delivery. Delivery lags by rail are typically very long ranging from 115 to 120 days compared to 20-25 days by truck. While rail transport is much cheaper, capacity is highly constrained stemming from inadequate wagon-space, delays in off-loading, poor infrastructure especially on the Bangladesh side, and so on. Small importers find truck transport a very attractive proposition because they can use small amounts of capital and generate a quick turnover on their investment even if transport costs per unit are higher. Generally, however, the problem of delivery lags figure prominently amongst the complaints made by traders. In terms of the quality of transactions, the majority of respondents were unhappy with the quality of rice received.

Expiration of Irrevocable Letters of Credit

The irrevocability of LCs would appear to have asymmetric implications. It provides exporters with a great deal of leverage in their dealings with importers at the expense of importers. Thus importers may not cancel a LC during its validity period without approval from the exporter. If an importer thinks that prices may fall dramatically in the local market, he could request the exporter to stop shipment. However, in nine times out of ten such requests go unheeded. On the other hand, importers were often under pressure to raise the price (through a LC amendment) - to which they generally seem to succumb, as non-compliance may lead to e.g. delays or poor quality of grain received.

A physical presence at the time of loading of shipments in India appears to be important. Most firms have their own men (apart from the C&F agent) at the border to check the quality before taking delivery.

Arrangements for Inland Distribution

There was tremendous political pressure to ensure a smooth flow of rice imports, but independently of that, everyone concerned felt that it was his national duty in the face of a grave situation verging on famine, to remain on guard so that rice flows were not disrupted. As far as rice was concerned, no extra payments were asked for by the officials, there were no labour or transport problems, no harassment or delays.¹

Respondents' Views on Factors Increasing Transaction Costs

There is a clear perception amongst all respondents that suppliers often do not stick to their side of the bargain. A large proportion of traders also attached a high rank to problems of transport and storage as factors affecting their transactions. Somewhat surprisingly, insecurity, *mastani* or toll-collection did not figure as a problem.

Costs of Trade and Trade Finance

There are generally no problems in opening a LC. The foreign currency requirement can be arranged in just one day. The cost of a LC is around 1.5 percent of its total value, including bank charges, insurance and other costs, including transport and commission. No interest is charged until the goods are cleared by the customs. Once clearance is obtained, the importers have to pay off the bank quickly to avoid interest charges.

Storage and Transport

Importers generally have access to storage space, e.g. in the form of godowns, with most actually owning these themselves.

The Quality of Information

There are no institutional mechanisms for the monitoring and dissemination of vital trade

¹ As the Vice President of the Traders' Association in Benapole said, "For rice we don't need to pay any extra money - just the Advance Income Tax (AIT) of 3 percent - that's all".

information to traders. Thus, importers have to invest heavily in information collection through their own efforts. There is no association of rice importers yet and the existing Traders' Association is not involved in the job of operating as an information-clearing house.

PORTS AND INFRASTRUCTURE

There is a great deal of variation in terms of the critical facilities available in the different land ports of Bangladesh: transport and storage facilities, availability of international phone/fax/courier services, and banking facilities.

Darsana is the oldest rail port and accounts for the bulk of Indian rice imports. Like Hili it too has access to the local telephone network but lacks warehouses. It is serviced by all the major banks and the banking infrastructure is generally considered "good". There are however, a number of problems faced with regard to banking services. In addition, the port faces specific problems related to its position as a rail port. Since banks are closed on Fridays and Saturdays traders are unable to obtain the 'No Objection Certificate' (NOC) from the bank necessary to release their consignments upon arrival.

VOLUME OF RICE IMPORTS - GOVERNANCE FAILURES ?

There has been a lot of speculation about the quantity of rice actually imported from India in 1998-99. There is a strong view that actual imports were much less than suggested by the official figures, mainly due to undeclared imports of non-rice commodities officially shown as rice imports. A recent attempt to cross-check Indian rice export data with Bangladeshi rice imports for 1998-99 suggests that the former accounts for around 75 percent of the latter. In other words, perhaps about 25 percent of total rice imports by Bangladesh, may indeed have been non-rice commodities.

CONCLUDING OBSERVATIONS

This study represents a major effort in trying to understand the evolution of the cross-border rice trade and the manner in which it is organized and conducted. The market problem that any market has to solve is the problem of enabling exchange to be carried out rapidly, fairly and

securely, where each party will keep to his side of the bargain. For these, certain preconditions have to be met - market institutions or the mechanisms that allow the transacting parties to contact each other, negotiate terms and arrange finance and dispatch goods. With reference to the rice import market, we have examined these conditions and observed that the system works reasonably well. However, some caveats are in order. Both supply and demand side problems were identified - but clearly the former dominates the concerns of the importers.

SUMMARY OF DISCUSSIONS

DISCUSSANT: Prof. M. Ismail Hossain
Department of Economics
Jahangirnagar University

First I would like to thank the authors for their presentation. They have presented many important issues. The important question is to what extent is India a reliable source of imports for maintaining food security in Bangladesh in times of emergencies. Dr. Paul Dorosh has shown that after liberalization of trade, imports from India stabilized the markets in Bangladesh. In his paper, Dr. Osmani discussed prospects of India's rice economy, particularly that of West Bengal, and suggested that Indian rice exports may continue to help solve the rice availability problems of Bangladesh. Then Dr. Murshid presented the institutional arrangements of the rice import trade between Bangladesh and India making suggestions regarding future policies.

Dr. Murshid showed that importing rice by rail is time consuming, taking about four months, while imports by truck take only one month. Trade from Thailand might be quicker and less costly. We need to develop some mechanisms to solve these transport problems.

Next, I come to the question of government support to the private sector in rice trade. I think in addition to the private sector, government must be engaged in foodgrain trade to stabilize market prices and to maintain the interests of the consumers. However, government must inform the private sector about its involvement and its levels of imports. It can then allow the private sector to import the residual amount. Otherwise, the private sector will not be able to respond effectively in times of emergency if accurate information is not available.

Though India is a favored source of import of foodgrain for short and medium term, we have to consider the exchange rate policy of the Indian government and any natural shock in the rice production. If the rate of depreciation of the rupee against the U.S. dollar is less than the depreciation of the Bangladesh Taka against the U.S. dollar, then imports from India would no longer be cost-effective. In fact, if Bangladesh depreciate its currency vis-à-vis to India by 30 percent in real terms, then India will not be a cost-effective source of imports. Also if Thailand depreciates its currency by

20 – 25 percent, then Thai rice will be cheaper as of now.

Now I come to the question of food policy. The papers are well balanced. Though each showed India as a reliable source of import, nevertheless, they didn't suggest that we should give up our efforts to boost our agricultural production. Dr. Paul Dorosh argues for providing price incentives to producer. But in trying to provide appropriate price incentives, we need to take the import parity price (ex-India) into consideration. If the procurement price is set above the import parity price, imports will flood the market and will reduce the price in Bangladesh. So we need also to look for the other ways to increase production as well. Thus, there are important constraints in price policy.

In explaining India-Bangladesh rice trade, Paul uses only the official data while he ignored the unofficial elements. If possible, we need to consider unofficial elements because in the post flood period of 1998, smuggling occurred on a large scale.

Paul's paper should also provide insight into the future food economy and food security. Further research in this respect is needed. Though for mitigating short and medium term crises, India is the best source of imports, our long-term strategy must be to boost domestic production so as to maintain long term food security. Further research is needed on how we can increase domestic production. Paul's paper has emphasized the price of rice. But looking at prices alone, we can't go very far. We need to push forward the technological frontier. This is one of the most important problems in our agriculture.

OPEN FLOOR DISCUSSION

DR. WERNER KIENE (WORLD FOOD PROGRAMME)

As long as India and China behave rationally, they will be favorable source of imports and the smaller countries in the region will not suffer. The papers by Dr. Dorosh and Dr. Murshid have relied on this assumption. Further investigation of the economic rationality of India's national policy and West Bengal's food trade policy is necessary.

Then I come to the "residuality" of the private sector as Prof. Ismail mentioned. In this

case I think we have to decide clearly what the private sector will do and what the government will do. Otherwise, there is the risk of coordination problems.

PROF. ABDUL BAYES (JAHANGIRNAGAR UNIVERSITY)

Professor Osmani's paper appeared to show that India has a comparative advantage in rice production, but these calculations did not appear to take into account all of India's subsidies. This is especially important in comparing India's agriculture to that of Bangladesh.

In Professor Osmani's paper, we also see that electricity is a major component of the total agricultural subsidy in India. If we increase agricultural subsidies in Bangladesh, should we subsidize electricity or other inputs?

MR. ABU BAKAR SIDDIQUE, BANGLADESH BUREAU OF STATISTICS

In the case of Bangladesh, how do the support price, the level of rice production, and exports influence each other?

PROF. M.A. HYE (JAHANGIRNAGAR UNIVERSITY)

So far as I understand, food policy research should focus on policy for food security, food import policies and self-sufficiency in production. Regarding self-sufficiency in food production we find one important thing from Professor Osmani's paper that in India, agricultural subsidies are high relative to those in Bangladesh. So, why are we not thinking about giving subsidies to agriculture again?

DR. M.A.S MONDAL (BANGLADESH AGRICULTURAL UNIVERSITY)

From Dr. Paul Dorosh's paper I find high fluctuations in India's rice production. In the year of high production, 1997, had there been any effect from the Indian export subsidies or facilities to the private traders to increase domestic production?

DR. DILIP ROY (BIDS)

India has been giving subsidy to its overall agricultural production and Bangladesh is importing Indian rice, so does that mean we are eating India's agricultural subsidy?

AUTHOR'S RESPONSE: DR. PAUL DOROSH

First, trade from Thailand. Yes, in fact, trade from Thailand is likely to be much more dependable per contract, and that trade is much more established. The Ministry of Food looked into the possibility of importing from Thailand very carefully because of problems of tenders with traders from India. But nonetheless, rice imports from Thailand would have cost more. Another important consideration is related to economies of scale in shipping. Whereas for imports from India, a truck can carry in 10 tons at a time, or 12 tons if it is over loaded, a ship from Thailand can bring in 15,000 tons. This has implications for how many traders are involved in the trade, a point made many times by our Project Director, Abdul Aziz.

Second, in Professor Osmani's paper, he quoted a study that did in fact measure both inputs and outputs at economic prices. This study showed that India does have a comparative advantage in exporting rice, but not in cotton or wheat. That is one crucial reason why Professor Osmani thought that in the medium term, India is likely to be exporting rice.

Third, "Is food security equal to import parity?" No, absolutely not. But in terms of market availability, the private sector import trade provided essentially all the grain that Bangladesh demanded at the import parity price. Now, we were very fortunate that at the time of the flood, even though the import parity price was high (Tk. 14.5 per kg in Dhaka for coarse rice), it wasn't too high. What if it had been Tk. 18 per kg? And again, if the rice imports had come from Thailand, the price would have been a little higher.

So the import trade enhanced food security by increasing market supply and total availability. But there's more to food security than availability, and there is no guarantee that import parity in another year might not be higher. This afternoon, we'll talk about access, another important dimension of food security.

Regarding the support price and its impact on imports, this is potentially a very important issue. We will discuss the topic more tomorrow in the sessions on procurement and price stabilization. If Bangladesh sets the procurement price too high and it actually tries to support that price by buying up all the rice offered at that price, it might end up buying grain from India. That of course would be very expensive. By the way, back in around 1985, that happened to Indonesia. They set their procurement price of rice too high and ended up buying imported grain through their domestic procurement in Sumatra, because at that time, the imported rice was the same variety of rice as local production: IR-8.

Next, the comment that India has an export surplus now, but they have big subsidies. In Professor Osmani's judgment, these subsidies are likely to remain. But India has a competitive advantage in rice, even without the subsidy.

Does India have export subsidies? Yes, government exports were likely subsidized, particularly when FCI was trying to dispose of very large rice stocks. In fact, India was getting a price quite a bit below world market prices in the mid-1990s. Part of the reason for the lower price was a quality difference, though. Private sector exports are not subsidized in the sense that there is no subsidy on trade, though as we've discussed there are subsidies on electricity and other inputs into production.

As for whether large amounts of rice have been smuggled into Bangladesh, in addition to official imports, this seems unlikely. When we look at demand for rice in Bangladesh, we have a puzzle. Prices went up by 30% between 1996 and 1998/99. And yet, if you believe the production and import figures, you conclude that consumption per capita also went up. This doesn't seem to make sense. That leads us to question: is production overstated, are imports over-stated, have there been massive stock changes (that doesn't seem possible over a long period of time), or did we do something wrong with our elasticity of demand calculations? If one argues that imports are actually understated (because of informal trade), that only makes the situation more puzzling.

We looked into the structure and magnitude of informal trade in late 1997 following the

aman shortfall that year and found that small amounts of rice were coming through at that time. But there was no tariff on rice imports for most of 1998 and 1999, so there seems to be little reason for traders to evade customs. Given the large magnitude of the formal trade, it seems likely that informal rice imports were very small in comparison.

CHAIRPERSON: PROF. WAHIDUDDIN MAHMUD

First, regarding this discrepancy between our rice import figures and India's rice export figures. One other source of data on the size of India's exports is India's rice export quota. We should be able to find this out. The Ministry of Food should also take up the issue of the discrepancy with the National Board of Revenues. We know this is part of a much bigger problem in Bangladesh, where the export figures of the Bangladesh Bank and the official export figures differ by 20 to 25 percent. Since foodgrain is an especially sensitive matter, I think this should be a special priority.

There is a problem that we have the Ministry of Food and the Ministry of Agriculture where there is an artificial division in which production incentives and subsidies come under the Ministry of Agriculture and food distribution and food security come under the Ministry of Food. This project is under the Food Ministry and is supposed to advise the Food Ministry. I find this a bit anomalous because there must be coordination when agriculture and food policies are formulated. I think this project should cut across the ministerial divide and look at production and incentives.

The focus on India is important because India has become a determinant of our import parity price. Whether it will continue to be so is something that Professor Osmani's study looks at. We have to remember two or three things. India is still disconnected from the world market in terms of rice in the sense that India permits its exports only by quota. Exports are not liberalized, so India's market price is not India's export parity price.

Why India has not liberalized is a large topic. India, unlike Bangladesh, has retained production subsidies on a large scale, and also has retained a large Public Distribution System that includes a subsidized urban distribution and a universal system in Kerala and West Bengal.

In Bangladesh, we were able to do away with our entire urban food distribution system. Why could we do that without much upheaval and why couldn't India do it? Forecasting what policy changes will take place in India in the future is very difficult. Reforms in India and Bangladesh depend on the nature of political regime and the nature of democracy in the two countries.

As Professor Osmani has pointed out, the bilateral trade real exchange rate between India and Bangladesh is an important factor. The Bangladesh Taka appreciated bilaterally in real terms over the last seven and eight years by more than 30%. Without that appreciation, the situation would have been very different. Historically, the Bangladesh rice price has generally, on average, remained between import and export parity, and we were coming down toward the export parity price. But this change in India's relative exchange rate, plus India's domestic policy including a large pileup of stocks, had implications of lowering our import parity price considerably, so that our domestic price is now near to our import parity price instead of our export parity price.

But, Paul has concluded rightly. The opportunity of importing from India has been good for our food security, and has been good for meeting our short-run emergencies (created by floods and other things). But over the long run, let India do what it likes to do. We want to achieve our food self-sufficiency, because achieving rice self-sufficiency also makes sense for Bangladesh in terms of comparative advantage. If we take into account our potential on the production side, the potential of technological spread, the potential of further reduction of our unit costs of production, then Bangladesh should have its own competitive advantage and should have self-sufficiency in rice, irrespective of what happens to India's policies.

And in terms of our own strategy of poverty reduction and achieving food security in longer run, we shouldn't shift our focus from our own longer-run objective of self-sufficiency. But it is interesting from both an academic standpoint and from a policy standpoint, that in periods of emergencies and shocks, imports from India give a scope for meeting these emergencies. Our policies should take advantage of these opportunities, not deny these opportunities.

I hope that your next sessions will clarify more some of these issues. Thank you for the opportunity to come here and discuss your research findings. Thank you all.

SESSION II

**THE 1998 FLOOD, GOVERNMENT POLICY AND
RURAL FOOD SECURITY**

FOODGRAIN MARKETS AND POLICY IN THE AFTERMATH OF THE 1998 FLOOD

— Dr. Paul A. Dorosh

The mid-1998 floods in Bangladesh were unusual both for their depth and duration. Unlike, the normal floods that cover large parts of the country for several days or weeks during July and August, the floods in 1998 lasted until mid- September in many areas, killing hundreds of people and destroying roads, houses, crops and other assets. Official estimates of the 1998/99 aman production shortfall rose to 1.9 million MTs, (in addition to the 0.3 million MT losses of the aus crop in July and August). Other estimates of total losses were even greater, e.g. 2.6 mn MTs according to USAID/Dhaka.)

Even though the boro rice harvest, the next major rice harvest after the aman crop, followed about five months later (mid-1999), the aman production shortfall did not lead to large price increases or food supply shortfalls. Instead, private sector foodgrain imports, together with government commercial imports and food aid, supplied markets and prevented major price increases. Government programs also helped reduce the adverse effects of the flood for many of the most severely affected food insecure households.

THE 1998 FLOOD: GOVERNMENT POLICY AND FOODGRAIN MARKETS

Initially, the flood caused only relatively minor damage, reducing the aus harvest by about three lakh metric tons. However, transplanted aman seedlings were also lost, and as the duration of the flood extended, it became increasingly clear that the November / December aman crop was at risk. Given that most modern varieties (HYVs) of rice are photo-period sensitive, replanting after August 15 would result in significant yield loss or even total crop failure. Moreover, even local varieties had to be planted before about September 15 to produce satisfactory yields.

On 26 August 1998, as the extent of flood damage to existing crops, road infrastructure and other assets became clear, and as the prospects for the aman harvest dimmed, the Government of

Bangladesh launched an international appeal for aid. Ultimately, donors pledged 1.083 million MTs of flood relief food aid in addition to 596,000 MTs of regular program food aid.

Major flood relief efforts began in August 1998 through provision of 20,400 MTs of rice through Gratuitous Relief (GR) in flood-affected thanas and an additional 30,800 MTs of rice in September. In addition, the Vulnerable Group Feeding (VGF) program began on a large scale in August with an initial distribution of 13 lakh cards entitling the holder to 8 kgs of rice per month. In late September, the World Food Programme (WFP) strongly urged the Government of Bangladesh to expand the VGF program to 4 million cards (households) with an allotment of 32 kgs of wheat per card. Ultimately, the Government of Bangladesh agreed to the expansion in the number of VGF cards, but given short-term stock constraints and likely delays in food aid arrivals, the ration size was set to 8 kgs of rice and 8 kgs of wheat per card.

Altogether, planned offtake for 1998/99 was increased from 1.718 million MTs to 2.279 million MTs. Through December, however, limited government wheat stocks, uncertainties about rice supplies after the aman harvest, and financial constraints limited total distribution to 630 thousand MTs, only 26 thousand MTs more than in the pre-flood government distribution for this period. Rice distribution was greater than originally planned only in August and September, mainly because of VGF distribution. Thereafter, it was significantly less than planned, especially in March and April as originally budgeted OMS sales did not take place. The story for wheat is the exact opposite. Actual wheat distribution was below initial plans in August and September, and exceeded initial plans every month thereafter. VGF (29.3 percent), Food For Work (26.0 percent), Gratuitous Relief (4.6 percent), and Test Relief (3.2 percent), together accounted for 63.1 percent of total foodgrain distribution from July 1998 through April 1999.

RICE POLICY

Market prices of rice had been high in the first half of 1998, even before the flood because of a poor 1997/98 aman rice harvest in November / December 1997. As domestic prices rose beginning in December 1997, it became profitable for the private sector to import rice from India. Government policy encouraged private sector imports of rice through removal of tariffs on

imports, limitations on open market sales, instructions to expedite clearance of rice imports through customs and abstaining from re-imposition of anti-hoarding laws. As a result, during the first five months of 1998, the private sector imported 8.94 lakh MTs of rice from India, mainly by truck and rail across land borders.

With the onset of the boro rice harvest in May, the national average wholesale price of coarse HYV rice fell from a peak of 14.2 Tk/kg in April to 12.0 Tk/kg in June and private imports slowed to 59,000 MTs in June. During the flood, prices again rose to import parity. By continuing its policy of encouraging private sector imports, the government enabled the private sector to import more than 2 lakh MTs of rice per month from August 1998 to March 1999, with private rice imports reaching 288 thousand MTs in January and 345 thousand MTs in February, 1999.

Thus, because of the poor 1997/98 aman harvest and the flood-damaged aus and aman harvests in 1998/99, Bangladesh rice prices (wholesale Dhaka) remained close to ex: India import parity prices (the price of rice exported from India adjusted for 3 Tk/kg transport and marketing margin between the Delhi wholesale market and wholesale Dhaka) for most of calendar year 1998. Wholesale prices after the flood were in fact remarkably stable. The national average wholesale prices of coarse rice remained in the range of 14.14 to 14.83 Tk/kg from September 1998 through mid-April 1999.

The private sector also imported 624 thousand MTs of wheat from July 1998 through February 1999, even though large amounts of wheat food aid flowed into Bangladesh. Given the large volume of private sector imports, it appears that food aid inflows did not provide a disincentive for domestic wheat producers, at least through early 1999.

FOOD AID VOLUMES AND ALTERNATIVES

In contrast to the long-term declining trend, expected food aid arrivals in 1998/99 were 1.22 million MTs, 671,000 MTs greater than the total in 1997/98. Official data on food availability per capita indicate that in 1998/99, 176.4 kgs/capita were available, an 8 percent increase over the average per capita availability of the first eight years of the decade.

The price evidence suggests, however, that the increase in actual consumption of foodgrain was likely much less than the increase in per capita availability. For example, assuming an own-price elasticity of rice demand of -0.2 , per capita rice demand would fall by approximately 5.3 percent in response to the 31.2 percent increase in prices. It appears likely, then, that total availability has likely been overstated, due to a combination of over-estimates of production or private sector imports, or an under-estimate of private stock changes.

Even if per capita availability of foodgrains did increase in 1998/99, this does not necessarily mean that food aid inflows were too high. The private sector was importing substantial amounts of wheat, an indication that domestic prices were approximately equal to actual import parity for the qualities of wheat imported. More important, **the food aid provided the resources needed** to fund relief to millions of food-insecure households through the VGF and Food For Work programs.

Nonetheless, additional cash transfers following the flood might have sped up delivery of aid to needy households. Direct distribution of food and relief supplies were vitally important **during the flood and the immediate post-flood period**. Except for the immediate post-flood period, household food security in Bangladesh was constrained not by food availability in markets, but by household access to food. But government distribution of food faced two other constraints as well: availability of public foodgrain stocks and finances for relief and rehabilitation efforts.

Food aid eventually eased these two constraints on public distribution. By providing food, it eased the government stock situation. And because the food aid was given as a grant, it placed no added burden on the government treasury. Yet, additional use of cash payments could have enabled the government and donors to provide even more immediate help to flood victims. Had donors provided cash to supplement direct food distribution, the total value of the VGF program could have been substantially increased without endangering government foodgrain stocks. Leakages may have been somewhat higher, but these costs must be weighed against the benefits of increasing the value of aid to the poor before the arrival of large food aid shipments.

CONCLUSIONS

Together, the Government of Bangladesh, donors, the private sector and NGO's achieved a large measure of success in tackling the very real threat to national and household food security caused by the 1998 flood. A major food shortage was avoided and millions of flood-affected households received direct assistance. The experience of the 1998 flood thus provides several important lessons for food policy and enhancing food security in Bangladesh.

First, the large-scale private sector imports of rice following the flood illustrates the valuable contribution that the trade liberalization of the early 1990s has made to enhanced food security in Bangladesh. Enabled by government policy that encouraged private sector trade, the private sector imported 2.52 million MTs of rice and 0.757 million MTs of wheat between July 1998 and April 1999. During this same period, public distribution of foodgrain was 15.84 lakh MTs, 1.88 lakh MTs of foodgrain more than the 13.96 lakh MTs in the original 1998/99 distribution plan, but 0.941 million MTs less than private sector rice imports. Thus, the private sector rice imports were 1.6 times greater (and total private foodgrain imports 2.0 times greater) than public distribution of foodgrain in the first ten months of the 1998/99 fiscal year.

Second, at the household level, Bangladesh government programs mitigated the negative effects of the flood on food security through a combination of rapid disbursement of emergency food relief from its existing stocks and additional distribution of foodgrain through VGF and other channels.

Third, stock constraints limited distribution of foodgrain to flood-affected households from August through November. To avoid this problem in the future, one possible solution is for the government to hold more stocks during the early part of the fiscal year. Another alternative in a situation like that in 1998 when private sector imports maintained total foodgrain supply in Bangladesh at normal levels, would be to increase cash payments to households. Combined with foodgrain rations, cash payments could increase the government's ability to provide even more immediate relief in the event of another major flood.

Finally, the experience of the flood highlights the fact that achieving food security for the

poor of Bangladesh depends not only on market supply of foodgrain, but on their ability to acquire food. Even in years when food availability per capita is relatively high, millions of households in Bangladesh lack effective access to food. The floodwaters of 1998 have receded and a possible food crisis has been averted, but the challenge of achieving food security for all in Bangladesh remains.

IMPACT OF THE 1998 FLOOD ON LABOR MARKETS AND FOOD SECURITY AND EFFECTIVENESS OF RELIEF OPERATIONS IN BANGLADESH

— **Dr. Carlo del Ninno
& Dr. Dilip K. Roy**

The flood of 1998 was one of the most severe and longest floods in Bangladesh in recent decades. The large losses of agricultural production had a direct impact on the income of the farmers and an indirect impact on the income of the landless laborers that rely on the jobs in the agricultural sector. As a consequence, their ability to acquire food was reduced, thereby increasing their food insecurity. The main purpose of this paper has been to determine the effect of the 1998 flood on the rural economy and structure of the rural labor market, the effectiveness of government relief distribution program and the overall food security of the people in the flood affected areas. The analysis was based on the results of a rural rapid appraisal conducted in 64 villages in 7 thanas using a set of structured village level questionnaires.

HOUSEHOLD FOOD SECURITY

The adverse impact of the flood on the rural economy, caused by the slowing down of the economic activity and the reduced demands for jobs for the landless laborers, caused the prices of grain and other essentials to increase, thereby considerably reducing the access of households to food.

Food prices

In our investigation we found that food was generally available in the market even though prices had gone up. The retail prices of rice as reported in the community questionnaire increased between 5 and 20 percent in the period of the flood and then remained stable in all areas between 15 and 16 Tk/kg. The same thing can be said for atta, which was available for 11 to 13 Tk/kg. The price of vegetables increased more rapidly, especially prices of onions and eggplants. Overall, the prices of all major commodities turned out to be very similar in all areas under

investigation. This can be explained by the fact that, even though there were no village shops open in some areas, in most areas, some bazaars and weekly market remained opened in spite of the flood.

Food Consumption

It appears from the focus group discussions that farmers were a little better off than the landless. In fact, not all farmers had to reduce the amount of food eaten, because they could use their own stocks of rice. Most of the landless, instead, had to reduce the number of meals eaten per day from three to two and they had also to reduce the amount of food intake as well. This situation is not unusual in rural Bangladesh for landless people. Also, in areas not affected by the flood we found that landless households were reporting some level of distress. The poor did not have any stocks, assets, cash reserves and access to credit to enable them to offset the sharp declines in income. The food for the all of the day's meals was prepared at one time. Unfortunately, women as usual appeared to suffer more. They reported that they had to reduce the number of meals prepared and eaten, and because they were the last ones to eat, sometimes they were left without anything to eat at all.

IMPACT ON THE LABOR MARKET

The impact of the flood on employment was severe, particularly for those directly engaged in agricultural activities. The flood completely damaged the standing crops of aman, reducing the level of labor demand for harvesting activities in a period when there is usually a peak demand for hired labor (nearly half of the required labor for harvesting and threshing is hired), causing a great reduction in agricultural employment. As a result, the thanas that relied more on the cultivation of aman and had a higher percentages of landless labor were affected the most. During the flood and immediate post-flood period, there was virtually no work for agricultural wage laborers. There was some work for two weeks for boatmen and fishermen in those two months, but in general, there were fewer employment opportunities available in non-farm activities.

In the seven flood-affected thanas, the loss of total direct labor demand in aman rice crop

due to harvesting and threshing was 3,919 thousand person-days, of which about 49 percent were hired labor. The reduction in indirect demand for rural labor was the result of the reduction of trading activities caused by the smaller level of gross marketed surplus of aman rice, which caused a reduction of wage employment and income. At full employment, the loss of indirect labor use was equivalent to 1,254 thousand person-days. The loss of direct hired labor demand alone accounted for 38 percent of all demand for daily laborers over a period of three months in the seven flood affected thanas.

The economic activities slowed down considerably, but did not come to a halt. Due to the low level of economic activity and the low level of labor demand, it was very hard for landless people to find alternative sources of income. Most people tried to engage themselves in petty trade, transport, fishing, and other minor activities associated with lower returns to cope with the loss of agricultural wages. Some people looked for jobs outside the area (16 percent). More than 10 percent of all landless migrated to non affected areas, although 50 percent of affected people had to take temporary shelter. Fishing provided some relief to poor people as the supply of fish increased in the open-water bodies.

The average loss of total income from agricultural wage labor due to the loss of direct labor demand in aman crop harvesting was estimated to be, on the average, Tk. 958 per month per worker in the flood and post-flood period. If the loss is compared to the full employment level (22.5 days per month), the average loss of monthly wage income increases to Tk 1,337.

Effect on Female Rural Employment

Female wage laborers were particularly hard-affected during the flood. Only 14 percent of the total workers in wage employment are females. On average, for all thanas, about half of rural working women were engaged in homestead work, and about 60 percent of female workers were engaged as maid servants. Only 6 percent of working women are in the agricultural sector and the jobs they perform exclusively are fewer than those done by men. Their wage rate is usually lower due in part to the lower effective demand due to geographical immobility, and the specificity of tasks they perform such as threshing and processing. Diversification of their

occupations and government programs such as earthen work could enhance their status and the return to their labor.

EFFECTIVENESS OF RELIEF OPERATIONS

In our analysis, we found that the main determinants of allocation of relief given to affected areas were the number of people in shelters, the number of people reported dead, and the share of affected people in the total population. The amount of relief received by each area was found to be consistent with the need as expressed by the number of people affected and other key indicators. Nonetheless, in some areas people in the local communities received more relief than expected, and in other areas they received less than expected. The immediate relief (Gratuitous Relief) received at the local level was distributed with equity and helped the poor during the flood. In most cases, the resources available were directed to landless poor and other poor people. As a result, in only half of the cases did farmers receive some relief. The amount of additional relief (mostly Vulnerable Group Feeding) took some time to be organized and local communities relied on the support already allotted to them.

THE 1998 FLOOD AND HOUSEHOLD FOOD SECURITY: EVIDENCE FROM RURAL BANGLADESH

— **Dr. Carlo del Ninno
& Dr. Dilip K Roy**

The flood of 1998 had a devastating impact on the country of Bangladesh and on the lives of rural households. In this study we tried to find out the extent of the impact of the flood on households food security and the mechanisms employed by the households to survive and maintain a minimum level of consumption. We also attempted to make an assessment of the extent and effectiveness of the aid that has been given to them by private individuals, government and non government agencies.

The results of this study are based on a detailed household survey of 757 households in seven flood affected thanas that was carried out in the months of November and December 1998, just after the flood waters had receded. In order to understand which groups of people were more affected by the flood, we classified households according to their level of welfare expressed in terms of their per capita household expenditure, land ownership and their direct exposure to the flood. A simple index was developed to measure the direct exposure to the flood at the household level. According to the resulting index, households were classified as: a) not exposed to the flood, b) moderately exposed to the flood, c) severely exposed to the flood or d) very severely exposed to the flood. While the flood exposure variable gives an indication whether the people were directly exposed to the flood, it does not measure the level of the hardship they suffered or the impact the flood had on their lives. We found, though, that this variable does correlate very well with cluster and village level indicators of flood severity and with the other variables describing the adverse impact of the flood, like losses of agricultural production and assets.

Even though the level of losses and lack of labor demand severely constrained the consumption level of the people affected by the flood, we found that people were able to maintain a similar level of consumption, albeit very low in terms of per capita caloric

consumption, by making a few adjustments to their consumption pattern and by purchasing food on credit. In fact, they bought less rice and deferred purchases of clothes and other nonfood items. As expected, fewer people in the lower quintiles consumed expensive sources of proteins like meat, eggs and milk. The cereals particularly rice, dominated in the consumption basket of rural households. The share of rice in the food budget was 53 percent for the poor compared to 31 percent for the upper quintile. The richer income brackets devoted a relatively larger share of expenditures on fish, meat and fruits.

Almost 50 percent of all households purchased food on credit in the month of the survey for an average of Tk 1,040. While the percentage of people purchasing food on credit was slightly lower in the upper quintiles, they were able to obtain a larger amount of credit (Tk 1,388 in the top quintile), to be used for more expensive foods compared to poorer people (Tk 759 in the bottom quintile). The study also reveals that only 30 percent of the households not exposed to the flood purchased food such as rice, pulses, oil and other products on credit, compared to 59 percent of the households very severely exposed to the flood.

Many households lost a sizable share of their agricultural production. Losses were larger for rice production and for poor people. Many people also lost vegetable production, but their size and value was not very large compared to the losses of crop production. Poorer households appeared to have suffered more than richer households: the amount and the share of their losses were higher than those of households in higher expenditure quintiles. We can see that only 24 percent of the households not exposed to the flood suffered losses, and these losses did not exceed, on average, 13 percent of the value of the production.

Labor participation in rural areas cannot be separated from food insecurity in Bangladesh. Our analysis confirmed that there was a clear loss in the number of days worked, especially for daily laborers during the time of the flood. This was more a problem given the fact that even though the official unemployment rate is very low, very few people participate in the labor market. The floods reduced the few sources of income available even further.

The amount of damage done by the flood to the houses and to other physical assets of

people in the rural areas was very extensive. The losses were greater for houses, trees, poultry and valuable household effects. In total, 55 percent of the household lost on average approximately Tk 7,000, which accounts for 34 percent of the total value of their assets. In addition, many households sold many of their assets to have an additional source of income.

The analysis also confirmed that many people contracted debts in the period of the flood for various reasons, most of all for purchasing food. The level of their outstanding debts was also very high and corresponded roughly to half of the average monthly household expenditure.

Private individuals, government and non-government individuals provided several resources in kind and cash to people in the rural areas. In total, more than 56 percent of sampled households received some kind of transfers for an average of Tk 1,229 in total. Households that were more exposed to the flood received more transfers and larger amounts compared to households not exposed to the flood; 67 percent of households very severely exposed and 53 percent of severely exposed households received Tk 382 and 329 respectively, compared to 27 percent of not exposed households receiving on average Tk 253.

A larger percentage of poor households received some type of transfers. A total of 64 percent of the households in the bottom quintile received transfers, compared to 33 percent in the top quintile. The transfers were very important for the receiving households even though the value of the transfers during the July to November period was not very large (only Tk 328). These transfers represented almost 4 percent of the total household monthly expenditure over that period for all households, and 6 percent for poorer households in the bottom quintile.

The largest type of transfers, in terms of average size per receiving household, were private transfers (Tk 4,669), which were received by 11 percent of the households. Transfers from NGOs were smaller, and were targeted more to people exposed to the flood in the period of the flood. Government transfers, like the GR and the VGF were not limited to flood exposed households, but were more targeted towards people that were either poorer or that owned smaller amounts of land. 24 percent of households participated in GR, receiving an average of Tk 162, and 22 percent of households participated in VGF, receiving an average of Tk 308.

Participation rates in both the GR and the VGF programs were higher for households in the lower quintiles. The percentage of households receiving GR transfers went down from 26 percent in the bottom quintile to 13 percent in top quintile in the period of the flood, and from 8 percent in of the bottom quintiles to 6 percent in the top quintile in the period after the flood. Thus it appears that the GR program was better targeted in the period of the flood. Similarly, the percentage of households receiving VGF was 22 percent in the bottom quintile and 3 percent in the top quintile in the period of the flood, and 34 percent and 10 percent respectively in the period after the flood (Table 1).

In sum, the people in rural Bangladesh in the period of the flood appear to have suffered a lot, but they have been able to survive using a variety of means and strategies. Government programs, particularly GR and VGF, appear to have been well targeted, in general. One key question is how long will it take for the people that lost more income, assets and are deep into debt to improve their food security status.

Table 1 — Households Receiving Resources and Average Amount of Resources Received by Type and Quintiles (Taka per Household)

PERIOD : OCTOBER-NOVEMBER

Code of Revenue	Quintile 1		Quintile 2		Quintile 3		Quintile 4		Quintile 5		Total	
	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount
Stipend	1.32	165.00	0.66	75.00	1.32	142.50	1.99	155.00	1.97	253.33	1.45	174.09
GR	7.89	103.93	6.62	127.25	9.93	210.95	7.95	82.61	5.92	159.58	7.66	139.85
TR	0.66	145.00	1.32	234.87	0.66	93.65	0.66	49.24	1.97	54.41	1.06	115.11
VGf	34.21	197.04	19.87	207.39	18.54	200.83	17.22	200.89	9.87	208.64	19.95	201.62
VGD	6.58	219.07	0.66	283.18	2.65	159.73	1.32	262.20	1.32	163.89	2.51	208.68
CARE	0.00		1.32	191.24	1.32	332.25	0.00		1.97	242.11	0.92	253.33
O Assist	0.66	160.78	1.99	237.33	1.32	311.00	0.00		0.00		0.79	249.13
O Revenue	7.24	414.70	9.27	1,789.10	6.62	1,063.72	5.96	11,824.67	7.24	3,598.57	7.27	3,386.41
Total	51.32	242.07	37.09	615.43	35.76	402.38	33.11	2,273.51	27.63	1,098.27	36.99	838.85
Number	152		151		151		151		152		757	

Source : FMRSP-IFPRI Household Survey 1998

SUMMARY OF DISCUSSIONS

DISCUSSANT: DR. M. K. MUJERI

Visiting Fellow

Bangladesh Institute of Development Studies (BIDS)

First, I would like to thank the authors of the three papers as they have done an excellent job. The common theme of all three papers is the impact of 1998 flood on the food security of Bangladesh. These papers also provide some policy implications for the future.

The papers by Carlo and Dilip present data from a rapid appraisal survey and a household survey. The objective of these papers should be to present a picture of the rural economy after the flood, but it appears that the sample may not be representative. Also, it would be useful if the authors would define food security. The authors should also clarify their methodology for identifying the impacts of the flood on food security and other outcomes. The tables in their paper present data on a number of issues, but further analysis is needed before we can draw any conclusions as to the effects of the flood.

Regarding Paul's paper, I think that the contribution of all actors should be recognized (government, private sector, NGOs, international organizations). Everybody jointly contributed to the successful handling of the flood.

The paper showed how a large amount of private sector imports during and immediately after the flood solved the availability problem. The paper also described how government distribution of food through different channels such as VGF mitigated the negative impacts of the flood on household food security. What are the implications of these results for enhancing food security during future emergencies?

At the national level, food security involves ensuring the availability of food, while at the household level food security involves ensuring the access to food. For food security, then, food must be available, affordable, and the system must be sustained. As all of you know, in Bangladesh more than 50 percent of the people are poor; these people live with chronic food

insecurity. The problems of these chronically food insecure poor became worse during the flood because they were not able to maintain access to food.

But it is important to distinguish between short-term insecurity caused by transitory insecurity and overall insecurity caused by poverty. Some households affected by the flood suffered from transitory food insecurity, but not overall food insecurity. This type of distinction has important policy implications. To reduce food insecurity after a flood, we need to maintain availability, storage and trade of foodgrain. For ensured access to food, we need to create income-generating activities for the people. In a flood situation, these links break down due to the infrastructure and other disruptions. To solve the transitory food insecurity problem in a situation like flood, we need to re-establish these links.

Finally, in these papers, you have highlighted the actions of different actors, i.e. government, NGOs, private sector, international organizations; but the role of poor themselves is not considered. I think we need to understand the resilience power of the poor. We need to understand what strategies they adopt to face such problems. And I think consideration of their role has important implications for food security policies.

Thank you, Mr. Chairman.

OPEN FLOOR DISCUSSION

DR. ABUL QUASEM (BIDS)

In their paper Carlo and Dilip analyzed the behavior of the rural households. I think further work on coping mechanisms is needed to enable us to draw definite conclusions.

DR. RUSHIDAN ISLAM RAHMAN (BIDS)

Dr. Dorosh's paper shows that the availability of foodgrain in 1999 is slightly larger than the previous year and the price is also higher. How could the market clear if both price and availability are higher?

To assess the private foodgrain import to stabilize the price, the price of 1996/97 has compared to 1988/89. It would be useful to include a comparison of the prices of 1988/89 with those of 1986/87.

In the papers by Drs. del Ninno and Roy, I suggest food insecurity could be quantified as the percentage of people not getting food. Also, we must be careful not to confuse the concepts of food insecurity and poverty.

DR. NARAYAN CHANDRA NATH (BIDS)

Further detailed analysis is needed on the coping mechanisms of households. Also, we need to study the opportunity cost of relief. We should be searching for alternative mechanisms.

DR. M.A.S. MONDAL (BANGLADESH AGRICULTURAL UNIVERSITY)

A broader analysis of wage employment during and the aftermath of the 1998 flood is needed.

AUTHOR'S RESPONSE:

DR. PAUL DOROSH

Regarding the question of availability and rice price, between 1996/97 and flood year the rice price went up by 30% in real terms; estimated per capita availability increased as well. As we discussed in the earlier session, these data are indeed a puzzle, leading us to call into question the availability figures we have.

My paper focused on the macro- side of food availability. The imports from India kept rice prices at the import parity price of about 14 Tk/kg wholesale, compared to perhaps 18 Tk/kg or higher if there had been no imports. Government distribution from July through October contributed only a relatively small amount to foodgrain availability, but had important implications for household access.

DR. CARLO DEL NINNO

In our paper, we presented data on how flood-affected households responded during a period of transitory food insecurity. Many of these flood-affected people are poor, so they also suffer from overall food insecurity. Our survey has collected information on many aspects of household behavior so that we can better understand their coping mechanisms and hopefully later make useful policy recommendations related to food security. We plan to do a lot more detailed analysis on these issues.

I agree with the comments made regarding the many different actors (government, NGOs, private sector and international organizations, and the poor, themselves) helped to mitigate the severity of the 1998 flood. We will look further into these roles, particularly the actions of the poor households, in our future research.

CHAIRPERSON: PROF. ABDUL BAYES, (JAHANGIRNAGAR UNIVERSITY)

The paper by Drs. Del Ninno and Roy covered mainly the consumption situation after the 1988 flood, rather than food security, which is a multi-dimensional subject. Also, Dr. Quasem observed that donors, researchers and policymakers have been saying that Bangladeshi people have become resilient after facing so many disasters. I think the Bangladeshi people have always been resilient and that there is no evidence that they are more resilient now than before.

My last observation is that when we talk about food security, we need to discuss the question of employment generation. Government policies to increase agricultural growth after the flood generated a lot of employment, which led to increased household food consumption. This issue should be examined as part of a broader framework of employment, agriculture and household food security.

SESSION III

**FOODGRAIN PRODUCTION AND OPERATIONAL
ASPECTS OF PUBLIC MARKET INTERVENTIONS**

DOMESTIC RICE PROCUREMENT PROGRAMME : AN EVALUATION

**Dr. Quazi Shahabuddin
& Dr. K.M. Nabiul Islam**

Foodgrains, specially rice procurement programme has a fairly long history in the region comprising Bangladesh but price support is of more recent origin. For a long time, the primary objective of the procurement programme was to secure enough foodgrains to feed the Public Foodgrains Distribution System (PFDS). Since 1975, price support became an important objective, although feeding PFDS remained an important concern.

The objective of this study is to make an evaluation of the domestic rice procurement programme currently in place. However, no attempt has been made here to analyze the economic justification of the programme, its budgetary implications or the choice of appropriate criteria of fixation of procurement price. The study, on the other hand, examines the nature and degree of participation by different groups such as farmers, traders and millers and the problems faced by them in the process of both paddy and rice procurement. Also, the study makes specific policy recommendations for improving the effectiveness of the current programme in the light of the information collected through field surveys in three selected districts (Bogra, Dinajpur and Naogaon) of northern Bangladesh (Rajshahi division where more than 80% of rice procurement takes place).

The procurement survey was carried out in the Boro season, 1998 at and around ten LSDs, where farmers, traders, millers, sellers at LSD and LSD as well as other government officials were interviewed. In total, 340 people were interviewed, of which 160 were farmers of different categories, 60 were traders, 50 were sellers at LSD, 50 were millers and 40 were LSD as well as other government officials (Table 1).

The major findings from the field survey are summarized below:

- (a) Participation of farmers, especially small and medium farmers are negligible. Only 10 per cent of sample farmers participated in the 1998 Boro procurement programme, of which 5% were small, 13% were medium, and 22% were large farmers (Table 2).
- (b) The villagers far off from the LSDs are less interested in the procurement, compared to those located nearer the LSDs. Some villagers, especially belonging to distant locations, advocated for the re-introduction of TPC at the union level. In that case, they felt, the participation from farmers would potentially increase.
- (c) For farias and traders, however, sales at LSD appear to be relatively easy. For farmers, on the other hand, there exist too many formalities. Some farmers reported that they waited for 3 to 4 days with their paddy and ultimately they sold it to traders present at the LSD premises.
- (d) The millers are observed to play a key role in the procurement of both rice and paddy. They engage farias and other traders to procure paddy from the village farmers.
- (e) "Unofficial payments" at various stages of procurement have now become an open secret and is a source of major disincentives for farmers' participation.
- (f) The time spent in the process of procurement is extremely valuable for farmers, as they have to remain busy in harvest and post-harvest activities at this time.
- (g) Farmers have little knowledge about Fair Average Quality (FAQ), the quality of paddy with specified moisture content (14%), which needs to be maintained for paddy brought for sale at LSD.
- (h) Farmers have the problem of drying paddy after harvest as very few have drying places ('Chatal') at their premises. During the Boro season, the rainy days pose an additional problem for drying and storage.
- (i) There is no guarantee that the paddy brought by farmers at LSD would be accepted without any hindrance. So there are risks of incurring transport cost and theft of paddy due to lack of facilities at LSD premises for guarding those paddy. If one becomes a victim, the news get spread across the whole village, which creates wide-spread disincentive for other farmers to participate in the procurement programme.
- (j) The procurement would appear to be largely controlled by the political elites, UP Chairmen, UP members and traders. The sellers' list is largely fake and considerable number of the sellers are fraudulent.
- (k) Most of the millers were observed not to be satisfied with the size of the quota received for boro rice in 1998. This would indicate that the existing capacity of the most of the mills

remain unutilized given the total target of rice procurement, presumably after meeting the requirement of rice processing in the private sector.

In the light of the above findings of the study, the following specific policy recommendations are made for improved effectiveness of the programme in general, and to encourage farmers' participation in the procurement programme in particular.

- (a) The determination of procurement price at the level of price support is a critically important task in order to ensure adequate production incentives to the farmers. One can think of introducing some flexibility in the fixation of procurement price.
- (b) In order to encourage farmers' participation at LSD, the following specific suggestions are made:
 - to reorganize the procurement system at LSD so that the "unofficials payments" to both officials/staff as well as to labourers are kept to a minimum, if complete elimination is considered not feasible at least in the short run.
 - to ensure that the card/slip distribution process is fair through formation of an appropriate committee.
 - to create the "chatal" (drying) facility for farmers through provision of appropriate credit.
 - steps may be taken for creation of temporary storage at the LSD premises so that the paddy brought by the farmers are not damaged due to inclement weather.
 - to minimize harassments and loss of time at LSD since the loss of person days during the harvest and the post-harvest period is critical for the farmers.
 - the reintroduction of TPC at union levels may be considered since this would make positive contribution towards increased farmers' participation in the procurement programme.
 - the procurement programme should be initiated soon after the harvest.
 - irregularities in weighing should be minimized, if not eliminated completely.
- (c) Excessive imports and lack of effective storage capacity may serve as a hindrance for smooth operation of the procurement programme.
- (d) The existing procedure of distribution of quota to agreement millers may be reviewed in view of the dissatisfaction of the millers about the size of the quota received.

Table 1 — Sample size by category

Category	Sample categories	Total sample
Farmers	10 LSDs x 2 villages x 8 farmers	= 160
Traders	10 LSDs x 2 Markets x 3 Traders	= 60
Millers	10 LSDs x 3 Millers	= 30
Sellers	10 LSDs x 5	= 50
LSD/Other officials	10 LSDs x 4	= 40
TOTAL		=340

Table 2 — Number of farmers participated in procurement programme by district and by category (in 1998 Boro season)

District	Number of farmers participated			Total	Participation rate (%)
	Small	Medium	Large		
Bogra	3	2	2	7	14.6
Dinajpur	1	1	2	4	6.3
Noagaon	-	3	2	5	10.4
Total no. of farmers participated	4	6	6	16	-
Participation rate (%)	4.6	13.0	22.2	10.0	-
Total no. of sample	87 (54.4)	46 (28.8)	27 (16.8)	160 (100.0)	10.0

Note: Farmers are categorised on the basis of operated land.

Categories of farmers: Small - < 2.5 acres
Medium - 2.5 - 5.0 acres
Large - > 5.0 acres

Figures in parentheses denote percentages of total farmers in each category.

A REVIEW OF INTERNATIONAL AND LOCAL TENDERS FOR PROCUREMENT OF RICE AND WHEAT

Mr. Mahfoozur Rahman

OVERVIEW

It is the policy of the Government of Bangladesh to maintain an adequate stock of foodgrains. Principally, internal procurement and importation of wheat meet the requirements of the Public Food Distribution System (PFDS) and maintenance of an adequate security stock. Due to draught in 1997/98 and floods in 1998/99 aman production shortfall was approximately 1.1 and 2.1 million MT respectively. To maintain the stocks at a comfortable level and to meet the enhanced distribution needs for relief and rehabilitation, the government decided to import large quantities of rice and wheat in the FY 1997-98 and 1998-99 by floating local and international tenders for rice and wheat. At the same time, private sector imported a total of 3.46 million MT of foodgrains to help stabilize prices, which closely matched import parity prices throughout the period. Government procured a total of 0.432 million MT of rice and 0,584 million MT of wheat by means of 8 local and 12 international tenders for rice and 5 international tenders for wheat. This paper attempts to analyze performances of these tenders with a view to suggest modifications of existing procedures to enhance efficiency. They also form the basis of a proposed 'Tender Manual' that is under considerations of the government.

INTERNATIONAL TENDERS FOR RICE

A total quantity of 610,000 MT of rice was contracted to be supplied by 10 tenders floated in FY 1997-99, out of which 431,688 MT was supplied. The average price was US\$ 260.74 /MT. Quantities supplied were 71% of the contracted quantities.

Observations

- (a) International tenders performed reasonably well in FY 97-99 but performance deteriorated in FY 1998-99 as only 62% was supplied with an average delivery time of 109 days as against the stipulated time of only 30 days.
- (b) Corrective measures of encashment of performance bank guarantees did not improve the situation.
- (c) Grave difficulties with shipping and quality of supplied grains were encountered.

Problems

- (a) It was ascertained that the tendered prices were below the estimated C&F prices indicating that the price offers were highly speculative.
- (b) Repeated time extensions encouraged the suppliers to quote these prices on market speculation.
- (c) It was reported that the suppliers withdrew packing credit using the export letters of credit as security and utilised the monies for some other highly profitable ventures.
- (d) Relatively new ships of low tonnage are difficult to charter, adding to delays.
- (e) Bagged rice is handled manually making the 30-day delivery period unrealistic.
- (f) Single source of supply enhances risk elements as adverse factors simultaneously affect all the suppliers.

Recommendations

- (a) Alternative sources of supply may be utilised to obviate the common risk elements.
- (b) No time extension is allowed. However, the time of delivery may be extended up to a maximum of 60 days rather than 30 days that was never honoured in all these tenders.
- (c) On failure of any terms of contract performance guarantee may be cashed without recourse.
- (d) The government may adopt all terms and norms as practised in international grain trade.
- (e) Some special measures may be adopted for importation from high-risk markets. These include higher performance guarantee, engagement of reliable shipping company, pre-shipment inspection at the buyer's cost, and adequate insurance coverage.
- (f) Newer and more modern specifications and packing by ply bags may also be adopted.

LOCAL TENDERS FOR RICE

During FY 1997 through FY1999 a total of 147,444 MT of rice were procured against 8 local tenders, at an average price of Tk 13, 684 per MT. Government forfeited Tk.50 million from the non-performing suppliers' earnest money. Procurement by local tender offers many important advantages to the government, namely:

Advantages

- (a) Rice procured at the market rate costs less thereby effecting budgetary savings.
- (b) As the rice is delivered to the LSDs and CSDs, grain is delivered at the points of distribution saving substantial transportation time.
- (c) All costs of internal carriage and transit loss are built in the price offered.
- (d) Government pays only on receipt of goods. It is thus a safe method of procurement.

- (e) Government earns additional revenue by forfeiture of earnest money from defaulting suppliers for any transgression of contract terms.

difficulties

Some difficulties were encountered as local suppliers also based their prices on speculative and expected prices in India from where rice was imported. Moreover, higher inland transportation costs in India added to the suppliers' difficulties, resulting in only 43% of the contracted quantities to be supplied. However, performance was improving as the tenderers were gaining experience and expertise.

Recommendations

Government may continue to procure rice by this method so long as the requirement exists as it offers many advantages as outlined above. No time extension may be allowed and the earnest money thus forfeited may be kept in an interest bearing account to earn additional revenues. Earnest money may also be enhanced to 10% to discourage the suppliers to sell the imported rice in the open market if domestic prices rise during period of supply. As most rice is imported by broad-gauge railway from India, points of supply may be assigned along the north-south axis of the broad gauge line in Bangladesh to facilitate supply.

INTERNATIONAL TENDERS FOR WHEAT

A total of 5 tenders were floated during FY 1997-99 to procure 426,008 MT of wheat at an average price of Tk 6.10 per kg. The quantities supplied were 102% of the contracted quantity. All the contracts performed in all aspects excepting in tender #3, which was cancelled due to supplier failing to provide guarantee. The bid bond of this supplier amounting to US\$ 115,000 was forfeited.

Observations

In all tenders suppliers performed well within contract stipulations as regards quantity, quality and times of supply indicating the reliability of the international wheat market.

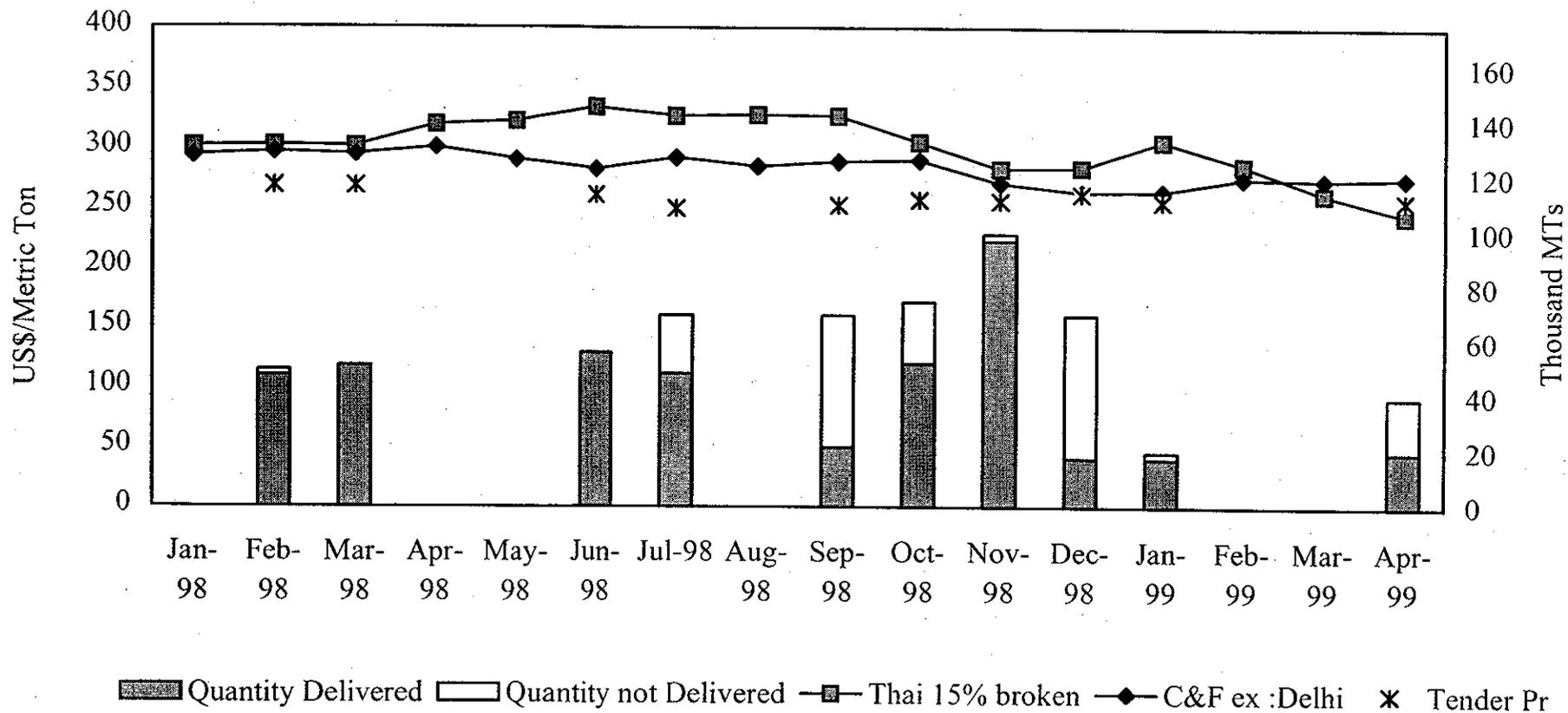
Recommendations

The Bank Performance Guarantee (BPG) of 5% may well be insufficient as post shipment claims may exceed that amount. To avoid litigation/arbitration, this amount may be enhanced to 10%. The government specifications of wheat are restrictive to only a few wheat-producing countries. In recent years, many other non-traditional countries are exporting good quality wheat to Bangladesh. Thus, government may consider modification of the specifications to allow those countries to participate in these tenders. Possibilities may be explored to utilize FOB rather than C&F contracts to further reduce shipping costs.

CONCLUSIONS

To efficiently execute these tenders, timing, quality and quantity issues are of paramount importance. From the analysis of past tenders it appears that local and international tenders for rice have not performed well whereas tenders for wheat performed highly satisfactorily. In view of the above, modifications and changes in the existing procedures have been suggested. These issues and solutions thereof were incorporated in a proposed tender manual, which is under consideration of the government.

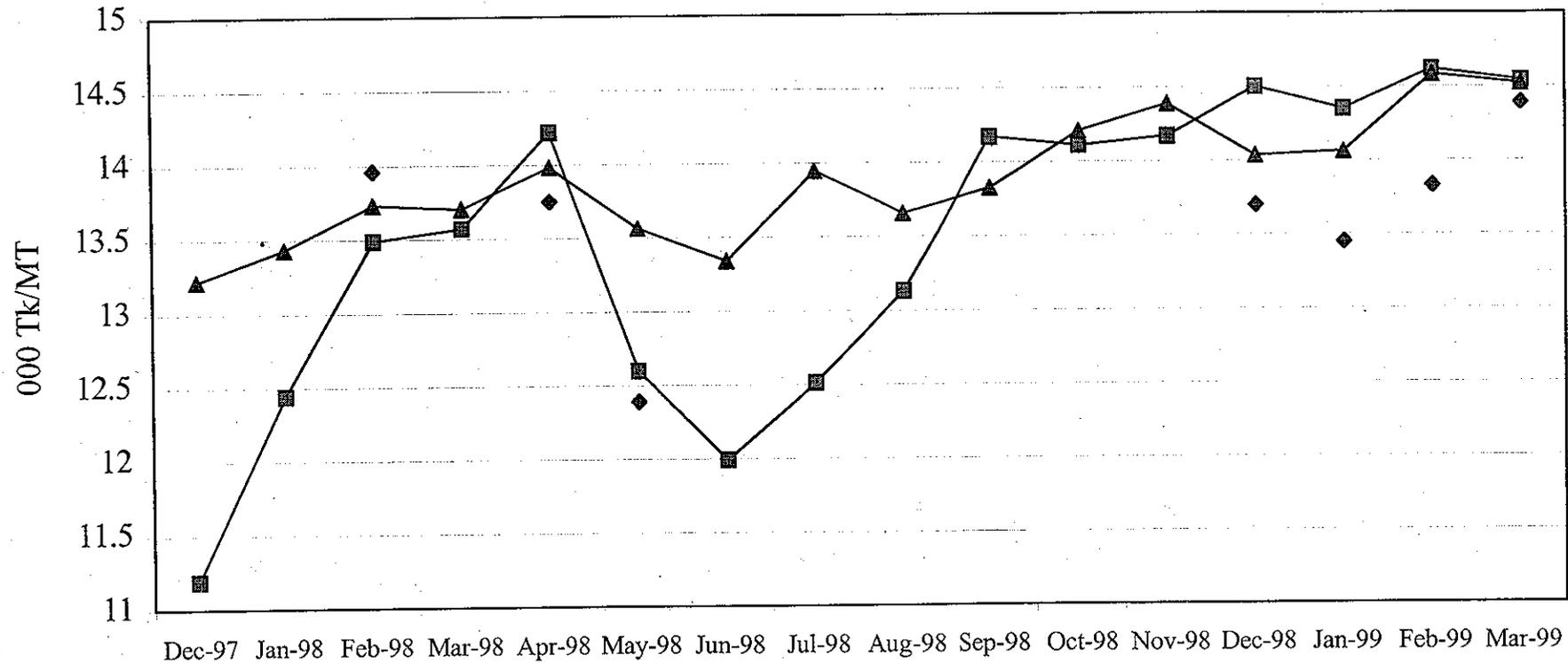
Figure 1 — C&F Prices, Tender Prices and Supplied Quantities International Tender for Rice (FY 1997-1999)



Note : 23 US\$/MT and 2500 Rs./MT have been added with Thai 15% Broken FOB, and Delhi Wholesale Prices, respectively to derive at the C &F Prices.

Source : MOF, DGF, FPMU and CMIE.

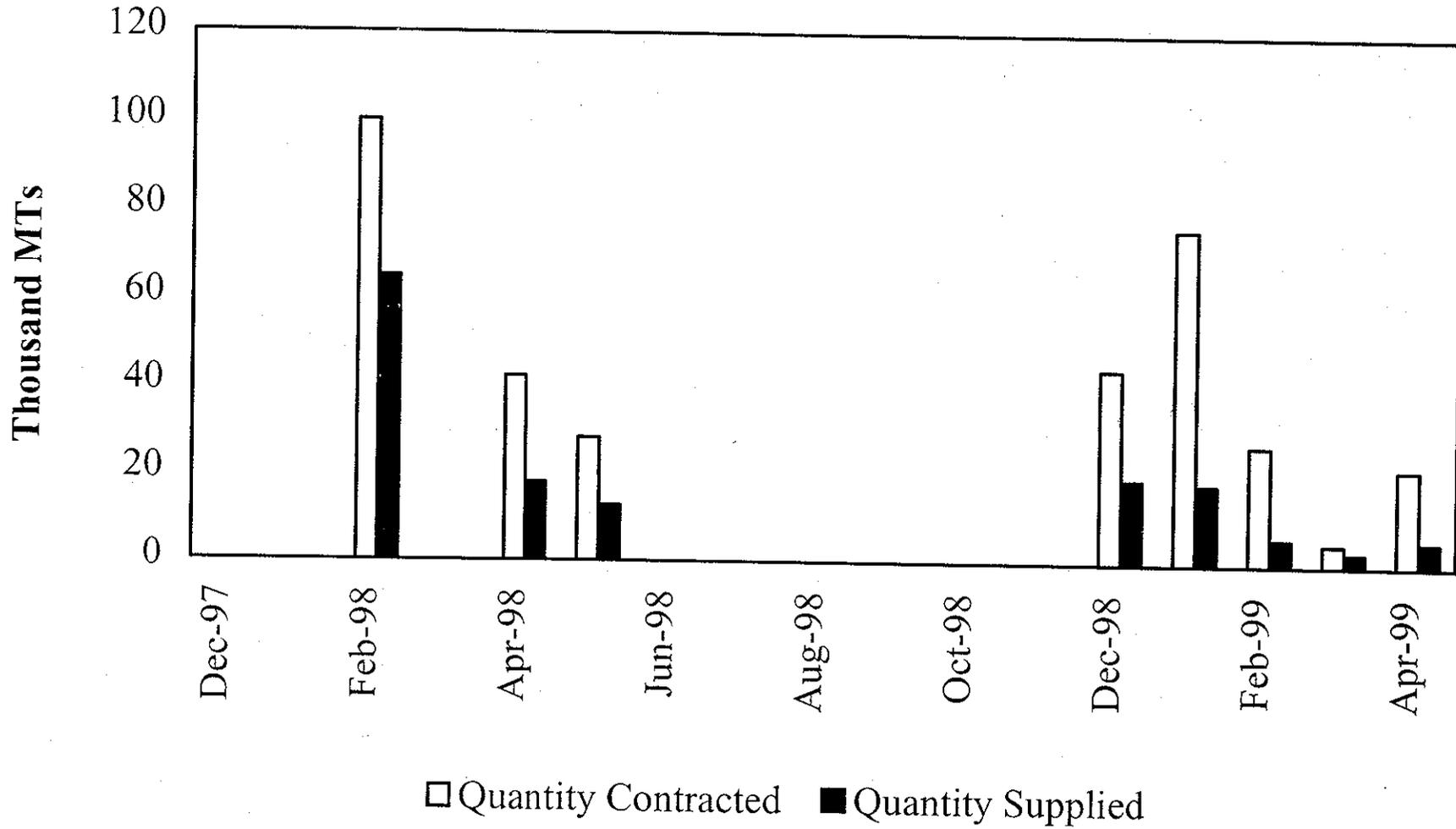
**Figure 2a — Import Parity, Contract and National Wholesale Prices
Local Tenders for Rice (FY 1997-1999)**



Source : CMIE, DGF and DAM.

◆ Contract Price ■ Natl. Wholesale Price ▲ Import Parity(Ex: Delhi)

Figure 2b — Local Tender for Rice : Quantities Contracted and Supplied



MAIZE PRODUCTION AND MARKETING IN BANGLADESH : AN INDICATIVE EXERCISE

— Dr. M. A. Quasem

Maize is a versatile crop and is more nutritious than rice in terms of protein, phosphorus, fat content and also in trace elements like magnesium, potassium and sulphur. It has an insignificant coverage of only 0.2 per cent of rice and three per cent of wheat acreage. With the introduction of high yielding seeds, its area and production have been expanding fast and it reached the level of 65,000 tons in 1997/98 from cultivation of 15,000 hectares of land. Among different districts of the country, Dinajpur, Rangpur, Bogra, Kushtia, Chuadanga and Dhaka are observed to be more progressive in maize cultivation.

Maize can be cultivated in all three seasons of the year but winter is deserved to be more predominant. In the currently undertaken field survey covering four maize villages pre-monsoon i.e. Aus season has the largest acreage under maize. Among these four villages, hybrid maize is more important in two commercial villages of Birganj in Dinajpur and Savar in Dhaka and the composite in two other traditional villages (Jessore and Syedpur). Hybrid yields 5.4 tons per hectare which is higher by 34% over the composite variety. Despite higher yields from hybrid seeds, farmers prefer composite seeds because of easy availability, lower price and known quality.

Maize fits well-fitted in the existing cropping patterns of the country. The major cropping patterns with pre-monsoon maize at Birganj are: Potato + Maize + Local T. Aman/Fallow while at Jessore are Potato + Maize + HYV Aman. In Savar such pattern is Potato + Maize + HYV Aman. The winter maize has the practice of Maize + China Irri + Fallow at Jessore and Maize + Fallow + Local T. Aman at Syedpur. With the introduction of maize it substituted several crops of which HYV Boro and vegetables are more prominent at Birganj; while mustard, sugarcane, vegetables and wheat at Savar. In two other areas, maize substituted wheat. Such substitutions cover about half of the current maize land in the study villages. Some fallow land has also been

brought under maize.

Average household production of maize is only two tons, the highest being at Savar (three tons). The consumption of maize at household level is less than three per cent. Eighty per cent is sold to traders and the remainder goes directly to poultry farm and the feed mills. In the traditional village fresh maize cobs are sold to traders from fields, mainly for local consumption as roasted or boiled cobs. Some consumption of maize as flour for chapatis, is reported at Birganj.

Maize growers are little interested in keeping stock for off-season sales because of price risk and possible fungal attack. Only 18% of maize growers kept stock amounting to 16% of their total production. Stocking is higher in Savar (28% of their production). All producers emphasized the need for proper drying before stocking. This is, however, difficult in earthen floor specially in the monsoon season. The poultry farms and the feed mills generally do not stock maize beyond one month's requirement as they have a regular schedule of procurement. Small poultry farm owners buy broken grains instead of finished feeds usually once a week from the local market.

The demand for maize as feed ingredient is growing fast in the country with the establishment of new poultry, dairy and fish farms. Annual increase in the number of poultry and dairy farms over the last six years ending 1997/98 is estimated to be 6850 and 3706 respectively. The present annual consumption of maize and wheat by poultry farms is observed to be 14 kgs by a bird at the ratio of 5:2 which however, varies depending on their relative prices. Poultry farms with an average capacity of below 5000 birds consume imported maize to the extent of only one-fourth of their requirements. The feed mills, on the other hand, use imported maize amounting to two-thirds of their grain consumption. Very rough estimates show that there is an annual requirement of 450 thousand tons of maize by poultry farms in the country against the present domestic supplies of only 65,000 tons. Poultry and dairy industries are thus, import-dependent despite having high potentials of domestic production (three million hectares). Provision of adequate price incentives to growers appears to be a major step towards increased

production of maize in the country.

The procurement programme of maize in 1997/98 by the Ministry of Food was quite satisfactory. Their existing rice godowns are adequate but the procurement officers are required to be extra-cautious about moisture content in maize which should by no means exceed 13.5%.

The economics of production of maize and its competitive crops like wheat, potato, China-Irri paddy, mustard etc. suggest that the minimum price to growers should be above Tk. 6.00 per kg. under the existing cost-price configurations and the crop production technologies used.

To encourage maize production, government institution through its procurement programme is essential at least in the initial stage. Along with the procurement programme, special credit supports may be extended to commercial farmers, traders, and the NGOs interested in maize stock for year-round supplies to the poultry farms and the feed mills. In this regard, the Department of Agricultural Marketing or the present Integrated Maize Promotion Project of the Ministry of Agriculture may act as a facilitator between the potential buyers and the sellers as many of the farms are not well aware of local supplies, their quality and prices.

For increased commercial production, market supplies of hybrid seeds should be kept under constant quality inspection by some state agency like BADC and their sales prices should be kept lower as far as possible. Block farming by local maize growers like country's existing sugarcane cultivation in the mill zone may be organized through timely supplies of seeds, fertilizer and credit.

It is also considered important to carefully study the economics of production of maize at a broader perspective of agricultural development as its expansion is going to substitute some of the major crops like jute, wheat, mustard and pulses whose growth in production is also essential to meet their growing demand in the country.

SUMMARY OF DISCUSSIONS

DISCUSSANT: MR. K. M. LAYEK ALI

General Secretary, North Bengal Rice Mills Association Federation
Dhaka, Bangladesh

Here three papers have been presented. I would like to thank the authors for their presentation. Especially I would like to thank Dr. Shahabuddin, Dr. Nabiul Islam and Dr. Quasem for selecting three northern districts for their studies.

For preparing their paper, Drs. Shahabuddin and Islam have talked to the millers, farmers and traders and have addressed their problems. I would like to present some issues on internal procurement. One of the basic objectives of the internal procurement is to provide price support to the farmers. The price support is provided so that the farmers can get fair and remunerative price of their product. The system is that the authority issues cards to some selected farmers and only these farmers are allowed to sell their paddy at the procurement center. But I think there are some problems in this case. Only a small number of farmers get the card and in some case non-cooperation of the procurement authority also create problems.

Despite these problems there must be internal procurement because this works as an incentive for the farmers to produce more foodgrain, and by this they will be able to get fair price of their products. Though the government has storage constraints, I still suggest government should purchase the whole product of the farmers (the amount the farmers want to sell) after the harvest so as to improve the condition of the farmers. If the farmers fail to get fair prices of their product, they will not be interested to produce more. So I think procurement of their product at the right time at the right price will increase the overall food production of the country.

The next thing I would like to discuss is that we need to reduce the production cost of the farmers. For this, subsidies should be given to the farmers. It doesn't matter much in what form they get the subsidies. I think any kind of subsidy would be able to reduce production costs. If production cost decreases, production will be more profitable to the farmers and they will be

interested more in production.

Millers have an important role in the marketing of rice. We eat rice, not paddy. Millers convert paddy to rice. So government must provide some facilities and incentives to the millers. Millers face space constraints for drying boiled paddy. I suggest that in order to solve these problems, credit must be given to them at a lower interest rate and tax must be withdrawn from the equipment they use.

In periods of bumper production, the government must buy substantial amount of local product so as to face the problems that arise in the crisis period. If the government maintains a certain level of foodgrain stock, it can avoid floating tender to buy from outside at the crisis period.

It is generally argued that the government suffers a storage constraint, so it procures a smaller amount of foodgrain. But like Vietnam, government can develop floating storage, which on the one hand will store food, and on the other hand will be used to dry food. By this process, the quality of the foodgrain will be maintained for a long time. I think government can collect tax revenues as a precautionary measure by imposing a surcharge, so that in time of natural disaster it can buy rice through tender and can sell rice through OMS at a subsidized rate.

Now I come to the question of production of maize. Since production of rice and wheat is our main problem, we have to think whether it is wise to plant maize instead of other crops. But, if like China we can plant two or more crops in the same piece of land, then the production of maize can be beneficial to us.

Lastly I would like to say, the million-dollar question to us is how can we increase our food production. I think research will be devoted more on this issue in the coming days.

Thank you, Mr. Chairman.

OPEN FLOOR DISCUSSION

DR. DILIP ROY (BIDS)

In his paper Dr. Quasem said that jute can be substituted by maize. But I think jute is still one of the important cash crops of our country while maize is a food crop and the acceptability of it as an important food crop is still open to question. So my question is how logical is Dr. Quasem's conclusion? Even if it is possible to replace other crops by maize how can the farmers do that?

The next point concerns the methodology of the paper by Drs. Shahabuddin and Nabiul. In this paper, they have interviewed millers, farmers, traders and procurement authorities. This is a broad study, but the methodology of the study is not clear.

In his paper, Mr. Mahfooz discussed local tenders, international tenders and private imports. My question is whether there is any possibility of conflict among these three.

Regarding Mr. Mahfooz's paper, he has shown that there is subsidy on India's rice trade while Paul has shown that there is no subsidy on India's rice trade. Which one is correct?

MR. EZAZUL HAQUE (DIRECTOR, D. G. FOOD)

In his paper, Dr. Shahabuddin has presented that unfair means adversely affect the procurement program. My question is whether the government procurement policy or the job design is responsible for this.

Regarding Dr. Quasem's paper, whether it is possible to substitute other crops by maize depends on the condition of land. Now we have to consider whether if we plant maize, the fertility of the land will be maintained so that we can easily plant other crops. I think Dr. Quasem's paper did not address this issue properly.

DR. EAMINI AKBAR (MINISTRY OF FOOD)

It has been observed that in many cases farmers often do not show interest to sell paddy in the procurement center. I think this is due to the difference between the procurement price and market price. So my question is, "How does the authority determine the procurement price?"

In many cases, farmers often report the unfair means of the procurement officer. So my question is, "How will we set a fair committee?"

Dr. Shahabuddin's report indicates that millers face space constraints for drying boiled paddy and he suggests providing credit to the millers to solve the problem. But I think credit alone cannot be able to solve this problem.

Procurement authorities report that they cannot offer fair prices to the farmers due to quality deterioration of their product. I suggest that for maintaining the quality of their product, farmers and millers should be trained.

AUTHOR'S RESPONSE: DR. QUAZI SHAHABUDDIN

I thank the respondents for their comments and suggestions.

Yes, in our survey we have found that only a small number of farmers can sell their product at the procurement center. One of the most important reasons of issuing smaller number of cards is that government doesn't possess sufficient storing place. I think the storage facilities must be increased over time so that the government can purchase more from the farmers.

Now I come to the question of procurement price. I think determination of procurement price at a certain level can work as an incentive for the farmers. But the procurement price must be consistent with the market price. Government should not set the procurement price far above the market price; since this would encourage rent-seeking behavior. Also, there should be some correlation between world price and the procurement price, as well.

In our survey we have talked with millers, sellers, traders and farmers separately. Different groups reported different types of problems. We looked for the solution of these problems; in the light of the information collected and including specific suggestion received from the

respondents of the survey.

Yes, I think maintaining quality of the product is very important. We have observed that procurement authority pays higher price for the better quality product, so farmers and millers need to be trained up to maintain the quality of the product.

We saw in our survey that the farmers face constraint of drying space. I think that with adequate credit facility they can at least partially solve this problem.

MR. MAHFOOZOR RAHMAN

First I come to Dr. Roy's question. He has found some discrepancy between my information and Dr. Paul Dorosh's information. But I think there is no discrepancy between the two at all. Paul said that there is no explicit subsidy on India's export trade. Of course he is right. I said that the rate of interest borrowed against letter of credit is lower than the commercial rate. And I am saying that this is an implicit subsidy. So I am also right. In fact export trade of all third world countries receive some facilities or incentives. Interest rate commanded in this respect can't be called explicit subsidy.

Now I come to the observation of Mr. Layak Ali. Since the floating tender is open to all the millers individually, their association can bid for it. In fact, there is no problem in this respect.

DR. ABUL QUASEM

There is a strong concern about substitution particularly the replacement of jute by maize. In fact things are not exactly like this. The question of substitution comes in case of marginal land. To grow crops in the marginal lands, farmers think which crop will be profitable, and they grow that crop. So jute may be replaced. Though this type of replacement can hamper our jute mills, farmers don't care much about that. They think about their profitability and their survival.

Then I come to the potential of area expansion. There are some areas that have greater potential for maize production. In these areas maize will substitute for other crops. In fact, all

land areas will not come under maize production, only the areas with high maize potential will come under maize production.

Our poultry feeds (mainly maize) are highly import dependent. There is a large gap between production and requirements. Moreover, there are no production promotion activities. So support should be given to both production and sales promotion.

Then I come to the question of tariffs. At the time when I did the study, there was a tariff on the import of maize. But since then, the tariff has been withdrawn from the import of food-grain and fertilizer.

Next I come to the question of fertilizer use in maize production. Yes, on a per acre basis, maize consumes more fertilizer than rice. But it is consuming 20 percent less fertilizer than potatoes. So, the farmers are very careful. And they are using smaller amounts of urea and larger amounts of zinc and sulphur to maintain the quality of soil.

CHAIRPERSON: MR. A.K.M. NURUL AFSAR

I would like to say a few words on policy recommendations.

First, the opening of procurement center at the union level. At present we are procuring all over the country through 685 centers. But if we open procurement centers at the union level, the total number of centers will be increased to 4600. As you know now in the free market economy, the role of the government is shrinking; so it is a question whether we will open procurement centers at the union level.

Now I come to the flexibility of the procurement price. Many words have been spoken in this regard and also on the real market price, procurement price and the corruption of the procurement officials. If we keep the flexibility in the procurement price, that is, if we adjust procurement price to the real market price it will bring little good for the farmers but will increase the corruption of the procurement officials. For example, consider the case of price flexibility in OMS program. If the market price is Tk/kg 10, then OMS starts on Tk/kg 9, and if the market price is Tk/kg 12, then OMS starts at Tk/kg 11. This type of price flexibility increases corruption at the field level and the authorities become more questionable.

Then I come to the question of expanding the millers' quota. Government has a support price policy for the growers. But we have limitations on how much we can procure. We can't procure more than 10 or 15 percent of total production. The marketable surplus for boro at this moment is 50 percent, and in case of aman it varies between 25 to 30 percent. The government cannot procure to this extent. It does not have enough organized channels at this moment. We no longer have distribution through ration channels. All of our distribution serves as a safety net. So we have limitations in the quantity we can procure. In some cases, donors do not participate in distributions programs effectively. Food aid is also shrinking and the government cannot afford a big volume of purchases. So the size of the quota is limited by resources.

Now I come to the question of maize. We still have many problems in the availability of foodgrain. So we have to be cautious in the substitution of other crops by maize.

Now I would like to say some words on the procurement policy. We review the procurement policy every year observing the behavior of the farmers, millers and traders. I think procurement is a function of price as well as supply. If the price is appropriate and production is high, that is market supply is high, then the government procurement program becomes a success.

Then I come to the question whether we will procure paddy or rice. Sometimes, we give more weight on rice and sometimes we give more weight on paddy. We do not have any rigid position in this respect.

Next I come to the Mahfooz's paper. Still we have some difficulties in international tenders. Since 1994/95 there is an inspection system before shipment. Buyers have the right to check the quality of the product. However, when the product comes to the port we see that the quality of the product is different. This is one of the major problems in international tenders.

The existing rule in international tender is that 90 percent of the money will be paid in advance and the remaining 10 percent will be paid after the arrival of the product. But this 10 percent is not sufficient to cover the risk. So we have to examine the situation very carefully.

Lastly, I would like to thank all authors and participants in the workshop.

SESSION IV

NATIONAL FOOD SECURITY POLICY OPTIONS

Bangladesh Food Situation Report

FPMU

October 1999

Volume 42

Overview

Foodgrain market prices remained steady in August and September, reflecting the record boro rice and wheat harvests from March to May, 1999. The average wholesale price of coarse rice in Dhaka was Taka 12.50 per kilogram at the start of September, nearly Taka 2.0 per kilogram lower than in 1998 when widespread floods caused major damage to the aman rice crop. Procurement of both boro rice and wheat procurement, (602 thousand MTs and 280-300 thousand MTs, respectively) far surpassed original targets. Prospects for the 1999/2000 crop appear to be good, as area planted is near the target level, input supplies are adequate and the weather through early October was favorable in most of the country.

Production Outlook

For the fiscal year 1998-99, the estimated foodgrain production is 21.35 million MTs (metric tons), about 1.6 percent more than the target of 21.00 million MTs, and 3.23 percent higher than the actual production during 1997-98.

Overall agricultural production exceeded targets during the fiscal year 1998-99 because of application of improved technology, use of HYV seeds, expansion of irrigation facilities, and more intensive cultivation of crops and availability of adequate credit. If this trend can be maintained, it is hoped that Bangladesh will be self sufficient in foodgrain production by the end of the year 2002.

In the current fiscal year, 1999-2000, the projected foodgrain production is 22.40 million MTs (Aus 1.80, Aman 9.50, Boro 9.20 and Wheat 1.90 MTs). Projected area for transplanted aman is estimated at 5.0 million hectares. The latest information received from the Directorate of Agriculture Extension indicates that since transplanting began in July, 4.90 millions hectares of land has already been transplanted, 98% of the target. The government has already taken steps to provide credit and seed, and to insure adequate supply of fertilizer and fuel to farmers. Rainfall for the aman crop has also been adequate to date. Some flooding occurred in the southern coastal belt during early September, but caused relatively little damage to the aman crop there.

Figure 1

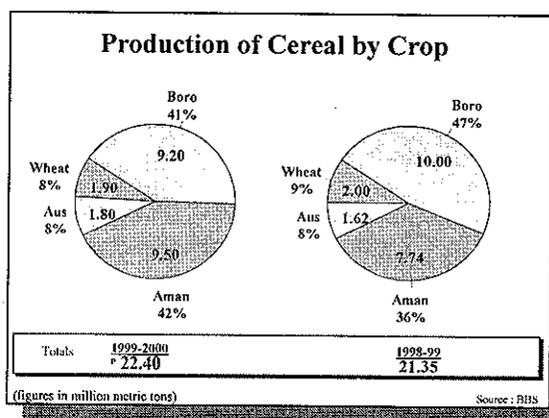
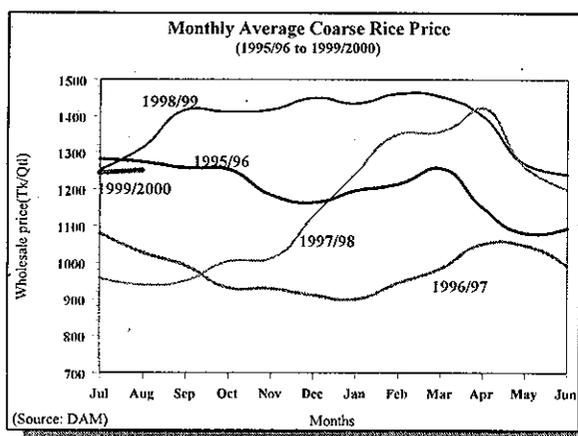


Figure 2



Government Action

In order to support the farmers, the Government increased the internal procurement target of both boro rice and wheat, raising the boro target from 400 thousand to 600 thousand MTs and the wheat target from 200 thousand MTs to 280-300 thousand MTs. Wheat procurement continued up to 31st August with a procured quantity of 254 thousand MTs. Boro procurement continued until 30 September and reached 602 thousand MTs, also slightly above its revised target. In response to the suffering of the poor people due to flood in certain districts, the government started VGF distribution programme in August. 2.5 million cards have been issued, and the budget allocation has been increased from 15 thousand MTs to 75 thousand MTs. Distribution of foodgrain in Food for Education (FFE) will start soon. Other channels (VGD, TR, GR, etc.) are also in operation as per the scheduled programme.

Dhaka, Bangladesh, October 14, 1999

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Food Aid and Commercial Imports

In the 1998-99 fiscal year (FY) about 1.24 million MTs foodgrain were received from the donor community. In the current fiscal year (1999-2000) about 0.83 million MTs of food aid commitment have been received to date, including 0.45 million MTs deferred from 1998-99 FY. Meanwhile 115 thousand MTs of wheat have been received during the months of August and September 1999. The Government of Bangladesh imported of 0.334 million MTs of rice and 0.430 million MTs of wheat during 1998-99 through its own resources. For 1999-2000, the government currently has no plans for commercial import of foodgrain, since the stock in the public storage depots is more than 1.30 million MTs.

During 1998-99 a total of 3.46 million MTs of foodgrain were imported by the private sector. In the current fiscal year (as of 30th September 1999) 0.284 million MTs of foodgrain have been imported.

Table 1 : Imports of Foodgrain

(000' MTs)

Category of Imports	1998-99 Total	1999-2000												Total	
		Actual		Projection											
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun		
Rice															
Govt. Com.	334	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Food Aid	59	0	0	2	2	0	0	0	0	0	0	0	0	0	4
Private	2663	32	42	60	110	100	50	20	50	100	30	20	20	634	
Wheat															
Govt. Com.	430	0	0	0	0	0	0	0	0	0	0	0	0	0	
Food Aid	1175	0	7	155	294	233	72	70	0	0	0	0	0	831	
Private	804	43	103	40	30	40	30	20	10	20	30	20	20	406	
Total	5465	75	152	257	436	373	152	110	60	120	60	40	40	1875	

International Prices

International rice prices have decreased in recent months. Since January 1999, the export price of 15% broken par boiled Thai rice fell from \$283 per MT to US \$227 per MT, due to good harvests in rice producing countries and weak import demand. Prices in India have been steady, as indicated by the wholesale price of Perimal rice in Delhi, which was Rps.8.72 per kilogram in August, equal to \$201 per MT. Adding estimated transport and marketing costs, the calculated import parity price at Dhaka in August was Tk.14.6 per kilogram for Thai 15 percent broken and Tk.14.0 per kilogram for Perimal rice, compared to the wholesale price of Tk.11.85 per kilogram coarse rice in Dhaka.

The international wheat price (F.O.B., US gulf hard red winter #2) continued to decline, falling to US \$101 per MT in July, the lowest level in over five years. The wheat price rose slightly in August, 1999 to \$110 per MT, but was still below the 1998-99 average wheat export price of US \$118 per MT. Future market F.O.B. price quotes for US Gulf hard red winter #2 wheat are currently US \$108 to \$118 per metric ton for delivery in October - November 1999.

Figure 3

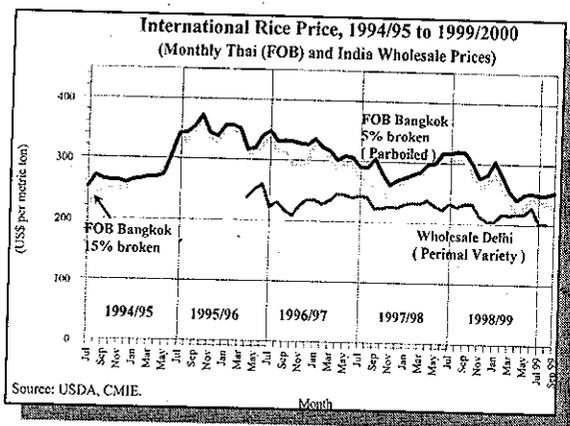
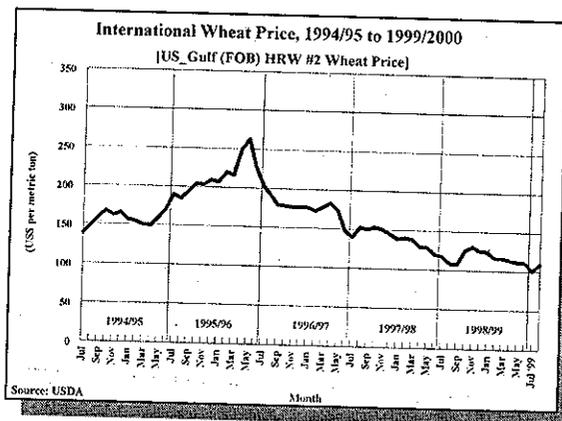


Figure 4



Domestic Prices

Because of a good boro harvest, the national average price of HYV coarse rice (Figure 2) remained stable with only a slight increase to Taka 12.50 per kilogram in the month of August 1999, up from Taka 12.43 per kilogram in the month of July 1999. Last year in the month of August the national average price of coarse rice was Taka 13.13 per kilogram. Paddy prices increased more sharply, rising from Taka 6.10 per kilogram in Rangpur in mid-July to Taka 7.26 per kilogram by the end of August (Figure 5). The paddy procurement price is Taka 8.25 per kilogram, providing ample incentives for farmers to sell to the government.

Figure 5

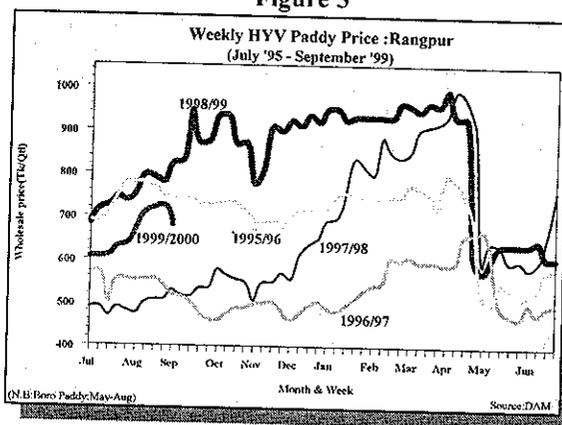
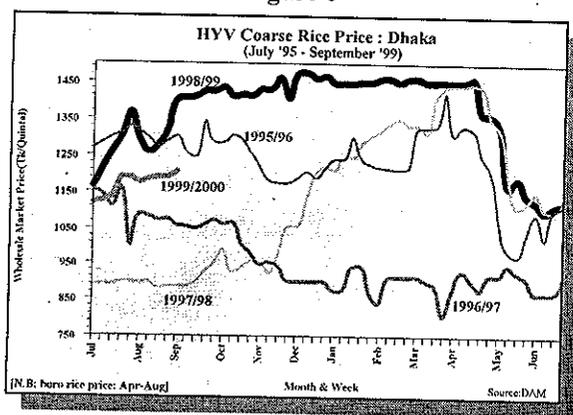


Figure 6



The average HYV coarse rice price in the Dhaka city market remained stable at Taka 11.90 per kilogram in the month of August 1999, the same level as in July (Figure 6). A small increase in rice prices in the coming weeks is expected in line with normal seasonal price patterns. Nonetheless, prices in Dhaka at the start of September 1999 were only Taka 12.05 per kilogram. This year's price is nearly Taka 2.00 per kilogram lower than those in September 1998 (Taka 14.02 per kilogram), when floods had damaged the aus crop and aman seedlings.

The average price of wheat in the Dhaka market also showed a slight increase to Taka 8.77 per kilogram in August 1999 from Taka 8.59 per kilogram in July 1999. Wheat prices in August 1999 were still more than Taka 1.5 per kilogram below their August 1998 levels, however. Given the low market prices and a government procurement price of Taka 8.80 per kilogram, the Ministry of Food was able to successfully procure 254 thousand MTs of wheat, 12.7 percent of national production.

Figure 7

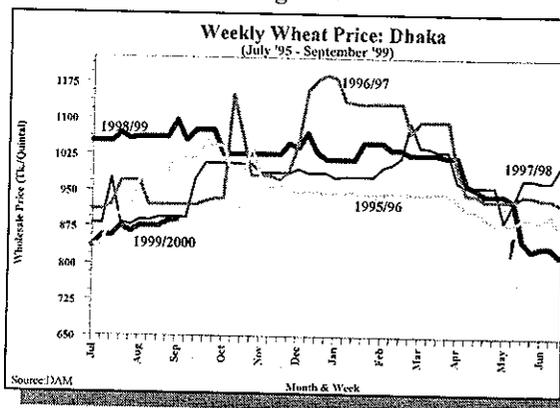


Figure 8

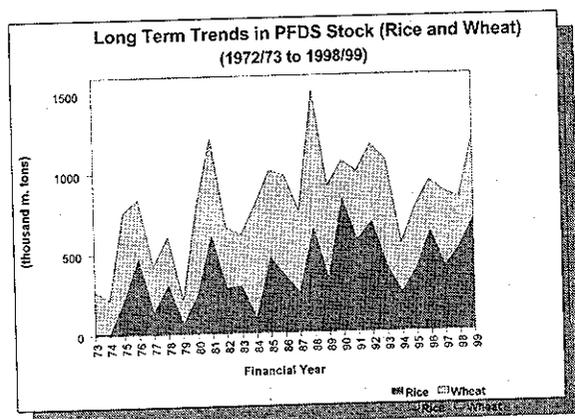
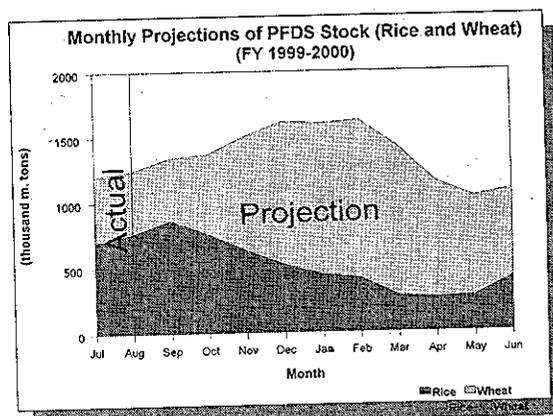


Figure 9



Public Food Operations

Table 2 : Monthly Public Foodgrain Operation, 1999-2000
(Jul - Aug 1999 Actual Figures; Sep 1999 - June 2000 Projections)

(000 MTs)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
Rice													
Opening Stock	695	760	861	756	626	517	441	410	271	256	269	406	
Accumulation													
Procurement	83	148	0	0	0	50	100	50	0	25	150	75	681
Food Aid	0	0	2	2	0	0	0	0	0	0	0	0	4
Govt. Com. Imp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Distribution													
Priced	11	12	32	51	31	40	11	53	12	11	11	11	286
Non-Priced (including FFE)	6	35	74	80	78	85	119	136	2	1	1	1	618
Stock Loss	1	2	1	2	1	1	1	1	1	1	1	1	14
Closing Stock (a)	760	861	756	626	517	441	410	271	256	269	406	468	
Wheat													
Opening Stock	504	482	475	608	880	1098	1158	1213	1148	890	759	675	
Accumulation													
Procurement	2	0	0	0	0	0	0	0	30	80	23	20	155
Food Aid	0	7	155	294	233	72	70	0	0	0	0	0	831
Govt. Com. Imp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Distribution													
Priced	10	12	10	10	11	11	12	12	52	11	10	10	171
Non-Priced (including FFE)	13	1	11	10	4	0	2	52	235	199	96	45	668
Stock Loss	2	2	2	3	3	3	3	3	2	2	3	3	31
Closing Stock (b)	482	475	608	880	1098	1158	1213	1148	890	759	675	637	
Total Stock (a+b)	1242	1336	1364	1506	1615	1599	1623	1419	1146	1028	1081	1105	

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PRICE STABILIZATION AND PUBLIC FOODGRAIN DISTRIBUTION: POLICY OPTIONS TO ENHANCE NATIONAL FOOD SECURITY

— Dr. Paul A. Dorosh
& Dr. Quazi Shahabuddin

Ironically, less than one year from the massive floods of 1998 and the concerns of imminent food shortages, excessively low prices, rather than high prices dominate the short-term food policy debate. Bumper crops of wheat and boro rice in the first half of 1999 suddenly brought large surpluses to markets, leading the Ministry of Food to increase procurement targets, and resulting in a large build-up of government stocks. This rapid turnabout in market conditions and public perceptions illustrates both the natural instability of foodgrain production and markets in Bangladesh and a major reason why the Government of Bangladesh intervenes heavily in rice and wheat markets.

The major objective of food policy in Bangladesh is ensuring food security for all households. To meet this overall objective, the government undertakes several activities: it intervenes in markets to stabilize prices, targets food distribution to poor households and provides emergency relief after natural disasters. Thus, government food policy has both price (stabilization) and quantity (public foodgrain distribution) aspects, and given fiscal, as well as stock constraints, it is not always possible to meet all objectives.

For example, no specific floor and ceiling prices are set. Rather, the government attempts to influence domestic market prices through limited purchases (domestic procurement), sales or distribution of specified quantities of foodgrains. Likewise, programs designed to alleviate poverty and household food insecurity such as Food For Work (FFW) and Vulnerable Group Development (VGD) are limited by the extent of resources available, particularly in the form of food aid.

This paper examines the mix of government intervention and private sector participation in food markets in recent years, and analyzes policy options related to price stabilization and targeted distribution. In particular, the focus of the paper is on the role of trade liberalization,

impacts of domestic procurement on rice prices, and food aid.

RICE PRICE STABILITY IN BANGLADESH AND WORLD MARKETS

The reduction in the size of the PFDS in the early 1990s diminished the government's share of total foodgrain sales and consumption, and to some extent its influence on domestic market prices. The trade liberalization of the early 1990s also reduced government control on the supply of foodgrains through imports, though it opened up the possibility that private sector imports could stabilize markets in times of domestic production shortfalls, perhaps in a more cost-effective way.

Examination of rice price variability in Bangladesh shows no clear increase in price instability in the 1990s compared with the 1980s or the second half of the 1970s. Year-to-year fluctuations greater than 10 percent and deviations from the moving average of more than 5 percent occurred more frequently in the 1990s than in the 1980s. However, seasonality of monthly prices was reduced in the 1990s, and coefficients of variation of annual prices fell sharply. Real prices of rice were slightly more unstable in the 1990s, (as measured by the coefficients of variation).

World prices of rice, ex: Bangkok, in contrast, have clearly become more stable over time, as the volume of world trade has grown. In the 1990s, Bangladesh domestic prices expressed in Taka were approximately as stable as Bangkok prices expressed in dollars (as measured in terms of deviations from a moving average trend.) Overall, the evidence indicates that Bangladesh annual prices were slightly more stable in the 1990s than international (Thai) prices though Indian prices, heavily influenced by Indian government market interventions, were even more stable.

STOCK POLICIES, PRICE STABILIZATION AND THE ROLE OF INTERNATIONAL TRADE

Earlier stock modeling exercises suggest the importance of clarifying policy objectives and the limited influence and benefits of government market operations on domestic rice prices in the 1980s. Given the lower price of wheat compared with rice, costs can be reduced or the number

of people reached can be increased if wheat is used instead of rice in targeted distribution to the poor. Moreover, with trade liberalization, private sector imports have added to price stability by effectively providing a price ceiling at import parity levels following poor rice harvests in 1994/95, 1997/98 and 1998/99. Nonetheless, rice price stability remains a concern, especially since export parity does not provide an effective floor because Bangladeshi traders have not established export contacts.

IMPACTS OF GOVERNMENT INTERVENTIONS ON DOMESTIC RICE MARKETS

Domestic procurement thus retains its importance. Production instability in the aman season makes price forecasting difficult, though. In five of the last six years, the eventual average wholesale market price at harvest was above the procurement price, resulting in an average of only 8.9 percent of the procurement target actually being achieved. Moreover, the procurement price set in boro season has been excessively high in 3 out of 4 recent years, resulting in extra costs to the government and windfall profits to those who are fortunate enough to sell at the procurement centers. In addition, procurement prices substantially above market prices encourages rent-seeking behavior and adds to the potential for corruption of public officials connected with procurement. Open tendering has succeeded in enabling some domestic procurement following unexpected domestic production shortfalls in 1998 and 1999. Technical problems remain, but if these are overcome, costs could be reduced and reliability of procurement could be increased.

TARGETED DISTRIBUTION, FOOD AID AND HOUSEHOLD FOOD SECURITY

The Bangladesh food economy has undergone major changes in the last two decades: foodgrain production has increased, real rice prices have fallen, major rationing channels (palli rationing and statutory rationing) were eliminated in the early 1990s, and private sector foodgrain imports were liberalized in 1992/93. In the 1990s, with less food aid available, total PFDS distribution is lower (by 0.68 ounces/person/day compared to the 1980s), but over 80 percent of this foodgrain is targeted to the poor.

In the medium-term, if Bangladesh increases production and prices fall towards export

parity levels, price stabilization, in the absence of some exports, will become more difficult. Moreover, increased foodgrain production reduces the estimated food gap, generally used in the determination of food aid flows.

The concept of the food gap is deficient on two counts, however. First, it fails to take into account private sector imports, which depend not only on domestic production, (and more broadly domestic supply and demand), but on international prices as well. Second, the food gap is essentially a measure of food availability, but food security depends not only on availability, but on access and utilization as well. There is a very high likelihood that food aid to Bangladesh will decline in the future because of increased domestic production and, perhaps, more exact estimations of private sector imports in the food availability calculations. Moreover, food aid worldwide may fall due to reductions in producer subsidies in donor countries following the Uruguay Round agreements. Reductions in food aid are likely to result in overall reductions in resources for ensuring household access to food, as well.

Thus, a firm commitment on the part of donors and the Government of Bangladesh regarding resources for access is needed, particularly for programs that combine access with increased skills or infrastructure development to enhance long-term growth in incomes. As domestic production increases and Bangladesh becomes more integrated with world markets, foodgrain price instability may become less important. Tackling the problems of poverty and household food insecurity will require more resources, not less, than those devoted in the past to price stabilization and direct food distribution through the Public Foodgrain Distribution System.

SUMMARY OF DISCUSSIONS

DISCUSSANT: DR. SAJJAD ZOHIR

Senior Research Fellow

Bangladesh Institute of Development Studies (BIDS)

My main responsibility here is to comment on Paul and Shahabuddin's paper. Broadly speaking, the paper discusses both stabilization and food security. There are two aspects of stabilization. One is international trade, that is external procurement, and the other is internal procurement. This paper examines whether private sector participation in international procurement has been good or bad for price stabilization.

My first observation is on the title of the paper. The paper covers many issues, including the mix of government intervention and private sector participation in food markets and the implications of trade liberalization and domestic procurement. However, the current title does not capture the main theme of the paper.

Section II of the paper analyzes the price movements of Bangladesh and compares them with some aspects of Indian and Thai prices. The authors find that comparisons of price stability in the nineties with price movements in the eighties give mixed results. They also find that the Bangladesh price in Taka is as stable as the world price in U.S. dollars.

Section III actually takes the position that price stabilization per se does not generate much benefit. More important, the government's role is stated to be essential in achieving the broad objective of food security. Even though the authors do not state it directly, the proposition is that for the purpose of price stabilization, the government does not have much to do in terms of domestic procurement. I am extending their argument a bit in an extreme form. The authors also discuss the needs for food stocks to handle situations when the world price is unreasonably high.

I think it is important to analyze the characteristics of the price movements in the nineties, and identify the differences of this post-liberalization period and the earlier periods. What are

the lessons from analysis of price movements of the seventies, eighties and nineties?

Now it seems that there are two important omissions in the analysis of the price movements of rice. The first one is the omission of the cyclical component of prices. We know that in any time series analysis, there must be an analysis of trend components, seasonal components and cyclical components. But this paper omitted discussion of cyclical variations, which previous studies undertaken by BIDS have analyzed. We see from these earlier studies that the amplitude and phase of the cyclical component increased in the nineties. This is one of the major aspects that distinguish the price movements of the nineties from those of the eighties.

In the analysis of the seasonal price index the existence of a long cycle must be taken into account. The paper includes tables showing the months of peak prices and the months of low prices for each year of the periods analyzed. But you will see that the months of peak and low prices have varied a lot in the nineties compared with the eighties. This is because the long cyclical price movements of the nineties have not been taken into account. We all broadly agree, though, that in the eighties and nineties the seasonality element has been reduced because of the change in rice production structure.

The second aspect I would like to address is the issue of the import parity price with India providing a ceiling for Bangladesh rice prices. In Figure 3.1 & 3.2 of the paper showing average annual prices, we see that during the eighties our domestic price was always below the import parity price, but during the nineties the two prices have on occasion changed their relative position. Further probing into the reasons behind the contrasting price behavior in the eighties and nineties would be useful.

I would summarize the main argument of the paper as price stabilization brings little benefit for the society. However, this analysis has been provided from the perspective of the consumer only. The paper also shows that some stabilization can be ensured without the participation of the government, through private sector imports of rice. A counterfactual analysis is done suggesting that the benefits of domestic procurement for price stabilization have been quite limited. The authors also state that government market interventions using rice are more

effective for price stabilization (of the rice market) and that wheat is more efficient for ensuring food security at the household level. Many of these observations are similar to those from the early 90's. Further analysis may be needed, though.

There is no controversy, I believe, on the private sector participation in international trade of foodgrain. The government has allowed it, and it is taking place. Whether this trade has actually increased price stability is unclear, since this paper did not take into account the cyclical component of rice price fluctuations. These cyclical fluctuations do not indicate that the private sector has failed in price stabilization. But one may conjecture that the private sector is still in the early phase of the learning process with regards to international trade in rice, which has been allowed only since 1994. Further analysis comparing the two periods of large-scale rice imports in 1994-95 and 1998-99 would be useful. In 1994-95, a lot of importers who normally did not trade rice got involved in rice imports. Many of these traders lost a lot of money when there was a sudden decline in rice prices, indicating that they had serious problems with forming accurate price expectations.

If the authors can more clearly identify how the structure of the private sector may have changed and explain the cyclical movements in prices, then the authors' arguments regarding the effectiveness of the private sector in price stabilization will be more convincing to policy makers.

Thank you Mr. Chairman.

OPEN FLOOR DISCUSSION

DR. M.A.S. MONDAL (BANGLADESH AGRICULTURAL UNIVERSITY)

Regarding the Food Situation Report presented by Ruhul Amin, I would like to know how the production target is set and what varieties of rice are imported by the private sector.

DR. ABUL QUASEM (BIDS)

Paul and Shahabuddin's paper shows that rice price stabilized over time and also shows that real price came down. Does this indicate that food insecure people are more secure now? Has their purchasing power increased?

PROF. ABDUL BAYES (JAHANGIRNAGAR UNIVERSITY)

The paper has emphasized the role of the private sector in reducing fluctuations in rice prices. Greater emphasis should be given to the role of government investment in infrastructure and communication.

Our analysis of food security is confined mainly to the consumption of rice and wheat. But these days people are diversifying their diets and consuming more of other commodities, as well. So, in the analysis of food security, we need to consider the production and consumption of other commodities. Further investments in infrastructure, communication and education can encourage this change in food habits and help us to achieve a sustainable food security.

AUTHORS' RESPONSE:

MR. RUHUL AMIN

In each year the national food committee sets a production targets for each crop. One key factor is how how much land is available for production.

Regarding private sector imports of different varieties of rice, I would like to say that actually the government does not have any control over the private sector. At this time, the private sector is importing mainly fine varieties, since they are profit motivated and the market price of coarse rice in Bangladesh is low. Private sector traders occasionally contact us to learn about current government policy and possible policy changes.

DR. PAUL DOROSH

There are two major objectives of the public foodgrain distribution system. One is stabilization of the rice price and the other is targeted food distribution to the poor. In terms of rice price stabilization, private sector imports have made the task easier by putting a ceiling on rice prices equal to import parity, as we have discussed several times in the last sessions.

Another aspect of price stabilization is avoiding excessively low prices at the time of harvest. This is a major issue for the government now with current market prices rather low. As we have discussed, it is difficult to set a procurement price before knowing the size of the harvest. Procuring foodgrain through tender can save the government a lot of money by ensuring that the procurement price will not be significantly higher than the open market price.

Price stability is not the same as food security, however. We have seen that private sector imports have greatly enhanced rice price stability over the last few years, but that does not solve the food security problem. Whether the rice price is Tk. 12 per kilogram wholesale Dhaka or Tk.14 per kilo wholesale Dhaka, there are still a large number of poor people who do not get sufficient food. Food security involves much more than rice price stabilization. Government distribution and targeting are also very important for enhancing food security of poor households, and as Carlo's paper showed, VGF and other programs were well targeted to poor and flood-affected households following the 1998 flood.

Food aid is one major source of government foodgrain for distribution to the poor. Unfortunately, the level of food aid is not based on the needs of poor households for increased consumption, but on the availability of the foodgrain in the country. Even though the availability of the foodgrain increased last year, half of the population did not have adequate resources to consume enough food.

Finally, though the economic benefits of price stabilization are small, rice price stabilization has other benefits. Highly unstable rice prices threaten political stability since rice is a major staple food. So, even though the economic benefits of price stabilization are small, price stabilization is a high priority.

DR. QUAZI SHAHABUDDIN

First I will address Dr. Sajjad Zohir's comment on price fluctuations. Yes, by some measures prices in Bangladesh have been more stable in the nineties than in the eighties. And Thailand's prices have also been more stable.

Then we come to Dr. Quasem's comment that even though price fluctuations are lower in recent years, it does not indicate that food insecure people are more secure now. Price stabilization is only one aspect of food security. For long term food security, we need to put more emphasis on sustained growth in agricultural production. In the short run we can mitigate food insecurity by private imports or by food aid. But in the longer term, we need to do two things. The first one is to achieve sustained growth in agricultural production in the country. We need to formulate an appropriate strategy in the light of the slow growth in the nineties. In order to increase the growth rate, policy measures need to be taken to address the problems of the decline in soil fertility and the slowdown in growth of irrigation. At the same time, we have to initiate long term income generation activities so that people can maintain a certain level of purchasing power. We need to set a target of achieving a national growth rate of 6 percent to 7 percent. This will contribute towards solving both the availability and access problems.

Thank you, Mr. Chairman.

Chairperson: MR. MAHBUB KABIR (SECRETARY, MINISTRY OF FOOD)

I can only say that this has been a very interesting session. I thank all of you, all the presenters of the papers, discussants and distinguished participants.

I am not going to discuss various aspects of price stabilization and food security. Instead, I would like to talk about the formulation of food policy.

Policy decisions are taken on the basis of various considerations, including economic analysis. Political-economy considerations are very important, especially the perspectives of policy-makers and their expectations for various events in the following months.

The Food Secretary is only one of the many players. What I have done during my last eighteen months in the Food Ministry is maintain a close liaison with Dr. Paul Dorosh and his team and tried to equip myself with professional advice and analysis. Then I have gone over to the policy-making bodies with my professional backing and tried to present these policy options, along with their implications. Whatever policy decisions you have seen in the past come out of those policy-making bodies. My experience is that if you go professionally prepared, your viewpoints are more likely to be accepted than if you go unprepared, and that is precisely what I have tried to do. I must say that it has been a very useful experience.

But I must also say that the policy-decision process is not purely politics, because that would not serve the interests of the Ministry of Food. The policy-making process is not purely economics, either. It is both. Policy emerges out of the very important perceptions of the decision-makers, who weigh both economic and political factors in making their decisions.

Thank you.

SESSION V

**PANEL DISCUSSION : BANGLADESH FOOD SECURITY
: THE WAY FORWARD**

8/12

PANEL DISCUSSION

BANGLADESH FOOD SECURITY: THE WAY FORWARD

CHAIRPERSON: MR. ABU ABDULLAH

Director General, Bangladesh Institute of Development Studies (BIDS)

PANELISTS:

1. MR. MAHBUB KABIR

Secretary, Ministry of Food

2. DR. DAVID SPRAGUE

Leader, Economic Growth and Agricultural Development Team
USAID, Dhaka

3. DR. QUAZI SHAHABUDDIN

Research Director, BIDS

4. DR. WERNER KIENE

Country Representative, World Food Programme (WFP), Dhaka

MR. ABU ABDULLAH (DIRECTOR GENERAL, BIDS)

In this session we have a very distinguished panel. We have Mr. Mahbub Kabir, secretary of food; dr. David Sprague, leader of the agricultural growth and economic development team, USAID; Dr. Quazi Shahabuddin, research director, bids; and Dr. Werner Kiene, country representative of the world food programme.

there are one or two issues that we have discussed in earlier sessions that perhaps bear a little further elaboration. One is the whole issue of self-sufficiency versus what some have called self-reliance. In other words, should Bangladesh try to grow all its own food requirements, or should it depend on the world market and basically go by comparative advantage? Here, i am expecting dr. Shahabuddin to say something on these issues.

second, we have this tautology that the poor are food insecure and the food insecure are

poor. There may be minor discrepancies, but basically these two are virtually the same. So any policy to eliminate poverty is at the same time a policy to promote food security. Obviously, we will not discuss macro-economic policy, investment policy, privatization policy and other growth policies here.

But we also know that food policy has to be very heavily involved in safety nets that give some degree of protection to those who are left behind by liberalization, privatization or whatever development policy is being implemented in the country. But, if food policy is primarily for income support to the poor, does it have to be as food or should it be in cash instead. Yesterday, our Cabinet Minister expressed some anxiety or displeasure at donor statements that they might prefer to give the aid in cash rather than in physical terms as food, which has a lot to be said for it. Werner Kiene and others may wish to address this issue.

DR. DAVID SPRAGUE (USAID)

When I came in this afternoon, I heard Paul say something about donors making food aid decisions based on the food gap. I just want to re-emphasize that this is absolutely true. I think that probably the first factor that comes into play in the U.S. as far as food aid is concerned is what has happened in the U.S. That will be a large determinant of the size of the food aid that eventually is given. This is the reality and I think everyone is aware of it. So, there is necessarily going to be some fluctuation in total food aid that is available.

On the other hand, when food aid is divided among the countries in which we have programmes, the gap is the critical measure by which the amount of food aid is determined. I know that for a fact because I just went through this process about a week ago with representatives from the USDA. The argument that the nutritional level is still quite low for well over half the country will not carry the weight that the gap figure will. For whatever reason, it is not as important a figure as the simple gap between needs and supply. I don't think that that it is necessarily the best measure for the country in terms of food security, but it is one that does drive donors in their allocation of food.

I would like to go back to what I said in the opening session about the importance of establishing a sound food policy. I think it is so critically important because the policies will determine what happens at the time of crisis, and that is when those policies are needed -- not when everything is going well. So I think having a strong and capable Food Planning and Monitoring Unit within the Ministry of Food is absolutely essential. That is why this type of discussion that can feed information into that unit is exactly what is needed.

I think that the Food Ministry's policy of allowing the private sector to act during crises over the course of the last several years was absolutely the right thing to do. The success of this policy is borne out by the results and I hope the policy will continue in the future. Over-intervention by the government in the time of crisis may solve the immediate short-term problem, but it will distort the market and have long-lasting negative effects. I think that what the previous and present Secretaries did in the course of the last two crises was just the right thing to do.

On targeted food programs, my analysis of what happened during the flood and in the aftermath of the flood last year was that, in the effort to be fair and equitable in the allocation of food to those most in need, a very broad based program, the VGF program, was used. There is a need also for a program that could respond more quickly in a time of crisis like that. Such a program needs to be thought of ahead of time, planned ahead of time, and implemented quickly, because as we saw in this case, it does take time to get the cards printed, to make determinations of who should receive cards and how much they should receive. That takes time if you're going to do it in a way that is fair to everyone. I think that while this process is going on, there needs to be in place a more rapid action program that would give food out much more quickly.

The only other thing I would add is that there was a place for cash as well as food in the aftermath of the flood. Availability of food was not always the major problem; it was the access to the food. People simply did not have the cash to buy enough food. Therefore, I think there was a role for the donors to bring in cash, rather than just food. I think it has to be done carefully, since obviously there is all sorts of room for corruption in a program like that, but

combining cash with food could have added to the relief effort, making it even more effective.

Thank you, Mr. Chairman.

DR.QUAZI SHAHABUDDIN (BIDS)

Mr. Chairman, I would like to address some pertinent issues related to the attainment of food security in Bangladesh.

Few countries approach food security with as much a sense of urgency as Bangladesh. This is not surprising since Bangladesh faces the daunting challenge of feeding its 125 million people, most of whom are poor. The country has an average per capita income of about 200 dollars and a history of periodic natural disasters. The average household still spends about 60% of its budget on food and foodgrain still supply 80% of calorie to the household.

At the outset, I would like to emphasize on the interface among the changes in agricultural production environment, structure in foodgrain market and food policy reforms over the last decade in Bangladesh. The country has witnessed considerable growth in foodgrain, specially rice production over the last two decades. This is largely attributed to adoption of HYV, expansion of irrigation facilities and use of chemical fertilizers, specially in boro season. This has led to growth in marketed surplus, increase in private stock and long term decline in real price of rice. Moreover, the significant increase in production of boro rice resulted in more even distribution of market arrivals of rice which reduced the seasonal price spread considerably (from 23.6% during the seventies to 12.5% during the nineties). At the same time, the foodgrain market has become more integrated due to improved infrastructure in rural and peri-urban areas. All these has led to a number of food policy reforms, perhaps the most important of which is trade liberalization since the early 90's, specially the encouragement of private sector imports of grains in times of domestic production shortfall due to natural disasters. This contributed significantly towards stabilizing market supplies and prices in 1997 and 1998 when draught and floods caused considerable loss in aman rice production.

Despite these developments, however, the government has to intervene to address chronic food insecurity, for those who are most vulnerable (those who lack entitlements and therefore,

are largely bypassed by the market) through various safety net programmes and also to provide relief as well as to stabilize market supplies in times of natural disasters.

Now I would like to present before you a framework for approaching the problem of achieving food security for all both in the short as well as in the long run, which incidentally also constitute the overall objective of the national food policy. Here I would like to emphasize that given limited budgetary resource and the complexity and magnitude of the problem, the government recognizes the need for partnership with the private sector, donors and NGOs in order to achieve this goal. Attainment of food security involves availability, access and utilization. On the availability side, the overall objective is to ensure adequate supplies of food at affordable prices, which has both short and long term dimensions. The mechanism and/or approaches ranges, in the short run, from distribution from public stocks, encourage private sector trade, provide adequate price incentives for domestic production and to promote sustainable and efficient domestic production.

Let us first concentrate on the long-term availability of foodgrains in the country. We all know that the most important issue facing Bangladesh agriculture is to enhance and sustain growth in crop production, specially foodgrain production. Projections of foodgrain supply and demand have shown that even with a modest economic growth rate of 4 per cent, demand for foodgrains will increase to 25 million tons by 2000 and 30 million tons by the year 2010. On the other hand, with a base case scenario assuming annual growth rates of 3 per cent for irrigated area and 3.5 per cent for rice yields, supply could increase to 24 million tons in 2000 and 28 million tons in 2010. The widening demand-supply gap indicated by these projections underline the imperatives of accelerating the growth in foodgrain production in the country. Meeting the shortfall through commercial imports may not be efficient since various studies on comparative advantage have shown that Bangladeshi farmers are efficient producers of rice for import substitution, if not for export. In other words, the attainment of self-sufficiency in rice production is not only an important socio-political objective, it is economically sensible as well. In fact, the objectives of attainment of self-sufficiency and self-reliance becomes synonymous, in this sense.

Now, what is the scope of increasing foodgrain production in Bangladesh? I think there is considerable scope of increasing foodgrain production in the country. This is largely reflected in the wide gap between the potential and realized yields of both rice and wheat. Various studies indicate that the yield potential of the existing HYV rice is more than 4 tons/hectare whereas the average yield realized by the majority of farmers is only 2.0 tons/hectare. In case of wheat, the gap is even greater. Thus, the foremost priority is to accelerate growth in productivity and close the yield gaps. In achieving this objective, it is necessary to identify and address the underlying constraints/limiting factors.

There may be many but I would like to identify four major limiting factors which prevent the growth of crop productivity in Bangladesh.

First, there is the lack of high quality seed. Most of the seed requirements are met by seeds retained by farmers from earlier harvests and are generally of poor quality. In this context, one can think of hybrid seeds which has been extensively used in China and India, though it has some inherent limitations of the renewal requirements every year. Also, the prospects of "super rice" being developed by IRRI is in the pipeline for quite sometime now but when this will actually be tested in Bangladesh remains open to question.

Second, there are severe deficiencies in the management of nutrients in raising crop productivity and improving soil fertility. The inadequate and unbalanced use of N, P and K (excessive use of urea compared to phosphate and potassium fertilizer), the shortage of other nutrients like sulphur and zinc and rapidly declining level of organic matters in the soil are the major factors for the decline in soil fertility.

Third, there is inefficient management of water at the farm level. Crop productivity is hampered by the inefficient use of irrigation facilities. It may be worthwhile to mention here that supplementary irrigation at the grain-filling stage could avoid as much 40% loss of yield in transplanted aman rice.

Finally, there is the problem of weak link between crop research and extension which prevents farmers from making use of improved technology for raising crop productivity and farm

profitability.

In order to overcome these constraints, appropriate policies need to be adopted for sustained growth of rice production in the country. It should be emphasized here, however, that while much in line with country's comparative advantage, rice production will continue to dominate the agriculture sector in the foreseeable future, not all efforts should be concentrated on rice alone. The advantages of crop diversification in enhancing farmers' income, nutritional balance and soil quality are too well known to need any elaboration. The country has a wide range of agro-ecological conditions suitable for growing various crops. Such possibilities should be explored as well.

Alleviating poverty and attaining food security for its fast-growing population are the most critical challenges that Bangladesh has faced since its independence. Successive Five-Year Plans have set these the twin goals of development, but so far only modest progress has been achieved. Much remains to be done to attain these goals. The "business-as-usual" scenario cannot do the job if these chronic problems are to be solved within a reasonable time horizon and if a better society for the next generation is to be established. In fact, eradication of poverty will remain an illusion if the economy continues to grow at the historic rate.

A simple illustration would make this more clear. If per capita income grows at 2.6% per year, it will take 28 years to double it from US \$250 today to \$500 by the year 2025. At that level of income (which is now enjoyed by Pakistan), nearly a third of the population will live in poverty. If Bangladesh were to reduce poverty to around 20% over the next quarter century, it must target to reach an income level of around US\$ 1000 within that time horizon. Indonesia had been able to reduce poverty to 15% with that level of income, before the recent economic crisis hit the country in 1997. To attain that goal, the target for the growth of national income must be set at 6.5% per annum. With political stability, prudent economic policies, moderate inflow of foreign private investment and efficient implementation of development projects, that growth target should not be difficult to achieve.

Before concluding, I would like to say a few words about long term access to food of the

poor. It is widely recognized that since land, capital and economic opportunities are fairly unequally distributed and underemployment is widespread, the trickledown effect of economic growth on low-income groups is fairly weak in Bangladesh. Hence, in order to improve access to food, a broad-based economic development with emphasis on employment- generating programmes is needed. In this context, the diversification of the rural economy and development of non-crop agriculture such as livestock and fisheries assume special significance. Also, planned development of rural non-farm sector would be a sensible policy and is expected to contribute significantly towards achieving the objective of food security for all in the long run.

Thank you, Mr. Chairman.

DR. WERNER KIENE (WFP)

I'm not a believer in Malthus and his theory, Mr. Chairman, but I know that last week there was a day called the day of six million [people] which raised some eyebrows in some corners. Of course, we all know that so far, worldwide, we have had sufficient resources to meet the growth in demand or needs of this many people. On the other hand, we have seen areas, this part of the world is one of them, where one is led to believe that Mr. Malthus is saying something we need to think about. Be that as it may, continuing increase in population is disturbing. The previous speaker alluded to the need for another 20 million metric tons of cereals given current projections. Now, where this 20 or 30 million MTs will come from is a question for the agronomists to decide.

We have talked a lot about availability -- aggregate supply. We have also spent a lot of time in this workshop about access. But I hear the terms nutrition and utilization only sparsely interwoven in the discussion. When we deal with food security, this latter part has to come into the equation, as well. Poverty analysis in Bangladesh is based on caloric consumption capacity. On the other hand, what nutritionists tell us is very serious. Even if we do much better on caloric intake, the density of micro-nutrients in the current diets of Bangladesh is dismally low on most micro-nutrients that people need for a healthy life.

I am starting actually with my conclusions because sitting close to me is the Secretary of

Food, Mr. Mahbub Kabir who is now chairing a taskforce on a more integrated food security policy. We will have to deal more constructively with the third element in the food security trilogy of availability, access, utilization and nutrition. The data on food access that we have seen in this workshop need to be linked with some of the Bureau of Statistics data that we have for the nation as a whole. These data suggest that food assistance in kind will remain one of the important policy tools of this country.

You asked me, Mr. Chairman, about food versus cash and the honourable Minister's frustration expressed in the presentation yesterday. I think the debate will have to shift away from food versus cash for these transfer payments to food and cash. We have seen in our programs that transferring food alone, be it for simple safety nets or for more development oriented goals, is not sufficient. We have to see food as a part of a package in all our programs.

I think we will also see in the future, agreement that these programs that are transferring entitlements to the poor are indeed needed both for the regular, silent emergencies which are the routine, unfortunately, for quite a number of Bangladeshis. And more importantly, they will be a tool for emergency relief.

Now I think we need also to aware of what is happening worldwide, as Dr. Sprague mentioned earlier. There is not likely to be greater amounts of food aid available for countries like Bangladesh. We hope we are not seeing Bangladesh moving to a situation that other countries have moved into, where suddenly man-made emergencies or political emergencies attract all the attention and by that also a lot of food aid. I think that is not the scenario we are considering here. But we are considering a continuation of the current/ past scenario that there is a silent emergency befalling many people here, particularly the ultra-poor, in nine years out of ten. And there will be a massive emergency every tenth year, like last year's flood. All that we can do, working together with government and non-government organizations, is to make our response more effective and more efficient.

Therefore, I think the name of the game for all of us is targeting. We need to ensure that the limited amount of food that is available will reach the lower two quintiles of the population.

Food assistance must go to the ultra-poor. (We use the term 'ultra-poor' from the Finance Minister's budget speech last year; some call it the "hard-core" poor.)

Secondly, in the debate on poverty eradication, we need to make it known to all that 27 million of the 30 million ultra-poor of the country live in the rural areas. There is no way we will solve metropolitan poverty by pumping money to directly address metropolitan poverty. It is a bottomless pit and Dhaka will suffer if that's the only instrument we have. We need a new resolve to deal with rural poverty; there, agricultural productivity will play an important role.

We need to get away from seeing food assistance as a safety net program in the charity context. This is wrong. Food is just another investment resource. We need to move toward seeing food as an enabling instrument, enabling the development of the ultra-poor. The World Food Programme has resolved at its board meeting that countries like Bangladesh need to husband their food assistance in this development context. That means enabling the poorest people to take part in the development process.

The data presented by Dr. Del Ninno and Dr. Dilip Roy yesterday supported the idea that poor people are constrained by their lack of food to take part in the many opportunities offered by the NGOs and others. Food assistance must be seen as part of development strategy. That's the way donors will continue their food assistance to Bangladesh. That's also how existing food resources transferred to the poor will be most usefully spent.

We also think that in this country and in many others that investment from food transfers is not only to be seen in terms of better roads and embankments, but in terms of human capital, which may be the most lasting capital to which particularly the poor can hold on.

Now clearly, the Honourable Minister yesterday was critical about the success rate of programs like VGD succeed in making people more capable of tackling the future. I think she has a point. On the other hand, there is something in these programs that shows that we can help make the poorest people more capable of facing the future. That is something we should probably build on.

Now again I come to the point of nutrition. I feel this is something we need to better

understand and research. One example is the diet that is being produced by program participants and transferred to other participants in the National Nutrition Project, the new program which the World Bank, UNICEF and the World Food Programme are so enthusiastically developing. The nutritional density of this diet, except for calories, is much too low to really succeed in building up bodily functions for a healthy life. So, there is a need to rethink some of the fortification strategies. I think one should start with atta, and other commodities that are normally consumed.

We also hope that in our discussions that food transfers and entitlements that are used in rebuilding roads and infrastructure after disasters like the flood, can be seen as a more constructive instrument in disaster mitigation at the micro-level. Food assistance should be seen not only as having benefits at the community level, but at the micro-level as well.

I come to perhaps the final point, which irks our donors. You all know that the WFP head office in Rome does not have a big garden where the food is grown. We get it from our donors. They are concerned about the efficiency of state-run systems through which a lot of our food goes and are interested in more mixed systems to handle food distribution. The PFDS turned out to be God's gift last year, but we run this program involving eight to nine thousand people year after year. We should discuss whether this really is the most efficient system.

The warehouses I visited over the last year seem to have a lot of unusable capacity because a roof is leaking. Perhaps one option is to hand over some of the storage of grain to the private sector, but this is a topic beyond our discussion today.

To summarize what I have said: one key is targeting, enabling, and preparing for disaster mitigation. Another key is a rural focus and to do something with metropolitan poverty that is different from our approach to poverty in the many small urban centers in the rural areas. We need to distinguish between rural, rural-urban, and metropolitan poverty; otherwise we will not do justice to the political demands that the Secretary pointed out in the last session. I earlier mentioned nutrition. Finally, we should consider programs with both food and cash as part of a package.

Thank you, Mr. Chairman.

MR. MAHBUB KABIR (SECRETARY, MINISTRY OF FOOD)

I think the government has rightly given high priority to food security, for which a sound food policy is absolutely essential. There are various aspects of food security, including issues of availability, access and utilization, and the Food Ministry has a very peculiar role. The availability side, in particular, production, is the main focus of the Agriculture Ministry and other related ministries. Only in time of emergencies when the food gap increases, will the Food Ministry be asked to import a part of the total grain to increase availability and also to have the capacity to intervene in the market. Likewise, access is also the responsibility of other ministries, such as the Ministry of Disaster Management and other ministries involved in various channels of the PFDS. The Food Ministry is somewhere in the middle, dealing with both availability and access issues. So I think, first of all, there is a very clear need for a greater co-ordination among these agencies of our government in order to ensure food security.

Secondly, I think that in a broad sense, the government and donors share food security objectives, and are both interested in targeting the poor and vulnerable groups of the country. What we have discussed yesterday and today is basically the instruments that are available to us and the efficiency of their use. Here, I think there is always room to make improvement in our system. The issue is how we can best achieve results given the limited resources available.

I think over the past years, we have seen that the government, the private sector and the donors are the major players. These three major players have developed quite efficiently in the sense that they complement each other's roles. Last year's flood has proved that the government, the private sector and the donors could work together efficiently, with a common goal in avoiding a major disaster.

In my judgment, this collaboration among these three actors will continue in the near future. Having said this, however, the government is concerned about the declining food aid in Bangladesh. Even though the donors have praised our efforts in targeting the food aid for poverty alleviation, food aid is declining. Food aid, as I personally see it, is not only an instrument to meet the food gap, but is also a major instrument for poverty alleviation. If that is also the objective of the donors, I do not see any reason why this success should be penalized by

decreasing the food aid. The donors have retained their policy of poverty alleviation as the highest priority. Bangladesh is making progress in this area, yet the instrument that is available to us in terms of foreign aid is declining. I think this is a contradiction. They will have to address it, themselves.

About food aid and cash, generally, I would like to agree with Dr. Kiene that this is not food aid versus cash, but it is food plus cash. That is quite evident because often a portion of food aid received is sold by households.

I think the trade liberalization has helped tremendously in terms of the availability of food in times of emergencies. After the last flood, the private sector responded well and was very, very helpful in adding to market supply through its imports of food. At the same time, you have to see that the government's efforts through VGF, through fair price cards, and through OMS also limited any occasion for the private sector to do something which is not healthy for the market.

The other point I would like to raise is that in the long term, our food habits need to change. We cannot rely on rice alone. In terms of price, rice is almost double the price of wheat on international markets. So, for the same amount of foreign exchange, we can double the quantity of foodgrain available for public distribution by importing wheat instead of rice. Thus, there is a clear need for a greater effort on our part to change the food habits in Bangladesh.