UNDERCUTTING SMALL FARMERS

RICE TRADE IN BANGLADESH AND WTO NEGOTIATIONS

উন্নয়ন অন্বেষণ
Unnayan Onneshan
The Innovators
centre for research and action on development

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SUMMARY

The current decadent practice of protection in agriculture through the principle of unfairness and injustice based on riches rather need has put about 22.93 million farmers, more than half of the employed population, at bay in Bangladesh. On the one hand, the resource constraint of the country constitutes stumbling block to providing support to the needy farmers, and on the other, the meagre subsidies that used to be given have been withdrawn through unilateral liberalisation measures at the diktat of the World Bank and the IMF, dealing a death knell to the agrarian economy of Bangladesh. Tyranny of the forced liberalisation with virtual absence of domestic support to Bangladesh agriculture and dishing out of bounty along the lines of rigged rules in the resource-rich countries have contributed to stall the reduction of rural poverty in Bangladesh, with a yearly average of 0.32 per cent implying that it would take 135 years to eradicate poverty and 43 years to achieve the target of the MDG (millennium development goal).

The major beneficiaries of the trade distortions, namely the European Union and the USA, sought to keep as much as possible of their privileges and were hesitant to bring agriculture under the purview of GATT in the Uruguay Round. Thus they continue to maintain status-quo while leaving virtually everything for future negotiations to set up rules to reduce protection and trade distorting support, though the developing world had to swallow a host of measures for deeper liberalisations in many a field, undermining their policy space for development.

The WTO Agreement on Agriculture (AoA) allows 10 per cent amber box domestic support of total agriculture production for developing countries and 34 developed countries to provide above 5 per cent. They are also permitted to provide blue box support in unlimited quantity. At the same time, 25 countries are permitted to provide export subsidies while others are not allowed to do so. Nineteen of 25 countries are allowed to provide domestic support above de minimis level at the same time. None of these countries are heavily dependent on agriculture nor do they have lower GDP.

On the contrary, a deeply dependent country on agriculture like Bangladesh, employing highest number of people to the tune of 51 per cent and contributing 21 per cent of GDP, neither have resources to provide domestic support even at the allowable de minimis level nor are permitted by the Brettonwoods system as part of their conditionalities for loans. The aggregate measures of support (AMS) to agriculture declined to only 0.67 in 2001-02 from 1.54 per cent in 1995-96. On the contrary the cheap import of agricultural produce enjoying at least de minimis level of subsidies (India being Bangladesh's highest food exporter provides subsidies no less than 9 per cent) has flooded the domestic market, threatening the economy in general and the lives and livelihoods of small farmers in particular. Moreover, the rapid unilateral liberalisation programme at input and output markets as well as imperfect market structure dominated by merchants' capital have forced the small farmers to sell their crops with lower price in the harvest seasons to meet the demand for necessities and buy the same product with higher price in the later. For example, middleman and brokers appropriate from rice growers almost 8.7 billion Bangladeshi Taka, more than 1/5 of the agriculture GDP and 1/6 of the total share of agriculture to the GDP of Bangladesh.

There is no doubt that such arrangements are at odds with the promises made in Doha. Accordingly, arrangement of agriculture should be upturned to eliminate export subsidies and domestic support to ensure that domestic support should be allowed to farmers in those countries, who need these but not to those living in the countries with abundant financial resources. If such an arrangement could be reached, it is only then Doha Round will be development oriented.

When I was leaving India people asked me which of all the sights I had seen had most impressed me. I answered as they expected me to answer. But it wasn't the Taj Mahal, the 'ghats' of Benares, the temple at Madura, the mountains of Travancore that had most moved me, it was the peasant, terribly emaciated, with nothing to cover his nakedness but a rag round his middle the colour of the sun-baked earth he tilled, the peasant shivering in the cold of dawn, sweating in the heat of noon, working still as the sun set red over the parched fields, the starveling peasant toiling without cease in the north, in the south, in the east, in the west, toiling all over the vastness of India, toiling as he had toiled from father to son back, back for three thousand years when the Aryans had first descended upon the country, toiling for a scant subsistence, his only hope to keep body and soul together. That was the sight that had given me the most poignant emotion in India.

W. Somerset Maugham, A Writer's Notebook

INTRODUCTION

The stake of farmers of Bangladesh in negotiations for Agreement on Agriculture (AoA) in the run-up to the Hong Kong Ministerial Conference of the World Trade Organisation (WTO) scheduled in December, 2005 remains crucial to culminate the Cancun impasse. Like before, the rules of the game for the bargaining are subjected to market access, domestic support and export subsidy. The developed and the exporting developing countries have been pushing each other to open up their markets further, to cut domestic support and reduce export subsidy to agriculture. But did the issues make any good in the past or would it make any better in the future to the lives and livelihoods of billions of poor who are plunged into poverty in the least developed countries (LDCs) including Bangladesh?

In the deliberate absence of rule based trade system in agriculture, the major beneficiaries of the trade distortions, namely the European Union (EU) and the United States of America (USA), sought to keep as much as possible of their privileges and were hesitant to bring agriculture under the purview of General Agreement on Tariff and Trade (GATT) in the Uruguay Round of negotiations that culminate in establishment of the WTO in 1995. Thus they continue to maintain status-quo while leaving virtually everything for future negotiations to set up rules to reduce protection and trade distorting support, though the developing world had to swallow a host of measures for deeper liberalisations in many a field, undermining their policy space for development

The WTO AoA, in terms of domestic support[1], allows 10 per cent of total agriculture production for developing countries as amber box[2] support and 34 developed countries to provide above 5 per cent. They are also permitted to provide blue box[3] support in unlimited quantity. At the same time, 25 countries are permitted to provide export subsidies while others are not allowed to do so. Nineteen of 25 countries are allowed to provide domestic support above de minimis level at the same time, besides all of these countries provide huge green box[4] support due to their loads of money. None of these countries are heavily dependent on agriculture nor do they have low GDP.

Moreover, instead of reducing agricultural subsidies the developed countries had, in fact, raised those in many cases. The United States Farm Bill signed in May 2002 includes over US$135 billion in new subsidies over the next 10 years. It is estimated that the rice farmers in USA would receive US$75,000 per household from the government in the form of direct payments.

On the contrary, a resource poor country like Bangladesh, as per the diktats of the World Bank and the IMF, had to comply with the structural adjustment programme (SAP), which in turn forced the government to reduce the meagre supports she had provided to farmers. She has opened up her agricultural market since 1980s, initially by liberalising the input market and later under the AOA she has opened up the output market by liberalising the import of food items in mid 1990s. The tariff rates have been considerably reduced by bringing down tariff rates and narrowing their dispersion on similar commodities and simplified by reducing the number of duty slabs.

The trade liberalisation in agriculture has made a drastic change in the domestic market structure with greater degree of imperfection and inequality. Bangladesh's agriculture market is now held hostage, as the field work of the report shows, by a merchant class who has no direct relations with farming activities, but eats up the maximum share of agriculture. This has ultimately pushed the poor peasantry deeper in to indebtedness and penury.

When the UN Millennium Development Goals (MDGs) set to halve the poverty by 2015, the scenario in Bangladesh signs little improvement, as the national average poverty-declining rate is only about 0.52 percent on an average per year since poverty declined by 2.6 percent to 42.1 percent in 2004 from 44.7 percent in 1999 (GoB, 2005). In urban areas, the poverty decreased by 5.4 percent from 43.3 percent to 37.9 percent during the same period implying a reduction of 1.08 per cent per year while in rural areas, where most of the country's population including farmers live, came down from 44.9 percent to 43.3 percent with a yearly average of 0.32 per cent. A simulation exercise conducted for Bangladesh Public Policy Watch 2005[5] based on the trends in accordance with Food Energy Intake method shows that it will take about 81 years to eradicate poverty completely and 24 years to achieve the MDG target. In case of rural areas, the report further indicates that it would take 135 years to eradicate poverty and 43 years to achieve the MDG target. Even if the official

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estimates is considered, it will take about 50 years to eradicate poverty and about 20 years to achieve the MDG target. Evidence shows that Bangladesh is not on track to eradicate poverty and achieve the MDG target. This begs the questioning of effectiveness of the current policy regime underwritten in neo-liberal framework.

Gini index of inequality increased from 0.259 to 0.306 during this period (Table – 1).

While international comparison of Gini indices is subject to many problems, it is fair to conclude that Bangladesh has entered the stage of relatively high income inequality, which has been increasing over time.

Table -1: Inequality in Urban and Rural Areas

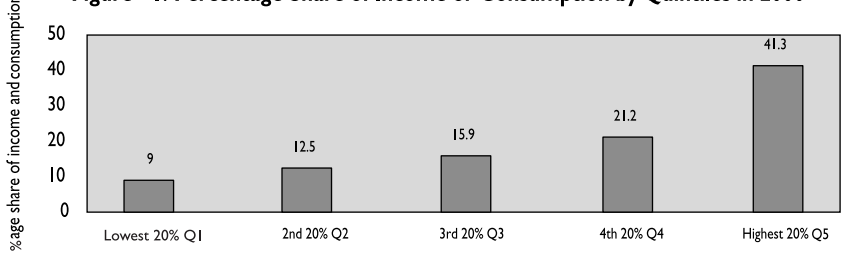
	Rural			Urban		
	1991/92	1995/96	2000	1991/92	1995/96	2000
Headcount	58.45	50.47	49.53	38.20	29.79	31.30
Proportionate Poverty Gap	16.73	14.01	13.84	11.40	7.62	9.02
Weighted Poverty Gap	6.43	5.42	5.16	4.54	2.58	3.47
Gini Index for Consumption	28.21	30.62	31.02	36.25	38.55	40.53
Gini Index for Income	27.00	31.00	36.00	33.00	39.00	44.00
Per Capita Expenditure	504.71	652.65	779.96	817.48	1234.25	1389.04
Assuming 1991/92 Lorenz Distribution for all the years						
Headcount	58.45	48.37	46.53	38.20	25.84	25.27
Proportionate Poverty Gap	16.73	12.32	11.61	11.40	6.32	6.12
Weighted Poverty Gap	6.43	4.37	4.05	4.54	2.18	2.09

Notes: These estimates were made by combining the decile distribution data for income with the poverty lines used in the IPRSP. Computations were made by using a program developed by the World Bank which fits a parametric Lorenz distribution to the decile distribution data and finds the values of the three measures of poverty by juxtaposing the poverty line and average income against that distribution.
Source: GoB (2004), which is based on Khan A.R and B. Sen (2004), "The Structure and Distribution of Personal Income and Poverty Reduction in Bangladesh During the 1990s," in Essays in Honour of Keith Griffin.

The outcome of the neo-liberal framework is conspicuous: the country is engulfed in a low rate of reduction in poverty, precipitated by a crisis in creation of productive unemployment, with lesser than required rate of economic growth, in the backdrop of unabated rise in inequality. The total number of unemployed population witnessed nearly a four-fold increase from 0.6 million in 1989 to 2.2 million in 1999-2000.

Rising income (consumption expenditure) inequality has reduced the poverty reducing potentials. The inequality in Bangladesh is explained by the fact that around three-fifths of total income or consumption accrues to the highest two quintiles of the population, while the lowest three quintiles receive about two-fifths (Figure - 1).

Figure - 1: Percentage Share of Income or Consumption by Quintiles in 2000



Source : World Development Indicators. 2004

A total of 8.3 million, more than 19 per cent of the employed labour of 42.8 million, was underemployed in 1999-2000 compared to 1.4 million (4 per cent of the employed labour) in 1983-84, an extremely high increase in the number of the people who work less than 35 hours per week. There has been a continuous unabated increase in inequality. The Gini coefficient for the rural areas has increased from 0.27 to 0.36 during the same period. Overall, the

According to the latest Household Expenditure and Income Survey (HEIS), household income of

the poorest five per cent of the population accounted for 1.2 per cent of the national income in 1974, while the richest five per cent accounted for 16.4 per cent. The top decile (10 per cent) of the population enjoyed 28.4 per cent of the national income while the lowest decile had a share of only 2.8 per cent. The situation has worsened over the 30 odd years since

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independence. The data shows there has been further concentration of wealth. The richest section of the population control more wealth than ever before. The top 10 per cent of the population controlled 40.72 per cent of the national income in 2000, and the poorest 10 per cent controlled only 1.84 per cent. The top five per cent enjoyed 30.66 per cent of the national income while the share of the poorest five per cent shrank to 0.67 per cent. In fact, over the last five years, the poorest five per cent of the population have never had access to more than 1.5 per cent of the national wealth.

The tale is similar in agriculture, the number of landless households has increased to 6.8 per cent in 2002-03 from 5.5 per cent in 1995-96 while 64 per cent of the households have less than one acre of land. The detailed official statistics on agriculture contained in Agriculture Census Report, periodically published by the national statistical agency, Bangladesh Bureau of Statistics are available until 1996, which suggest that the total operated area of farm land in the country has not increased between 1960 and 1996, seemingly rather a marginal fraction has disappeared, perhaps due to demographic pressure, leading to an increasing demand for building shelters, which in effect have increasingly and inexorably been encroaching on the traditional farmlands.

The number of farm holdings, correspondingly, has almost doubled over this period. There is a consequential process of disintegration of holdings into even smaller segments, with the number of small and marginal farmers increasing from about 52 percent in 1960 to nearly 80 percent in 1996. Hence, the number of large farms has declined over this period from 10.7 percent to 2.5 percent of the total holdings. The number of medium-sized farms even fell from 37.7 percent in 1960 to 17.6 percent in 1996. An absolute decline in the number for these two categories of farms is also evident (Table – 2). The distribution of farm holdings among owners and tenants is a pointer in this regard. The ratios of farm areas under owners, owner-cum-tenants and pure tenants did not vary much between 1960 and 1996 (Table – 3). By 1996 there has been a significant rise in the number and also in the ratio of farms operated by pure tenants. This indicates that the number of landless peasants along with the concentration of small and marginal farmers has sharply risen in this period. These marginal farmers continue to cultivate desperately their diminishing holdings, even though the objective conditions are increasingly becoming unfavourable for this purpose.

Table – 2: Distribution of Farm holdings according to Size, 1960-1996

(as percentage)

Size classification holdings	1960		1983-84		1996	
	of total farms	of total areas	of total farms	of total areas	of total farms	of total areas
Marginal (owning betwee n 0.05 to 0.99 areas)	24.3	3.2	40.4	7.8	49.1	12.8
Small (owning betwee n 1.00 to 2.49 areas)	27.3	13.0	29.9	21.2	30.8	28.2
Medium (owning betwee n 2.50 to 7.49 areas)	37.7	45.7	24.7	45.1	17.6	41.6
Large (owning 7. 50+ areas)	10.7	38.0	4.9	25.9	2.5	17.4

Source : Agricultural Census Reports, 1960, 1983-84, 1996; BBS

Table – 3: Distribution of Farm Holdings according to Types of Tenancies, 1960-1996

Year	Owner farms		Owner cum Tenants		Tenants	
	Number	Area	Number	Area	Number	Area
1960	60.8	53.6	37.0	45.2	1.6	1.1
1983-84	62.5	58.5	36.0	40.9	1.5	0.6
1996	61.6	58.5	34.9	39.6	3.5	1.9

Source : Agricultural Census Reports, 1960, 1983-84, 1996, BBS

Content of the Report

This paper focuses on the implications of trade in agriculture through an illustrative case study of rice in Bangladesh. The rice sector is selected since it predominantly occupies the total crop production. Rice constitutes 95.43 per cent of the total crop productions in 2003-04. According to the official statistics 75 percent of total agricultural land is used in rice production while more than two-thirds of the land is doubled or tripled-cropped. Thus the harvested rice area is about 105 percent of arable land. Rice has 60 percent of total value addition in the agriculture sector.

The following section discusses the liberalisation and its impact on livelihood of the small farmers, illustrated with insights collected at the grassroots level through case studies (the process of insights generation and data gathering has been given in Annex – A). The penultimate section provides a comparative analysis of support to agriculture in Bangladesh and the countries importing from, namely in India, the largest exporter of rice to Bangladesh. Lastly, some agenda has been put forwarded which may form Bangladesh's perspective for further negotiations in the WTO.

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UNILATERAL LIBERALISATION AND LIVELIHOOD OF FARMERS: GRASSROOTS INSIGHTS

Historically, Bangladesh has a large agrarian base, with the country's 76 percent of total population living in the rural areas and 90 percent of these villagers is directly related to agriculture. The sector employs about 51 percent of the total labour force of the country and provides over 90 percent of the rural employment (BBS, 2004). Though relative share of agriculture has been declining in the recent past, it still constitutes over one-fifth of the total gross domestic product (GDP) while it has continued to remain the largest provider of employment, which has been growing relative to other sectors (GoB, 2004). The rice sector possesses specific relation to the poor and small farmers as it is evident from several studies. It has almost 70 percent share in the total cropped area and has been seen by many having capacity to uplift the overall agricultural performance (Quasem and Hossain, 1985; Shahabuddin, 1995).

This section looks at the resultants of unilateral liberalisation by investigating into the implications in the local rice market through case studies conducted in four villages in Bogra, a Northern district, which has been taken like many studies as 'advanced area' and also popularly known as 'rice belt' of the country and in three villages of Noakhali, a South Eastern district near the Bay of Bengal, which is generally perceived as 'backward area.' The study also reports the findings of interactive sessions with middlemen, creditors, traders and millers at three hats (village bazaar) in Bogra, millers in Dinajpur, a Northern district, with large scale rice processing mills, and one hat in Noakhali.

Imperfect Input Market: Disproportionate Burden to Small Farmers

Bangladesh has carried out a series of successive liberalisation measures in agriculture sector under the aegis of the World Bank and the IMF. She has opened her agricultural market since 1980s, initially by liberalising the input market. Agricultural markets in Bangladesh are now substantially liberalised. Reforms have been quite extensive in the areas of:

i. fertiliser marketing and distribution,
ii. minor irrigation,
iii. seed development and marketing,
iv. interest rate deregulation,
v. food import.

The fieldwork has concentrated on the abovementioned issues to gather first hand knowledge of the principal actor – the farmers – on the impacts they have been living through after introduction of such wide-ranging reforms. While the causes of impacts on their livelihood are complex and manifold, certainly these are dominantly related to public policy. What is conspicuous in the economic strategy of the past decade is a systematic withdrawal of protection afforded to farmers and they are exposed to market volatility and private profiteering without adequate regulation, against the backdrop of liberlisation of input market in the wake of reduced public expenditure in agriculture. While there has been arrested growth of agriculture, with lack of other non-agricultural economic activities, the farmers, as the following notes from the field reveal, are languishing in a generalised rural crisis. The imperfect nature of the input market, liberalised at the fullest extent without regulatory regime in place, the farmers asserts in the interviews that the burden has fallen disproportionately on the majority of them belonging to small and marginal section, particularly worsening the tenant farmers and rural labourers.

Land: Landless and Marginal Farmers Increased

As there is no agricultural census report, containing recent data, the recent trend has been culled from alternative estimates. According to one government estimate, the total available land has increased marginally to 14.85 million hectors in 2000-01 from 14.29 million hectors in 1980-81. Though the total available land has increased, the net cultivable land has come down to 8.40 million hectors from 9.38 million hectors during the period (MoA, 2004).

The number of landless households has also increased in Bangladesh, according to another source of information. About 6.8 per cent of the total households were landless in 2002-03, while official figure for 1995-96 was 5.5 per cent. About 64 per cent households owned less than one acre of land (BBS, 2004). The distribution of farm size shows that the small and marginal holdings have increased whereas the proportion of medium farms has decreased. Households owning land more than 5 acres constitute 5 per cent (Figure - 2).

A variety of land tenancy and sharecropping system exists in rural Bangladesh. A proportion of the agricultural land market is also dominated

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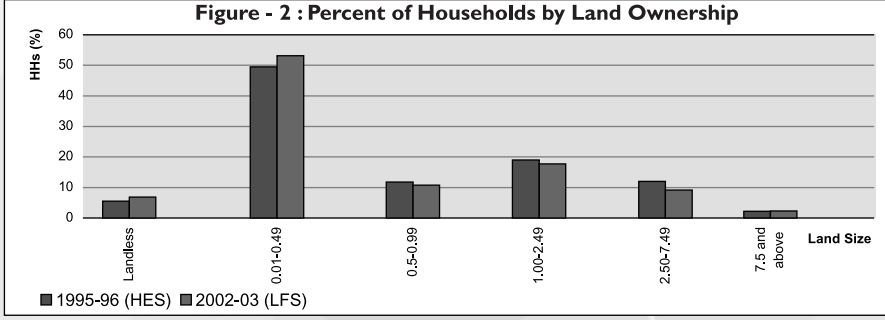
Figure - 2 : Percent of Households by Land Ownership



by absentee landlords most of whom reside in the towns. From the field studies in Bogra and Noakhali it is found that -

- In the advanced area, the lands are usually rented for a year for fixed rent at Tk 9000-10000 per acre for one year.
- Another system like land mortgage for certain amount of money is found in the advanced as well as in the backward areas. In this system small farmers rented the land from the owners for a fixed amount of money.
- Sharecropping is more visible in the backward areas where average land owning by the households is very poor. Under the agreement of the sharecropping, landowners usually get half the total yields if he bears half of the input costs (e.g. cost for water and fertiliser). If he does not bear any input cost, he gets one-third of the total output.

Irrigation: Water Lords emerged along with Landlords

Sweeping policy reforms were carried out in the area of minor irrigation since late 1980s. Bans on import of small engines were lifted and all import duties on irrigation equipment were removed. Regulations on engine standardisation as well as spacing of wells were also withdrawn. As a result, private sector holds sway over minor irrigation sector.

Coverage of irrigation has increased over the years. According to the national irrigation census, the irrigated land was 4.51 million hectors in the fiscal 1999-2000 and it rose to 4.81 million hectors in 2002-2003 with an average growth rate of 3.02 per cent (MoA, 2004). Among available means of irrigation, the power pumps, shallow and deep tube-wells have been in wide spread use.

A very tight water market is now prevalent, which as the field investigations reveal, is mainly controlled by a merchant class. Selling of irrigation equipments to the private sector had the predictable consequences of creating and sustaining a market of water without making any provision for small farmers. As a result, the big landowners have privately owned the small tube-wells (STWs) and deep tube-wells (DTWs) for irrigation and marketed the irrigation service to small farmers by levying exorbitant high cost. In this way, unregulated market for water has been developed, which is controlled by water lords. So a new class of water lords along with the landlords emerged in the rural economy of Bangladesh.

Box-1

A tight water market

A very tight water market prevails in the villages. Usually the deep tube-wells are owned by the co-operatives consisting 7 to 10 members having the area coverage of 80-100 acre with 25 horsepower machines. The minimum bill for each deep tube-well is fixed to Tk 25000 per year. So, the owners sale the extra water to others farmers after maintaining their need. The shallow-tube wells (STWs), are privately owned and each has the coverage of 25- 20 acre to irrigate. STWs usually use diesel as fuel.

Our study found that the average cost for water is 1800-2000Tk per acre for Boro production in both areas. In the backward areas power pumps are also found in the irrigation system but agriculture metre (especial metre for irrigation) is not found (1 is found in one village)

Source: Case studies in Bogra and Noakhali

The empirical enquiry shows that a very tight and highly concentrated water market has been developed in the advanced area like Bogra and Dinajpur. The backward areas like one in Noakhali have an inadequate provision of irrigation. In the advanced areas, the rural elites and landlords usually own almost all means of

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Box-2:
High irrigation costs deter access and compel forced sale

'Irrigation is necessary for HYV Boro production but with the expense of my paddy' a marginal farmer Mohmmad Mashud of Dashtica village of Bogra expressed his depression in such a philosophical language. When he was asked about irrigation: 'I have only 5 decimal of land of my own and sharecrop another 80-100 decimal to maintain my family's need of rice for the whole year. I also need to find out alternative sources of employment to maintain other need of the family consisting 5 members.

When asked about the reason behind the forced sale, he said, 'Because I need to repay the cost of irrigation bought from the nearby shallow tube well that is owned by the former union parishad chairman'. It costs about 1800- 2000Tk for Boro production and he has to pay the amount immediately after harvesting of his produce.

How can you meet your family need of rice later? He was again asked
'I should buy it back later anyhow. But obviously I will have to pay more to buy than I am getting from selling it now. So, irrigation not only costs my money but also my access in the market'- he said with great sadness.

Source: Case studies in Bogra and Noakhali

irrigation. It is also a fact that they are the main grabbers of government subsidy in irrigation[6], including that of diesel and electrification because they are empowered by the existing socio-politic and economic structure. The small and poor farmers have no choice but to buy water from these 'landlords'. Many small farmers usually depend on rain to irrigate their land given the increasing costs of irrigation. The high cost of irrigation was mainly due to a few water lords controlling the water market and price hike of diesel. Therefore, a vast amount of land has remained single cropped; mainly the rain-fed Aman is sown. The findings show that Aman is produced in huge area of Sonapur and Maijdi belt in Noakhali. Many of the rice mills in the area, thus, have remained closed during the investigation as it was the main harvesting season of Boro rice. The farmers said they could not produce Boro because of want of irrigation facilities.

The latest bouts of price hike of diesel as prescribed by the World Bank and the IMF have increased the irrigation costs further.

Fertiliser: Costing Much at Little Quality

Until early eighties fertiliser production, pricing, marketing and distribution -- all were extensively managed by the state machineries. By late 1980s, Bangladesh Agriculture Development Corporation (BADC) withdrew its operation and an elaborate network of private sector took over the fertiliser marketing. During 1987- 92, the share of the private sector in the fertiliser market rose from less than 5 percent to more than 90 percent (Shahabuddin, 1995). A series of reduction in fertiliser subsidy was initiated and by 1985 there was no explicit subsidy on urea (Adnan, 1999), while those on triple super phosphate (TSP) and murieted potash (MP) was reduced drastically.

Farmers usually apply four to five types of fertilisers for their rice cultivation, including Urea, TSP, SSP, MP, and DAP. The state-owned enterprises meet the total demand for urea and a portion of TSP and the government allows imports through authorised dealers. The field studies show that the sold urea at Tk 300 per 50 kg, while the dealers collected at Tk 265 from the government. The government opened up the imports of other types of fertilisers as well. With increasing mechanisation in agriculture and growing use of modern varieties, it was found that tendency of using fertilisers among farmers is on the rise over the years excepting TSP due to high costs. The increased demand for fertilisers also led the price to rise in the local market.

The bandwagon deregulation of fertiliser has caused price to rise by many folds (e.g. between 1972 and 1982, followed by another hike of about 30 percent during 1984-85 (Adnan, 1999). Even when the price of fertilisers in the international market shows downward trend, the price in domestic market has seen an upswing due to unregulated market. The profit-monger importers and dealers of the fertilisers, who also have many other businesses, generally control the market and hardly face any measures from the government due to absence of appropriate regulatory framework.

In February–March 2005, the government initiated a price subsidy scheme for imported fertilisers at 25 per cent on the invoice. The idea was that the importers should distribute the

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imported fertiliser to authorised dealers at subsidised price, which is 25 percent less than the imported price. However, the benefit went to the importers rather than the farmers, since this price subsidy is based on the invoice. This is also evident from the recent price spiral of fertilisers.

Box-3
Fertiliser: Costing too much, too little quantity

'I don't know exactly what I am giving into my field. Which one is patash or which one is phosphet. I just know the colors –one is black and the other is red and also know the price' - Gulzar Rahman responded. He is a small farmer of a village in Bogra district named 'Dhawapickshon' and engaged in agriculture for about 20 years having only 1 acre of land. The effectiveness of fertiliser, according to him, is fully dependent on 'luck' as there is existence of huge impure fertiliser in the markets. 'I am also a victim user of impure fertiliser. About 3/4 years back I have given adulterated fertiliser into my land and I could not even realise it. My harvest was affected and I had nothing to do then'. When he was further asked about the price of fertiliser, he compared it with mad horse (pagla ghora) especially for TSP. He calculated instantly that it cost 1350Tk on account of fertiliser to cultivate 1 acre of land for last Boro harvest.

Gulzar Rahman is a subsistence farmer who hardly can maintain his family consisting of five members with his small piece of land. 'I usually borrow money from my neighbours to meet up the input costs especially for fertiliser as other cost can be paid after harvest but not the cost of fertilisers. But in 1998 I didn't find any one to borrow. So, I went to the Krishi Bank for a loan of 6000 Tk from which I gave 1000 taka to the Bank manager. Still I have not been able to repay the loan and I will have to sale one piece of land to repay the loan'

Source: Case studies in Bogra and Noakhali

It is calculated from the field studies that fertiliser costs Tk 1200- Tk 1500 per acre for production of Boro rice. In case of Aman and Aus, the use of fertilisers is very limited. The price of imported fertilisers, especially those from China and the USA are very high in the local market. Farmers reportedly said that price of TSP marked a sharp rise in last two years. They claimed that average price of TSP went up by Tk 3/4 per Kg between 2003 and 2004. Though urea maintains a stable price over the years as government controls the supply chain the farmers said that they have to pay an additional of Tk 5-10 per bag in the sowing season due to high demand. The growing use of fertilisers due to mechanisation of agriculture and the additional costs forced the farmers to borrow fund from the informal sectors, which severely affects their production pattern as well as their livelihood, plunging the poor farmers into further indebtedness.

Credit: Falling Prey to Merchants and Usury

Another reform initiated under the SAP is the deregulation of interest rate. The central bank, Bangladesh Bank, introduced a flexible market oriented interest rate in January 1990. It also abolished sector specific interest rate bands for different categories of loans and advances.

Access of credit to small farmers especially those who are operating at the subsistence remains a substantive issue. In the name of financial sector reforms, the interest rate was liberalised and rural branches of state owned banks were closed adversely affecting the poor farmers from rationed loan scheme of the government. Earlier, the priority sectors like agriculture and small and cottage industries were favoured by the government administered low interest rate, but after the deregulation the government incentives for the two priority sectors in credit were dismantled.

Till 1980, around 63 per cent of state-owned banks' branches were located in rural areas and between 1980 and 1990, 73 per cent of the newly opened branches were set up in the rural areas. However, the percentage of the rural branches of the NCBs has reduced to only 61 per cent in 1998. So, a large number of rural poor people have lost the opportunity to get institutional credit. Moreover, when the operation of private banking started, the banks in the private sector have shown little interest in rural areas. So, according to the farmers, total formal credit system has become out of reach to the poor.

The government reinstalled the rationed interest rate for agriculture through specialised banks in recent years. The macro data show that credit disbursement in the agriculture has increased through formal channel. However, the internal dynamics of these loans is found highly

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concentrated with rural elite belittling small farmer's interests. The field investigation shows that small farmers still depend on informal sources for credit. This is mainly due to complex banking procedures. In the advanced areas the loan is taken from the relatives while in the backward areas traditional moneylenders and financier brokers are the main sources.

Box-4
Getting loan, sacrificing yield

Abdur Rahim of Nyttanandapur of Noakhali is a landless farmer, usually does sharecropping and also works as daily labour whenever he gets. 'I have no landed property to mortgage, so I cannot get credit from banks'- he said when he was asked about the credit he borrowed. 'So, I borrowed it from Rahamat Ali of the village on the agreement of Dhaner uppore'. Usually he borrowed it to meet the input costs in the sowing season and the repayment is been done with harvested paddy. This year he borrowed Tk 2000 and had to give 10 maund of paddy for the loan.

So, it is price fixing! – inquired surprisingly

'Yes, if I can sell it in the market I can get easily Tk 350 per maund whereas I am selling it at Tk 200 but I am bound to do it because I have no other source to borrow'.- he concluded.

Source: Case studies in Bogra and Noakhali

Furthermore, as most of the sharecroppers do not have titles, nor is the sharecropping recognised as collateral, a great many farming community have no access to formal credit.

From the field studies in Bogra and Noakhali, it is found that the input cost for water and labour is usually managed from relatives, NGOs and other sources in the advanced area. In contrast, some paddy payment arrangements like *'dhaner uppore'* are found in the backward areas where the borrowers repay the loan with harvested paddy. It is a type of price fixing loan e.g. usually for a loan of Tk 1000 the borrowers have to pay 5 maunds of paddy in the harvesting season.

Labour: Dominance of Family Persists

Family labour is the dominant factor in rice farming since a large proportion of the farms are small in size. However, farms also hire labourers for sowing, weeding and cutting crops on a daily basis or piece of work basis. But, many studies suggest a high degree of seasonal variation in agricultural employment. In the peak season, there was a shortage of labour, which pushes up the labour cost temporarily. However, many of them remain jobless in the off-peak season, showing a severe trend of underemployment. Our findings show that cost for labour is higher in backward areas than that of advanced areas. Many of the farmers reported that this is because of mechanisation of agriculture in the advanced areas. Nevertheless, it is found from the various studies that real wage in the agriculture sector is almost stagnant over the years (Barakat and Das, 2004). This is perhaps due to seasonal variation in agricultural employment. Farmers have also spoken of absence of diversification, including non-farm economic activities, particularly rural industrial activities.

Trading Networks in Inter-locked Markets: Failing Price and Falling Profitability

Rice trade within the country maintains an interlocked input-output market and price-appropriating network through producers to the consumers. In some instances, the trade of rice is interlinked with the production arrangements. For example, sales of paddy are linked to loans made by millers, landlords and brokers, in which the producers have to repay the loan in kind form. Furthermore, there is strong prevalence of sharecropping arrangement, which is also linked to the trading arrangement.

In the advanced areas, growers directly sell their output to the local hats except in case of sharecropping where a portion of paddy goes to the land owners as per the agreements. It is found that year-basis land rent system is frequent than sharecropping system in this area. Sometimes farmers also sell paddy directly to the local husking millers called Chatal. In hats, small brokers collect paddy for the millers (both auto and husking mills) on the basis of certain level of commission. There are also some brokers-cum-wholesalers who in one hand collect paddy for millers and on the other, buy back from the millers and sell it to the urban retailers.

Big millers (located in the Dinajpur and Naogaon) collect paddy from the brokers. A small part of the amount is supplied to the government rice procurements while a large amount is supplied to the big regional brokers called parties, who make available to the wholesale markets in Dhaka and other metropolitan area. Sometimes, wholesalers in the deficit areas directly buy rice from these brokers. In both cases rice is supplied to the

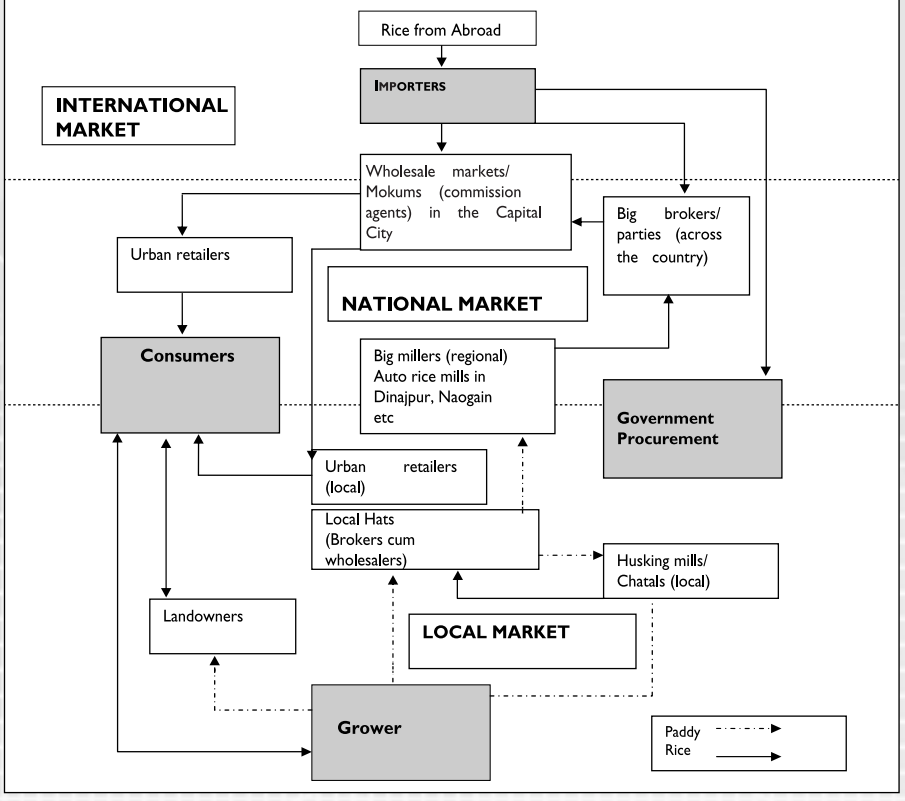
The trade of rice is interlinked with the production arrangements. Sales of paddy are linked to loans made by millers, landlords and brokers, in which the producers have to repay the loan in kind form.

urban retailers, making it available to consumers. The private traders also import rice from neighbouring countries especially from India (see later). They also supply the imported rice to the big brokers and sometimes to the wholesale markets directly. This entire interlinked trading network is presented in Figure - 3.

loan to the poor farmers and get the paddy at lower price, which is fixed between the two parties prior to the harvest. Since locally produced rice cannot meet the total market demand, the big brokers and importers collect rice from North Bengal and from neighbouring countries.

Figure 3: Rice Trading Network in the Advanced Area

The diagram is based on observations in Bogra and Dinajpur



In the backward areas, where average land holding for cultivation is very scanty, growers are tightly interlinked with the lenders and landlords. As pointed out earlier, a vast portion of land is single cropped due to inadequate irrigation facilities. Hence, sharecropping is predominant in this region. So the producers rarely go to the market to sell their output.

Besides, there exists an informal market in the area, where sales to neighbour occupy a substantive quntity of paddy (e.g. neighbours buy directly from the producers' houses). Therefore, the producers have hardly any surplus to sell in the market.

The producers do not directly sell the major share of the produced output. The brokers collect rice from growers' houses and supply the paddy to the local millers, who bring it to the market. Also some brokers provide conditional

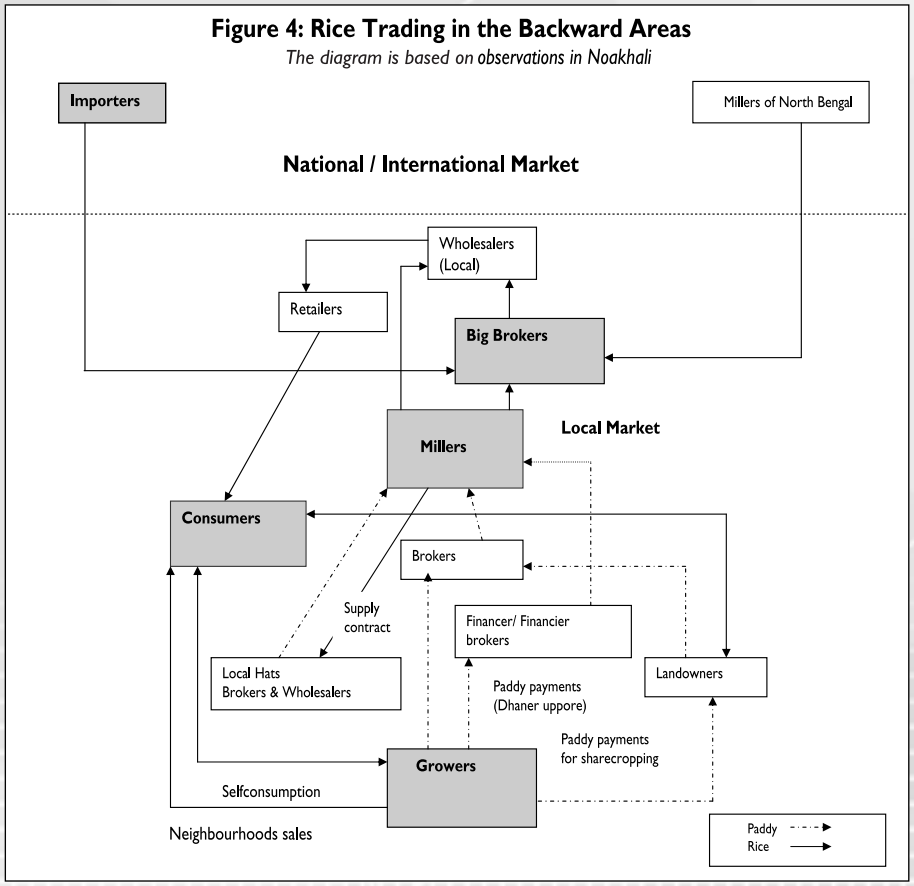
The Figure – 4 shows the way of rice trading from producers to consumers in the backward region through brokers, millers, wholesalers and retailers. In the process, the middlemen eat up most of the profit, leaving a small amount to the growers. It may be mentioned that during the procurement drive, government procure a very little paddy or rice from the backward area.

Prices of both paddy and rice differ. In the advanced area, with the price of 65 Kg of paddy, one *maund* of husked rice can be obtained, which is equivalent to Tk 455 whereas the same amount of produce is worth Tk 540 in the backward areas. One plausible explanation for higher price in backward area is the absence of government procurement system while alternatively the market price is very low during harvest season in the backward area.

In the backward areas, where average land holding for cultivation is very scanty, growers are tightly interlinked with the lenders and landlords.

Figure 4: Rice Trading in the Backward Areas

The diagram is based on observations in Noakhali



The Figure - 5 shows the appropriation of rice price in the market in both backward and advanced areas. It is evident that the major share of the surplus goes to the traders. The amount of appropriation is Tk 100 per maund.

A comparison of the production surplus and marketed surplus has been calculated showing that the producers appropriate lesser surpluses than that of traders.

Farmers lose Tk 87575m per year at the domestic market

Rice growers incur huge income loss due to existing trading practice, which transcends beyond so-called market arrangement of financial intermediation, allowed for 'efficiency' by decreasing transaction cost. The market survey conducted for the report shows that there exists a huge gap between the farmers selling price of paddy and market price of rice both in the advanced and backward areas. The empirical findings show that the farmers' loss is substantial, after the subtraction of husking costs and transport costs. The middleman and brokers appropriate most of the income. The calculation shows that farmers' net loss of income from the market is Tk 4.7 billion only for Boro production.

If this calculation is applied to the whole rice production of the country for a year, the estimated loss stands at Tk 8.7 billion (See Annexure-A). If this amount is compared with the contribution of crop and horticulture sector in the economy for FY05, it would be more than 1/5 of the agriculture GDP and 1/6 of the total share of agriculture to the GDP. This estimate is based on market price of rice and paddy in the advanced area during the harvesting season of Boro rice, which has the largest share in the total production of rice. The calculation is conducted for the pick-harvesting season when the market price of rice is usually low. If the seasonal fluctuation were taken into account, the lost income of the producers would be higher. The big hoarders primarily appropriate the gain from this fluctuation.

Producers generated surplus, appropriated by the rural elite

To investigate the magnitude of differences between producers' and traders' surpluses, the study presents the simple production surplus (price of total rice produced minus cost of inputs) and trading surplus (final price of rice minus the farm-gate price). For the purpose of illustration a simple method is used based on certain assumptions since a proper estimation

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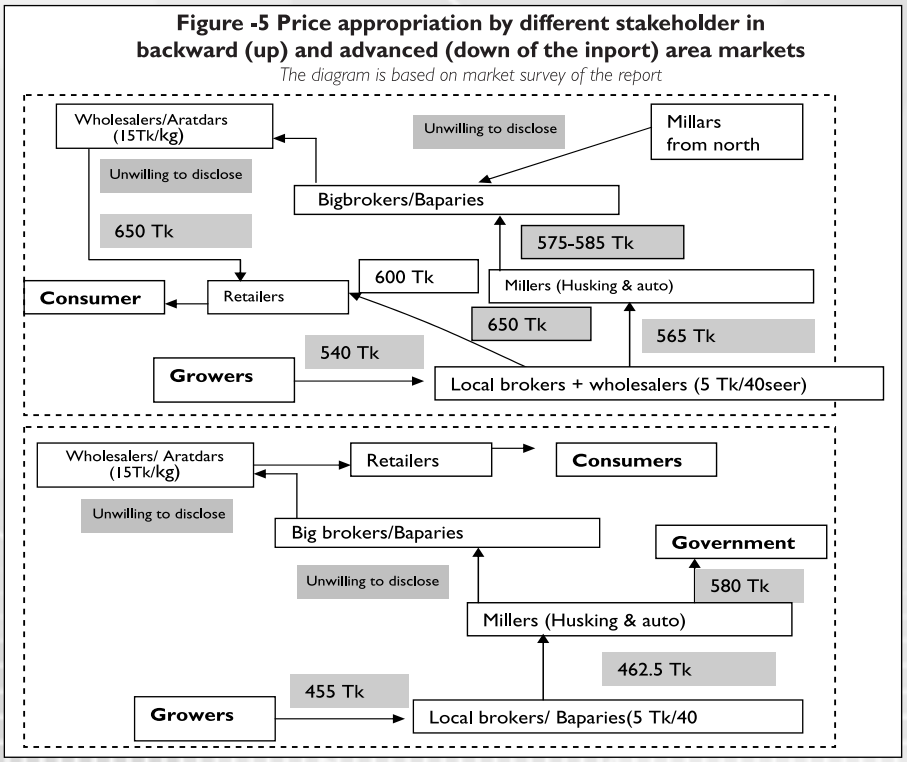
Figure -5 Price appropriation by different stakeholder in backward (up) and advanced (down of the inport) area markets

The diagram is based on market survey of the report



requires more in depth survey involving huge resources.

- Both input and output markets are imperfect in nature.
- Farmers own the cultivated land. So the costs of sharecropping and land rent are not incorporated.
- Imputed costs of family labour has not been taken into account yield and credit risks have not been taken into account,
- Farmers sell the entire production in the market.

From our field work in Bogra, it was found that on an average the production surplus from one acre of land in Boro cultivation is Tk 4500 spanning over a cultivation season of four months. The surplus might be much lower or even negative if the costs of family labour and risk factors have been incorporated. On the other hand, the average traders' surplus from the same amount of rice is Tk 5000 in a maximum duration of 30 days with almost no risks excepting some accidental and extortion risks (See Annexure-A).

There are three main reasons for low surplus gained by small farmers. Firstly, small farmers on an average hold about 0.87 acre each (Barakat and Das 2004). They are also compelled to engage in sharecropping and other form of land tenancy. Thus, the major share of the surplus goes to the landowners. As a result, the small surplus leads to a shortage of reinvestment, which poses a great question mark on the return of the so-called technological advancement.

Secondly, the farmers take loans from the brokers or landlords for purchase of input, in which mode of repayments is made through grains i.e. the producers have to pay a major share of their produced grain to the moneylenders and land lords. Lenders set the price of the crops in which farmers have no choice. Therefore, the lack of price incentives discourages farmers and ultimately they end up with lower surplus.

Thirdly, due to extreme population pressure, small farms are also breaking into non-viable holding, leading to land alienation, and growing landlessness. This fragmentation of landholdings put small farmers into disfavour of economies of scale, thereby leaving them without any surplus.

All these make it difficult to the resource-poor farmers to participate in mechanised agriculture.

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Sell cheap buy dear- market disadvantage for the poor

This section analyses how the small farmers are being affected in the local rice trading system against the back drop of liberalisation of the agricultural output markets. Farmers are being trapped in the inter-temporal time preference in the "so-called" free-market economy with greater degree of imperfection. As a result,

non-farm traders eat up the substantial amount of the marketed surplus whereas the small farmers end up with low surplus. It is also evident that despite the surge in import of rice, the price at the local market crept up, which again reduce the consumer welfares.

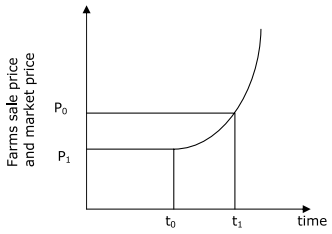
For our study purpose, the time horizon of the rice trading is characterised by two periods – peak season and off-peak season. Peak season is referred as the harvest period and off-peak as post harvest lean period. Farmers can sell rice in the peak-season to meet the immediate requirements or can store it for future sale. Thus they have to make an inter-temporal choice while trading rice. In general, price is lower in the harvesting season and goes up in post harvest period.

Farmers face a monopsony market - where there is a single buyer and large number of small sellers - when they sell rice. Therefore, the market is concentrated with a single buyer, who forced the seller to sale rice at lower price.

Empirical findings show that the average price of paddy is lower in the peak season than the off-peak period. It is also confirmed from various studies (Quasem, 1983) that when the prices lowest (usually in the second quarter of the year) the small farmers sell the highest proportion (about 50 per cent) while the large farms are lowest (about 22 per cent). In our case studies, the farmers who live at subsistence level are forced to sell hurriedly for repayment of the input costs and to meet up other basic needs. Moreover, farm's direct participation in the market is limited because of lack of transport facilities. Some times they cannot have the direct access to the grain market because of sharecropping arrangement, payment in kind for credit etc. Small farmers usually depend on borrowing from informal sector to meet the input costs. They remain under pressure to payback the loan including the interests as soon as they harvest the crops. These limit farmers' chances to get the fair price. Therefore, the farmers are forced to sell the rice at lower price to the nearest broker who is a monopsony buyer.

But farmers started buying rice in the upmarket during the off-peak season since by then they ran out of their reserves. They buy relatively higher proportion of rice than they usually sell. An empirical study shows that the small farmers buy back about 135 percent of their sales while the larger and medium farmers purchased 16 percent and 33 percent respectively (Quasem, 1983). The argument is still consistent as farmers in the field reported that given their size of the family (average household size is 4.9 in rural area, BBS 2004), they have to buy higher quantity, as they cannot store enough for the off-peak season. So by the time when they start buying, price of rice starts increasing in the local market. Thus the small farmers are worst sufferers due to limited market access and inter-temporal price fluctuations.

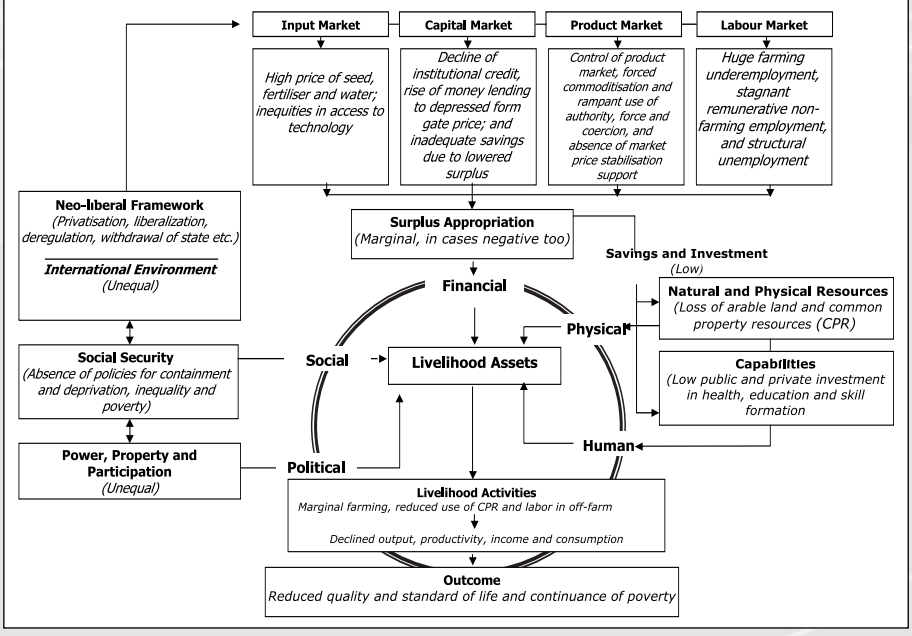
Figure - 6 Inter-temporal price variation of rice in local market



Small Farmers Plunged into Generalised Livelihood Distress

The economic strategy of the past decade rooted in neo-liberal framework, absence of policies for containment of deprivation, along with unequal power, property and associated dismemberment in participation in policy-making in conjunction with their interfaces in the input, capital, product and labour markets have reduced livelihood assets – political, social, financial, physical and human - have generated a generalised livelihood crisis (Figure – 7). High input costs, decline in

Figure - 7: Livelihood Distress of Farmers in Bangladesh



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Small farmers are worst sufferers due to limited market access and inter-temporal price fluctuations.

The lowered level of livelihood activities leads to declined output, productivity, income and consumption, leaving a blow to the quality and standard of life, implying continuance of mass poverty and inequality.

institutional credit, presence of huge farming underemployment and structural unemployment vis-à-vis low and declining prices result in a low generation of surplus. Marginal surplus in turn inhibits investment in means of production such as land and technology as well as caps investment in capabilities including health, education and skill formation, resulting in lowered livelihood activities. The process is further aggravated by lesser utilization of common property resources (CPR) in the wake of destruction of ecological assets as well as virtual absence of social security and insurance. The lowered level of livelihood activities leads to declined output, productivity, income and consumption, leaving a blow to the quality and standard of life, implying continuance of mass poverty and inequality.

SUPPORT TO AGRICULTURE IN BANGLADESH AND THE COUNTRIES IMPORTING FROM: A COMPARATIVE ANALYSIS

This section links Bangladesh's rice market with the international trade of rice. A country specific analysis has been drawn to show how the poor farmers in Bangladesh are being affected. The case has been illustrated through India since it is the main partner of Bangladesh in international rice trade, in which Bangladesh is the rice deficit country and India is the rice exporting country. Bangladesh has liberalised the private rice imports in early 1990s (see later) whereas India's private food exports were liberalised in 1994 as a part of the macro economic reform including exchange rate depreciation. Also it is important to note that during the period India has increased its agriculture subsidy under the new economic reforms while the same has been decreased in Bangladesh. In the fiscal 2003-04, the government of Bangladesh has marginally increased agriculture subsidy. Given the scenario, Bangladesh's import of rice from India has risen to unprecedented levels since then.

Trade Liberalisation

Import tariff reduction is critical in the trade liberalization policies that are strongly advocated and many times mandated by international financial institutions like the International Monetary Fund (IMF) and the World Bank in the loan packages they negotiate with LDCs such as Bangladesh. Therefore, the Government of Bangladesh adopted a sweeping trade liberalisation measures in 1990s by reducing the import duties on food grain substantially. The unweighted average tariff rates have been reduced dramatically to 27.5 per cent for 12 categories of agricultural products in FY04 from 51.98 per cent in FY92. The tariff on rice import has been reduced substantially to 7.5 per cent in FY04 from 33 per cent in FY91.

The rice imports have made it more difficult for local rice producers to compete with the rest of the world. The Figure-8 shows that trade liberalisation has contributed to an increase in imports of rice in Bangladesh.

Before import liberalisation Thailand and Vietnam were the main sources of import, though the extent of import was limited. However, following the liberalisation measures India replaced as the main source of rice import. The market survey conducted for the present report shows that the price of Indian Ratna and Sharna rice is much lower (at least Tk 2/2.5 less per Kg than locally produced HYV- Boro).

The competition between Bangladeshi and Indian rice growers can hardly be termed as fair. While Indian rice production is subsidised through a variety of mechanisms, the small, struggling domestic rice producer in Bangladesh receives almost no support from the government. Rice farmers do not receive export subsidies but a negligible amount of domestic support, which in fact shows a downward trend. Thus import surge from India and consequent decline in the demand for local rice has had a devastating impact on the desperate rural population who have no other means of living but agriculture.

Comparison of AMS to Agriculture

When the agriculture subsidy increased in India, the Bangladesh agriculture saw a decline in support. A comparative domestic support analysis shows that the aggregate measure of support (AMS) has increased in India from 4.12 per cent in 1990-01 to 8.57 per cent whereas the same has declined in Bangladesh to 0.67 per cent in 2001-02 from 1.54 per cent in 1995-96 (Table – 4). India has increased its domestic support substantially to canal irrigation, fertiliser, power, seed, credit etc following the AoA in UR. Bangladesh has, however, reduced its agricultural support drastically during this period except in 1996-97 following the great fertiliser crisis in mid 1990s. There are two important reasons behind the drastic fall of the domestic support. Firstly, over the years Bangladesh has been forced to reduce the agriculture subsidy to get the conditional loan from the World Bank and IMF. The fiscal constraint of the country is so severe that the country could not bargain with the IFIs for taking its position in agriculture in line with the WTO.

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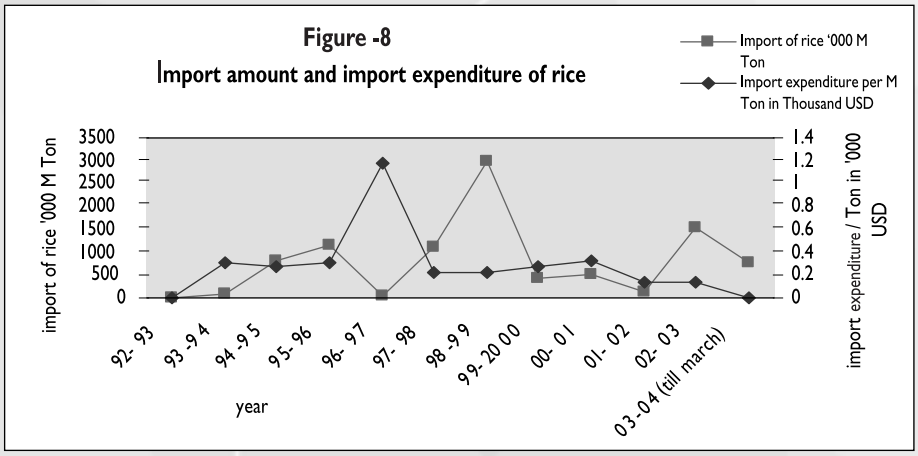


Table-4 AMS in Bangladesh Compared with India

Country	1990-91	1995-96	1996-97	1999-2000	2001-02
Bangladesh (Tk in mn)					
Total Support		4601.36	5094.5	4287.33	2878.27
Value of Agri Output		297421	321853	415267	422095
Total Support as a percentage of Output		1.54	1.58	1.03	0.67
India (Rs in mn)					
Total input Support	70276	267042	387460	344792	378041
Value of Agri Output	1706980	3425350	5358100		
Total Support as a percentage of Output	4.12	7.70		8.57	

Souce : Authors calculated the AMS in Bangladesh while Indian figures were taken from FAO (2004)

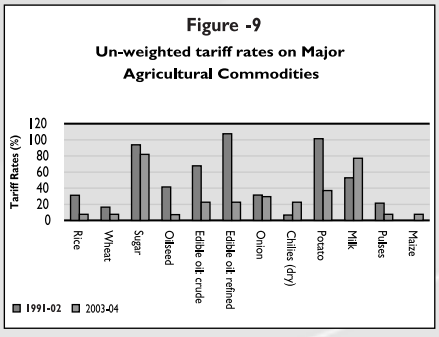
WTO NEGOTIATION AND CONCERNS OF SMALL FARMERS

As a least developed country, Bangladesh is exempted from reduction commitments on tariffs, export subsidies and domestic support to agriculture, but is obligated to freeze domestic support to agriculture at the 1986-88 level and bind all tariffs. In the UR, Bangladesh offered ceiling tariff bindings of 200 percent ad valorem on all products covered by the AoA, with the exception of 30 lines for which the bound rate was 50 percent. In addition, "other duties or charges" were bound at 30 percent on all these products, so that the overall bound rates were 230 percent on most products and 80 percent on the 30 tariff lines.

By 1994, trade in all agricultural commodities, were free of quantitative restrictions. And tariff structure was much lower for all agricultural products than the commitments. In fact the maximum tariff rate has been brought down to 82 per cent (on sugar) from 107.49 per cent (on refined edible oil) in 1991-92. For rice, the tariff has been capped at 7.5 per cent by 2004 from 31.25 per cent in 1991-92 (Figure – 9).

As far as trade-distorting domestic support is concerned, estimates of the AMS through input subsidies and price support is below 1 per cent in 2001-02 as against the WTO provision of 10 percent for developing countries. Fertiliser subsidies amounted to less than 0.15 per cent of the value of agricultural production while irrigation subsidies were 0.3 per cent in 2001-02.

Though Bangladesh fairly liberalised both of its export and import market under the SAP, it had not gained much from the export of agricultural products. The share of agriculture in total export was meagre at 0.54 per cent in 2004, up from 0.38 per cent 2001-02 (GoB, 2005). Bangladesh does not provide any direct subsidy to agriculture exports as it did not reserve the right



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to provide export subsidies in future - and indeed could not do so, since it did not notify the existence of any export subsidies during the UR (Tariff Commission Report, 2003).

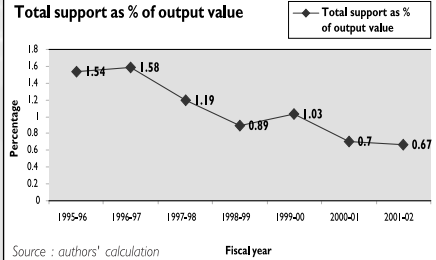
Major Threats to the Poor Farmers

In the above context it is important and timely for LDCs in general and Bangladesh in particular vis-à-vis the developed and developing countries to review the impact of new AoA. The concerns rose in all three aspects – market access, domestic support and export competition.

Shrinking government support threatening the livelihood of small farmers

In Bangladesh, shrinking government support to agriculture has made the production hardly viable over the years. Drastic reduction in public expenditure in agriculture increased the input costs and shrinking price incentives in an imperfect unregulated market structure ultimately swept the farmers out of their business. Just after the liberation in 1971, share of ministry of agriculture in total annual development programme was 30.97 per cent while it came down to only 2.59 per cent in 2001 (MoA 2001). The government subsidy to agriculture has decreased throughout the 1980s and in 2001-02 there was no explicit subsidy on agricultural inputs except some negligible subsidy in irrigation, fertilisers and seeds in the recent years. In most cases it was found that small and marginal farmers have hardly got any benefit due to preponderance of middlemen and local elite. Nevertheless, the AMS has continued to decline, which stood at 0.67 per cent in 2001/02 (Figure – 10).

Figure-10 AMS in Bangladesh



Source : authors' calculation

By taking into agriculture output and subsidies in 2001-02, a rough estimate suggests that it needs Tk 1342.68 crore if the country wants to provide about 1 percent subsidy to fertiliser of total agricultural output. However, fiscal constraints are one of the main reasons that refrained the government from giving subsidies in agriculture inputs. Our AMS calculation shows that government did not give even at 1 per cent subsidy of total output due to resource constraints. Moreover, the problem of limited resources forced the Bangladesh time and again to take conditional loan from the World Bank and the IMF that continuously kept Bangladesh under pressure to reduce the agriculture subsidy in contrast to domestic support rule of the WTO.

In recent years, though the total budget for agriculture has increased, budgetary allocation for agricultural services that farmers presumably benefit from has steadily been on the decline. The budget for agriculture increased 90 per cent and administrative outlay almost 200 per cent in the 2004-05 fiscal year. However, the outlay for agricultural services declined about 10 per cent, agricultural extension over 20 per cent and agricultural marketing 75 per cent. The budget for agriculture in the fiscal 2005-06 was twice as much as in the financial year before. However, 77 per cent of the total outlay was dedicated to administrative expenditure. The allocation for agricultural services declined about three per cent. The budget for the Department of Agricultural Extension was slashed by 34 per cent. The allocation for marketing and research was also reduced.

The price support to the producers by public procurement is also marked negative, as the government offered price is lower than the market price. From 1991 to 1999 the government procurement does not work as the price support rather it becomes tax for rice producers (MoA, 2001).

Growing subsidies in the exporting countries marginalising small farmers

In order to push rice exports the government of India has taken a decision to release stocks from the Food Corporation of India (FCI) to private exporters at a subsidised rate of US $127 per ton (milled rice) while the economic cost is US $253. Later, the Export Import Policy (EXIM) of 2001-02 has scrapped the policy of canalisation of rice import and other cereals and reserved their imports only for state trading agencies. At the same time has also increased the import duty by 80 per cent on husked rice and 70 per cent on milled rice making the commercial import of rice almost impossible from a low-price international rice market.

Fundamental Shift in the WTO: From Riches to Need-based Support System

Agriculture sector in Bangladesh has two-way roles to play in the overall performance of the country. On one hand, it is the largest sector of the country in terms of total value addition and on the other it is the most important sector providing the maximum employment for the whole country and also maintaining the lives and

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livelihood provisions for the poor rural people. The point that subsidy in developed countries hurt developing countries is true collectively, but would not be true for Bangladesh, which is a net importer of food products. Also food aid would be an inappropriate response, as it would tend to lower producers' price, providing a disincentive to local producers who are often the poorest but the least vocal politically. In this regard, it is important to note that the proposed generalised increases in food aid in Marrakash Ministerial Decision would be antithetical to the interests of agricultural producers and farmers in the net food importing countries like Bangladesh as the lower domestic price would hurt the rural poor.

Thus as a net importer, Bangladesh would face a two-edge difficulty in the negotiations with WTO. On the one hand, subsidised cheap import and food aid would hurt the small and poor farmers' livelihood due to consequent effect of lower domestic price. On the other hand, reduced subsidy of the major agricultural producers would cause the food price to increase, which indeed would fatten the import bill of the country. This as a result would surface various macro economic consequences including pressures on inflation and exchange rate. Moreover, when about 42 per cent of the total population of the country live below the poverty line it would be a quite injustice to supply foods to the millions of impoverished population at a higher price. So, the major area of intervention in rice sector should be-

a. productivity increase through technological advancement and infrastructure development,
b. institutionalised mechanism by which the small farms can get incentive in farming e.g. lessening input costs, insurance for price volatility, support mechanism for natural disaster etc,
c. a real balance between poor producers and poor consumers.

Therefore a comprehensive package is needed. Elements of such package could be, amongst others: correction of inequities in access to irrigation; bringing all cultivators into the ambit of institutional credit, including tenant farmers; augmentation of farming through technology, extension, price and other incentives; encouragement of cheaper and more sustainable input use, with greater public provision and regulation of private input supply and strong research and extension support; protection of farmers from high volatility in output prices; and enhancement of rural economic diversification to more value-added activities and non-agricultural activities.

All these measures need extensive support to agriculture. However, Bangladesh as well as other LDCs is not capable enough to support its agriculture. It has been shown that Bangladesh has no problem as far as WTO's rule on AMS is concerned, the problem she is having is with her limited resources. Given the resource constraints, as the study shows that the government support in agriculture is not sufficient and in fact declined over time, which is well below the WTO's allowable limit for the last ten years, the right choice for Bangladesh and other LDCs should be to bargain for creation of funding mechanism to ensure that farmers in poor countries get at least the *de minimis* level support like those in the developing countries.

The growing concern for NFICs is that while they have not been able to give the support at the de minimus level, the developed and developing countries have extended their agricultural subsidy. This has further marginalized the small and poor farmers of the food importing countries. So within the WTO there should be a "compensatory mechanism" to overcome the negative impact of trade liberalisation on the livelihood of millions of poor. Actually, what the small farmers of the NFICs need is to make them competitive at least at the domestic level so that they can compete with the imported products. Therefore, funding the domestic producers is the safeguard for NFICs from cheap import surge. Hence a prudent financing policy for the agriculture is inevitable so that the WTO can arrange the compensatory fund for NFICs.

Bangladesh as well as other LDCs always is on the double–edged sword. In one side, the World Bank and the IMF put them under pressure to curtail any support, on the other the WTO allows resource rich countries to give subsidy up to *de minimis* level apart from current distortion. So it is an imperative to establish policy coherence between the IFIs and the WTO.

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NOTES

[1] In agriculture, any domestic subsidy or other measure which acts to maintain producer prices at levels above those prevailing in international trade; direct payments to producers, including deficiency payments, and input and marketing cost reduction measures available only for agricultural production.

[2] Amber box: supports considered to distort trade and therefore subject to reduction commitments.

[3] Blue box: permitted supports linked to production.

[4] Green box: supports considered not to distort trade and therefore permitted with no limits.

[5] "Bangladesh Public Policy Watch 2005, Millennium Development Goals – A Reality Check," Dhaka: Unnayan Onneshan, available at: http://www.unnayan.org/Other/Unnayan%20Onneshan_PPW2005_MDG.pdf

[6] The Government of Bangladesh (GoB) has reinstated a marginal subsidy in agriculture in mid 1990s after the fertilisers scam in 1994 that killed 11 peasants.

ANNEXURE - A

1) Study approaches: A comprehensive field study has been conducted in several villages of Bogra, Dinajpur and Noakhali in April 2005 during the Boro rice harvest season. In the field study, primarily the case studies of the small farmers, millers, importers, etc were made. At least one intensive case study was made on each stakeholder groups. Primary data for input costs, market prices of rice and paddy were collected from the local hats, mills and wholesale markets. A good number of secondary data and literatures were also reviewed for analytical purposes.

2) Selection of the study area and time: To get an overall picture of the rice sector across the country, the study area was selected on the basis of technological advancement, and growth of production in the agricultural sector. In this regard, two different areas - advanced and backward - were selected for the field study. Bogra and Dinajpur have been selected as they are considered as advanced areas due to technological advancement, especially due to the coverage of irrigation. These areas have a surplus production and the cropping intensity is also higher compared with the other regions. On the other hand, Noakhali has been selected as it is considered as a backward area, in which little investment in agriculture took place. Also the area is characterised by low yield and little technological advancements. The region has also shortfall in agricultural production i.e. it depends on food import from other localities

Farm households in four villages of Bogra and Dinajpur districts and two villages of Noakhali district were studied. Two hats for each area were also observed in the Hatbar. Fertiliser dealers, seed distributors, wholesalers, importers and millers were also interviewed in the areas under observations. The big importers and modern auto rice millers are found in 'Dinajpur' district. The C& F agents, custom superintendent, border importers were interviewed in the 'Hili' land port of the country. The data were also collected from the main wholesale market of rice in the capital named 'Badamtoli' market.

3) Climate for rice cultivation: In Bangladesh, the major rice ecosystems are upland (the direct seeded Aus), irrigated (mainly transplanted Aman, 0-50 cm.), medium deep stagnant (50-100 cm.), deep water (>100cm<180cm.), flooded (>180 cm.), tidal saline and tidal non- saline (Ministry of Agriculture, GoB 2005). The largest harvest is Boro rice, including that of HYVs, which grow mainly in the dry season between October and March and require high irrigation. Among the other varieties, Aman is harvested in November/ December while Aus is harvested in July/August (Ministry of Agriculture, GoB 2005).

4) Calculation of farmer's income loss in the domestic market: (all the figures were taken from the field survey during April)

i. The price of 40 Kg husked rice is Tk 406 in the local paddy market.
ii. Average husking cost is Tk 16 per 65 kg paddy and other associated cost is assumed Tk 8. The total cost of husked rice is Tk 430 per 40 Kg.
iii. In the wholesale market the price of rice is Tk 570 per 40 Kg.
iv. The growers' loss of Income is Tk 140 per 40 Kg of rice or 65 kg paddy (Tk 570 –Tk 430)
v. The total loss of farmers in Boro production is calculated by multiplying the county's total Boro productions in FY05. Then for total rice production of the country is also calculated in the same manner

5) Calculation of production and trading surplus:
Production surplus is calculated as: market price of total output – input costs
Average production of boro in 1 acre is 60 maund (1 Maund = 37.33 kg) paddy * Tk 250 (market price for 1 maund) = Tk15000.
Imput cost (ploughing, hired labour, fertiliser, water, pesticides, etc) for 1 acre is Tk 10500
So, production surplus = Tk 15000 - Tk 10500 = Tk 4500.

Again, 65 kg of paddy is transformed into 40 kg of rice and its average husking and other costs calculated as Tk 24. The average cost for 1 maund is Tk {(250 * 65/40) +24} = Tk 430

The selling price of rice as reported in the field study is Tk 560 per maund. The trading surplus for 1 maund is 560-426 = Tk 134. Total rice obtained from 1 acre land is 38 maund. So, the total trading surplus for 1 acre of boro rice is = 134*38 = Tk 5092.

The costs and returns data for Bangladesh was collected for 2000 crop seasons from a nationally representative sample of 1880 farm households from 62 villages belonging to 57 of the 64 districts. Socio-Consult Ltd conducted the 2000 survey for an International Rice Research Institute (IRRI) sponsored study on determinants of rural livelihoods in Bangladesh. The data for India are obtained from Reports of the Commission for Agricultural Costs and Prices (CACP) and refers to the crop seasons 1998-99 and 1999-2000

REFERENCES

Adnan, S., 1999. 'The Political Economy of Technological Change in Bangladesh'. In: B. Rogaly, B. Harris-White and S. Bose, eds., 1999 Sonar Bangla? Agricultural Growth and Agrarian Change in West Bengal and Bangladesh. Dhaka University Press Limited, 177-228 1999

Bakht, Z., 1999. Report on Border Protection and Export Subsidy, Consultancy Report Prepared For FAO, BIDS, Dhaka, 1999

Bangladesh Bank (BB). Annual Reports, 1995-2000

Bangladesh Tariff Commission Report, 2004

Barakat, A. & Das, P. K., 2004. Agriculture within Globalisation and WTO- Politico- Economic Issues of Bangladesh Agriculture.- Paper Presented in XV Biennial Conference of The Bangladesh Economic Association from 8-10 December, institute of engineers, Bangladesh. Dhaka.

BBS Statistical Yearbook of Bangladesh, 2001

BBS, Statistical Year Book of Bangladesh, 2004

FAO, Agriculture Sector Review, 2004, Actionable Policy Brief and Resource Implications, Ministry of Agriculture, Government of Bangladesh

Government of Bangladesh (GoB) (2004). "Unlocking the Potential – National Strategy for Accelerated Poverty Reduction," Dhaka: General Economics Division, Planning Commission, Ministry of Planning, Govt. of Bangladesh, December.

Hossain, M. and Dev. U. K., 'Liberalization of Rice Sector: Can Bangladesh Withstand Regional Co-Operation?' IRRI, 2004

Patnaik, U. 'Export Oriented Agriculture and Food Security' In: The Great Grain Drain, Books For Change, Bangalore, India.

Quasem. A .Md. Farmers Participation in the Paddy Markets, their Marketed Surplus and Factors Affecting It in Bangladesh, BDS journal 1983.

Quasem, A. and Hossain, M., 1985. Impact of Agricultural Policies and Programmess on Small Farms in Bangladesh. Consultancy Report Prepared for FAO- Based on the Report of Bangladesh Pilot Agricultural Survey, 1982.

Tyranny of forced liberalisation with virtual absence of domestic support to Bangladesh agriculture and dishing out of bounty along the lines of rigged rules in the resource-rich countries have contributed to stall the reduction of rural poverty in Bangladesh, with a yearly average of 0.32 per cent implying that it would take 135 years to eradicate poverty and 43 years to achieve the target of the Millennium Development Goals.

A deeply dependent country on agriculture like Bangladesh, employing highest number of people to the tune of 51 per cent and contributing 21 per cent of GDP, neither have resources to provide domestic support even at the allowable de minimis level nor are permitted by the Brettonwoods system as part of their conditionalities for loans.

Arrangement in agriculture should be reversed to eliminate export subsidies and domestic support to ensure that domestic support should be allowed to farmers, who need these but not to those living in the countries with abundant financial resources. If such an arrangement could be reached, it is only then Doha Round will be development oriented.

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