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Plunging into Food Insecurity

Multilateral Liberalisation in Agriculture and the Concern of Net-food Importing Countries: The Case of Bangladesh

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SUMMARY

The report attempts to understand the implications of multilateral agricultural liberalisation on a food security situation of net-food importing developing country. Food security depends on an adequate supply, distribution, and access to appropriate level food for every individual. It is function of intricate social, cultural, economic, and political relationships that differ enormously from place to place and over time.

While affordability is a function of price and earning, the fluctuation of market price of food grain has implications on the food affordability by the poor. The WTO negotiations will leave it marks relating to prices of agricultural commodities in the course of elimination of export subsidy by developed countries by 2013. The planned measures is likely to scorn the interests of net food importing countries food security like Bangladesh and the poor majority of her will face the real threat to maintain their livelihood.

The country can ensure food security for her population either producing more food in the country or through import from abroad. Bangladesh has a little possibility to increase agricultural production rapidly unless it takes a very dynamic supporting strategy for its agriculture. It also faces a rapid decrease in food aid flow and a sharp increase in the import of the food to meet the production gap in the country. That means that the import will continue to increase in coming years that can effect on the balance of payment situation of the country.

Under normal circumstances, the reduction in export subsidies raises the world price of the product, benefiting exporters, hurting importers. There is an unavoidable erosion of preferences for NFICs who are enjoying subsidized price of basic foodstuffs. The erosion is not only related to hurting the macroeconomic stability through BoP crisis rather it has a negative effect on livelihood sustainability of the poor majority in Bangladesh through raising price of basic food items like rice and wheat. So, there should be effective mechanism in the forthcoming WTO AoA framework that would mitigate the adverse effect on the poor of the NFICs like Bangladesh as stated in the Marrakash Agreement.

From the angle of food security, Bangladesh must focus on the technological advancement, food aid efficacy and need based subsidy, international import insurance or a financial rebate programme for the NFILDCs on the ground of price and affordability of the poor and a countervailing mechanism on the ground of BoP crisis.

INTRODUCTION

The report attempts to understand the implications of multilateral agricultural liberalisation on a food security situation of net-food importing developing country. Food security depends on an adequate supply, distribution, and access to appropriate level food for every individual. It is function of intricate social, cultural, economic, and political relationships that differ enormously from place to place and over time.

Few would deny that international trade plays a part in this process. Thus the Uruguay Round agreements in Marrakesh in 1994 acknowledge that poor net food-importing countries could be harmed by the reduced availability of subsidized food in the world market. As a result, the Marrakesh Ministerial Decision on Measures Concerning the Possible Negative Effects of the Reform Program on Least-Developed and Net Food-Importing Developing Countries was adopted. This decision promised financial assistance to these countries to ensure that adequate food imports are maintained and to improve their agricultural productivity and infrastructure. The AoA makes concessions to developing and least developed countries' (LDCs) special needs, including a longer implementation period (ten rather than six years) and lower reduction commitments for programs that support agricultural production and trade. The principle of special and differential (S&D) treatment was used to provide developing countries with these more favourable terms. LDCs are exempt from tariff reductions (although they must bind them to a maximum level) and cuts to domestic support programs (although they are subject to a spending ceiling). LDCs are also exempt from export subsidy reduction requirements.

National food security can be ensured through increased availability often argued by different international bodies like FAO and others while affordability should be the main concern in countries like Bangladesh where majority people living under poverty line directly or indirectly. While affordability is a function of price and earning, the fluctuation of market price of food grain has implications on the food affordability by the poor. The WTO negotiations will leave it marks relating to prices of agricultural commodities in the course of elimination of export subsidy by developed countries by 2013. The planned measures is likely to scorn the interests of net food importing countries food security like Bangladesh and the poor majority of her will face the real threat to maintain their livelihood.

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, 2005).

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.

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 farmer 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 assert 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.

The following section operationally defines the food security and analysed the unilateral liberalisation of agriculture in Bangladesh leaning to the food security situation of the nation. The third section tracks the possible consequences regarding food security in Bangladesh resulting from the negotiations conducted at the WTO. The final section suggests some strategic options.

FOOD SECURITY SITUATION OF BANGLADESH

Defining Food Security

UN approach

Food security describes a situation in which people do not live in hunger or fear of starvation. Worldwide around 852 million men, women and children are chronically hungry due to extreme poverty; while up to 2 billion people lack food security intermittently due to varying degrees of poverty (FAO, 2003).

A direct relationship exists between food consumption levels and poverty. Families with financial resources to escape extreme poverty rarely suffer from chronic hunger, while poor families not only suffer the most from chronic hunger, but are also the segment of the population at the highest risk during food shortages and famines.

Two commonly used definitions of food security come from the UN's Food and Agriculture Organization (FAO) and the United States Department of Agriculture (USDA). In 1996, countries at the World Food Summit agreed that:

> 'Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy lifestyle'.

This definition was endorsed at the follow-up conference held in Rome 2002 in World Food Summit.

According to the USDA, food security for a household means access by all members at all times to enough food for an active, healthy life. Food security includes at a minimum (1) the ready availability of nutritionally adequate and safe foods, and (2) an assured ability to acquire acceptable foods in socially acceptable ways (that is, without resorting to emergency food supplies, scavenging, stealing, or other coping strategies).

Food justice

An alternative view takes a collective approach to achieve food security. It notes that globally enough food is produced to feed the entire world population at a level adequate to ensure that everyone can be free of hunger and fear of starvation. That no one should live without enough food because of economic constraints or social inequalities is the basic goal. This approach is often referred to as 'food justice' and views food security as a basic human right. The proponents advocate fairer distribution of food, particularly grain crops, as a means of ending chronic hunger and malnutrition. The core of the food justice movement is the belief that what is lacking is not food, but the political will to fairly distribute food regardless of the recipient's ability to pay.

Food sovereignty

A third approach is known as food sovereignty; though it overlaps with food justice on several points, the two are not identical. It views the business practices of multinational corporations as a form of neo-colonialism. It contends that multinational corporations have the financial resources available to buy up the agricultural resources of impoverished nations, particularly in the tropics. They also have the political clout to convert these resources to the exclusive production of cash crops for sale to industrialized nations outside of the tropics, and in the process to squeeze the poor off the more productive lands. According to this view subsistence farmers are left to cultivate only lands that are so marginal in terms of productivity as to be of no interest to the multinational corporations. It advocates banning the production of most cash crops in developing nations, thereby leaving the local farmers to concentrate on subsistence crops. In addition it opposes allowing low-cost subsidized food

from industrialized nations into developing countries, what is referred to as "import dumping".

The study understands the consequences of WTO agricultural negotiations on food security in terms of three aspects of food security, namely food availability, affordability and utilisation. This is how government of Bangladesh defines food security. Obviously availability is a major concern for food security while affordability is the most serious problem for the people of the countries like Bangladesh with 50% of people living under poverty specification.

Food availability and requirement

Bangladesh is a net food importing country. The official statistics shows that the production offset the food consumption requirements since FY 2000 largely due to bumper production in crops. A declining trend of food imports was witnessed between FY 2000 and FY2002**.** The surplus of food declined in the subsequent years. In the FY2004 and FY2005, the import data shows that food grain imports marked a sharp rise during the years, reflecting a deterioration of food availability in the domestic frontier. Per capita availably of food grain also shows a declining trend in recent years.

Table 2: Food-grain Availability (000' M.Tons)

Year	Population (Million)	Net domestic production (rice +wheat)	Foodgrain consumption requirement (453.6gm / Day/cap)	Food gap (Surplus) (4-3)	Private import	Public distribution	Domestic procurement	National availability (3+6+7-8)	Per capita Availability gm/day
1	2	3	4	5	6	7	8	9	10
93/94	117	17255	19371	2116	312	1376	166	18777	439.68
94/95	119	16270	19702	3432	1014	1573	278	18580	427.75
95/96	121	17151	20033	2882	850	1794	400	19395	439.15
96/97	123	18303	20364	2062	237	1392	615	19316	430.25
97/98	125	18599	20696	2097	1149	1621	617	20752	454.82
98/99	127	19631	21027	1395	3480	2134	753	24492	528.34
99/00	129	22416	21358	(1058)	1234	1900	967	24583	522.09
00/01	131	24083	21689	(2394)	1063	1774	1088	25832	540.24
01/02	133	23315	22020	(1295)	1289	1463	1053	25014	515.27
02/03	135	24025	22351	(1674)	2966	1434	947	27477	557.62
03/04	137	25308	22652	(2656)	2480	987	843	27932	552
04/05	139	23670	22982	(688)	2980	1370	898	27122	534

Source: DG Food, BBS & NBR

Note (i) the figures in parenthesis denote surplus

Affordability

Access to food

National availability of food do not necessarily employ that cent percent people have access to the national stock. The government intervention in the food market is virtually absent, excepting intervention like Open Market Sale and Ration Sale. The government uses these tools especially when the food prices see skyrocketing in the local market. However, a couple of recent evidences show that the government's seasonal intervention has been proved to be less effective as the price of rice remained high in the market when government simultaneously ran OMS.

Table 3: price of food grain

(Taka/ Quintal)

Year	Average wholesale price		Ration price from government		OMS (Open Market Sale) price	
	Rice	Wheat	Rice	Wheat	Rice	Wheat
1995/96	1200	823			1100	750
1996/97	982	899	1288		1100	750
1997/98	1150	871	1294		1150	900
1998/99	1377	917	1295		1250	850
99/2000	1223	864	1375		1250	800
2000/01	1148	870	1475		1250	800
2001/02	1202	867	1514		1250	800
2002/03	1325	887	1513		1050	700
2003/04	1380	1125				
2004/05	1470	1249				

Source: DAM, MoF

The table reveals that the average wholesale price of the food grain is often less than the rationed price provided by the government. However, the rice price is much higher in the retail market due to a racket of syndication among the rice traders and the price of rice increased notably in the local market over the last two to three years due to absence of effective intervention by the government. According to a recent report of the Consumers' Association of Bangladesh, price of coarse and fine rice increased by 37 and 33 per cent respectively to Tk 18.5 and Tk 24 per kg respectively between October 2001 and October 2004.

Public Food Distribution System(PFDS)

The government has recently made some changes in the targeted channels. The Food for Education (FFE) was fully converted to "Cash for Education" and the Food for Work (FFW) was partially converted to cash programme. Thus PFDS size has been reduced, as a result of series of reforms including abolition of statutory rationing of food in rural and urban areas. The total distribution through PFDS in 2001/02 was 1.77 million MT, which came down to around 1.4 million MT in the next two consecutive years. In 2002-03 government distributed about 287 thousand MT of food grains through Open Market Sales (OMS) programme. Budget of PFDS for 2003-04 was one million MT, indicating the gradual reduction in PFDS programme.

Table 4: Public foodgrain distribution by category (000' M Tons)

Year	Total distribution			Sales			Non-sales		
	Total	Rice	Wheat	Total	Rice	Wheat	Total	Rice	Wheat
1995/96	1794	592	1202	647	523	124	1147	70	1078
1996/97	1392	739	653	264	121	143	1128	617	511
1997/98	1621	529	1092	397	287	109	1224	241	983
1998/99	2134	530	1604	260	144	116	1874	386	1488
99/2000	1900	876	1025	291	132	159	1609	744	865
2000/01	1774	984	790	268	128	139	1506	855	651
2001/02	1463	648	815	254	128	126	1208	519	689
2002/03	1434	761	673	642	316	326	791	445	346
2003/04	987								
2004/05	1370	1100	270						

Source: DG Food, MoF

Table 5: Distribution of foodgrain from public stock (Ration) (000' M Tons)

Channel	1996/97	1997/98	1998/99	99/2000	2000/01	2001/02	2002/03
EP	116.4	240.4	210.4	206.9	206.9	223.0	222.5
OP	9.0	10.8	12.4	14.5	15.4	16.7	19.0
LEI	15.0	13.5	13.8	11.0	12.5	10.2	11.6
OMS	0.0	162.9	2.0	0.0	0.0	0.0	251.6
FPC	0.0	0.0	14.3	35.8	28.0	0.0	0.0
FM	45.0	8.0	6.9	19.6	4.8	4.3	119.5
PC/ATTA CHAKKI	0.0	0.0	0.0	0.0	0.0	0.0	17.5
MO	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.1	0.0	0.2	0.5	0.2	0.3	0.6
Ration	264	397	260	291	268	255	642

Table 6: Distribution of food grain from public stock (Non-priced channels)

(000' MT)

Channel	1996/97	1997/98	1998/99	19999/2000	2000/01	2001/02	2002/03
FFW	458.6	469.1	697.6	154.8	576.3	514.9	298.5
TR	127.4	101.4	90.3	124.5	119.9	145.2	108.5
VGD	100.6	222.3	205.8	216.7	184.8	171.2	175.1
VGF	0.0	6.4	464.3	149.1	200.9	84.3	64.3
GR	16.6	17.7	74.2	20.3	39.7	21.6	39.6
FFE	277.6	357.7	286.7	286.0	300.8	201.3	0.0
Others	67.5	49.2	54.9	57.7	71.4	61.7	94.1
Non-priced	1127	1224	1874	1609	1506	1209	791

Source: DG Food, MoF

Buffer stock for emergency

Bangladesh has maintains a stock of food grain for emergency purposes such as disaster, production plunge and any other supply shock. For this purpose, the government carries out open market purchase of food grain every year in the harvesting season. Also after completing all public distribution channels some amount is kept as buffer stocks for food security. In recent years food grain stock for emergency assistance has declined because of either inadequate public procurement or increased government spending through the distribution channels.

Table 7: Average closing stock of food-grain

(000'MT)

Year	Closing stock of rice	Closing stock of wheat	Food grain Average
1996/97	551	398	949
1997/98	297	455	752
1998/99	424	562	986
99/2000	658	682	1340
2000/01	643	407	1049
2001/02	478	536	1014
2002/03	438	306	744

Source: DG Food, MoF

Food subsidy

The government through its food grain distribution system within the non-priced and rationed mechanism provides support to its citizen. The amount of food subsidy has been declining over the years as the government has gone through a rigorous adjustment of the food distribution system to lessen the fiscal pressure in 1990s. However, the official data reveals an increase in food subsidy in FY2003.

Table 8: Subsidy on food

Year	Distribution			Subsidy (Tk in crores)
	Relief	Monetized	Total	
1986/87	728	1392	2120	500
1987/88	1112	1391	2503	NA
1988/89	1426	1515	2941	644
1989/90	792	1372	2164	596
1990/91	798	1574	2372	381
1991/92	924	1421	2345	344
1992/93	617	456	1073	153
1993/94	845	531	1376	167
1994/95	1065	508	1573	273
1995/96	1146	649	1795	299
1996/97	1128	264	1392	345
1997/98	1224	397	1621	389
1998/99	1874	260	2134	329
99/2000	1609	291	1900	363
2000/01	1506	268	1774	334
2001/02	1208	254	1463	335
2002/03	791	642	1434	464

Source: DG Food, MoF

Government Procurement of Food-grain and Price Support to Producers

Government procures rice and wheat directly from the producers for three purposes:

- Support the producers getting "just price",
- Maintain a buffer stock for its emergency purpose,
- Feed the regular public distribution system.

Government intervention through public procurement necessarily has greater implication on the price support to the farmers; however it is found from available data that only recently the procurement price exceeds the growers' price that makes the true benefits for the growers.

Table 9: Price support through government procurement of rice *(Aman)*

Year	Price of Aman Rice (Per MT)		Procured Amount (MT)	Price differential (TK '000)
	Procurement	Growers		
1995-96	11000	12027	41572	-42694.4
1996-97	10500	12027	199883	-305221.3
1997-98	10700	12027	542	-729.2
1998-99	12000	14110	60	-126.6

1999-00	12500	11975	234718	123226.9
2000-01	12500	11090	236219	333068.8
2001-02	12500	11560	112038	105315.7
2002-03	12800	12715	18819	1599.6
2003-04	12800	12445	143726	51022.7

Source: Authors calculation

In general, the government procures rice, paddy and wheat across the country through open market procurement every year. In case of rice, amongst the available varieties Boro is primarily procured due to its better-than-expected production in recent years while the procurement of Aman showed a declining trend.

Table 10: Price support through government procurement of rice *(Boro)*

Year	Price of Boro Rice (Tk/ MT)		Procured Amount	Price differential (Tk '000)
	Procurement	Grower		
1996	11500	9791	417432	713391288
1997	11000	9791	283531	342788979
1998	12000	11710	263906	76532740
1999	13000	12140	604438	519816680
2000	13000	13465	599934	-278969310
2001	13000	12325	486620	328468500
2002	13250	12950	628972	188691600
2003	13250	14000	754110	-565582500
2004	13250	13050	747075	149415000

Source: Authors calculation

Food Utilisation

Food Intake

The food intake declined in 2000, though the food intake increased at the national level including that of rural areas during mid-nineties. The food intake has been persistently on decline among the people in the urban area. This is discernable from the following table.

Table 12: food intake (in grams) in different survey year

Year	National	Rural	Urban
1991-92	886.2	878.1	938.4
1995-96	913.8	910.5	930.7
2000	893.1	898.7	870.7

Source: BBS

Who are the food-insecure in Bangladesh?

Access is the prime issue

Food access is only partially correlated with food availability. Sen showed that in the famine year of 1974 per capita food availability was actually higher than in any other year between 1971 and 1975. The floods of 1974 did eventually reduce food output, but their immediate impact was on farm labourers for whom there was no work in planting and transplanting rice

and who were therefore starving long before the main crop that was affected was due to be harvested.

The strongest link between food availability and food access is through the price mechanism, and in Bangladesh in recent years, the rapidly growing cereal price contributes to negative shock to food access of the population. The Consumer Association of Bangladesh (CAB) in its latest report on the price situation in Bangladesh shockingly revealed that the prices of essential consumer commodities have 'doubled' within the last one year (2004-2005). In 2001, the official estimate of inflation was some 1.47 per cent. Presently, the official inflation rate is over 7 per cent (2005) but actually the inflation rate is considered to be much higher. During 1991 and 1999, the percentage of rural children suffering from stunting (measured as height for age) fell from 71% to 55% while the prevalence of underweight (weight for age) fell from 72% to 61%.

Poverty is related to food insecurity

The poor themselves equate poverty with food insecurity. Usually villagers divided their community into four groups

(a) The 'rich', whose food supply lasts a full year
(b) A 'middle Class', whose supply lasts 6–12 months
(c) The 'poor', whose supply lasts 2–6 months and
(d) The 'extreme poor', who have to purchase all of their food.

In the rural areas 57.8 % landless are poor (lower poverty line) whereas it is 70.6 % while using upper poverty line and it is 45.94 % for small farmers considering lower poverty line. (BES, 2005). These people attain their basic food need from market i.e. through buying. While poverty is severe for the landless and small farmers, their share in the total agricultural system is also magnificent. Total 75.1% rural households are either landless (5.6%) or small farmers (69.5%) in rural Bangladesh. The prevalence of stunting and underweight is 215% higher among the children of those below the poverty line than among those above it. The corresponding figure for child mortality is in the range 176–85%. Not only is the gap large, but it has also been growing.

Urban poor consumers

Urban poor are the most vulnerable group according to food security and affordability of basic food staff due to any rise in prices. Now 23.1% of total population lives in urban areas (Population Census 2001) 43.6% of them are poor according to Direct Calorie Intake (Poverty Monitoring Survey, 2004). Among the poor, highest poverty incidence is found in daily wage earning group i.e. 58.55% for non-agricultural daily labours and 79.13% for agricultural daily labours in the urban areas (Poverty Monitoring Survey, 2004). Second highest incidence of poverty is recorded for the group 'Self Employed' primarily small traders and low-income people engaged in different sectors.

Spatial dimension of food insecurity

There is an important spatial dimension to poverty, vulnerability to shocks and food insecurity in Bangladesh. These events have a disproportionate effect on people in marginal, risk-prone, areas. There is also a spatial dimension to chronic food insecurity. The 1996 Basic Needs Survey (BBS, 1997) indicated that while the national average energy intake of 2,158 Kcal was slightly (1.7%) higher than the minimum requirement, there was wide variation between districts, ranging from a maximum of 2,470 in Dinajpur to a minimum of 1,819 in Bagerhat. There is marked clustering of areas classed as having 'very high' food insecurity in the west and northwest, particularly along the major river systems, which are prone to drought

and flooding at different times of year. Riparian areas are subject to the additional risk of riverbank erosion. About ten million people live in close proximity to the major rivers in very erosion- and flood-prone conditions. There are two seasonal dimensions to food insecurity. There are two lean seasons, March-April and October-November. The second is particularly severe for the rural landless, because it coincides with the pre-harvest period of low employment opportunities in agriculture.

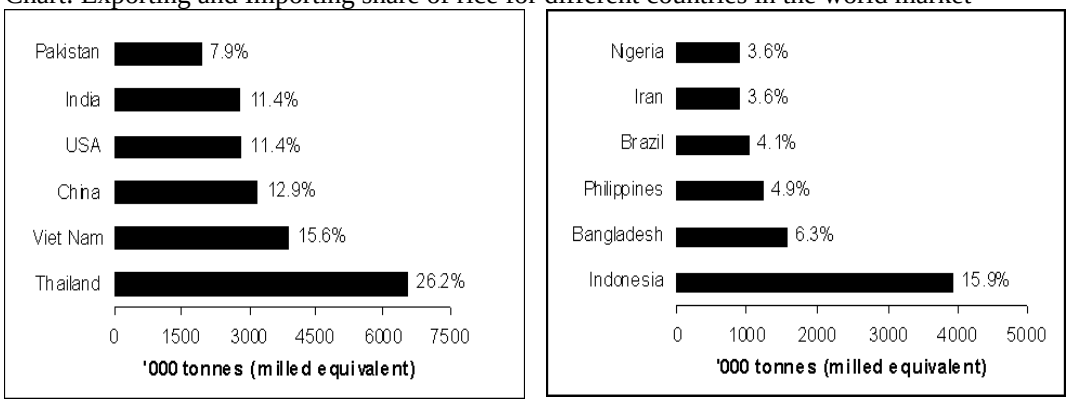
Consequences of WTO Negotiation on Bangladesh and Strategic Options

The likely impacts of the liberalisation under the WTO on the level and stability of market prices raised food security concerns among food importing LDCs. In the short run, the low-income food-deficit countries are concerned; apprehending that withdrawal of subsidies will lead to higher import prices or reduce their food aid and reduce food security. The concerns of food importing LDCs are addressed in the Marrakesh Ministerial Decision on Measures Concerning the Possible Negative Effects of the Reform Program on Least-Developed and Net-Food Importing Countries (NFIC), which includes mechanisms to monitor food aid under the Food Aid Convention and to ensure a sufficient level of food aid in grant form and/or concessional terms. With reductions in subsidies, these food-importing LDCs may pay higher prices for commodities.

In a summary of various modelling efforts assessing the impacts of the URAA on world market prices, Sharma, Konandreas, and Greenfield found expected price increases of between 4 and 7 percent. Prices for rice, wheat, sugar, and corn were forecast to increase, having a negative impact on net LDC importers. There is growing concern among net food importing LDCs about the impact of reduced food aid availability resulting from a reduction of surplus stocks and the higher prices. The Marrakesh Decision also calls for donor aid programmes to provide technical assistance to LDCs and NFICs that need to improve their agricultural productivity and infrastructure, and possibly short-term assistance to help finance normal commercial imports.

The thing which to be clearly understood is the difference in interests of the developing countries and the food importing LDCs in the arena of agriculture negotiations. All the developing countries does not essentially have the same interest in the context of exemption of export subsidy of the developed countries considering food security and rural development within the framework of agrarian economy of them. Especially the livelihood confrontation of the poor population residing in urban areas and small farmers engaged in the agriculture seems the major trouble to be encountered in NFICs due to the end of export subsidy to agricultural products by Developed countries.

Chart: Exporting and Importing share of rice for different countries in the world market



Source: Status of the world rice market in 2002, FAO

The export import scenario of rice (main food item of agricultural trade) in the global market can make a substantive indication for understanding the difference of interests in agriculture negotiation within the developing world. Some countries like India, Vietnam and Thailand are the major exporter of rice in the world market whereas Bangladesh and Indonesia are the major importers. So, it is easily predictable that the withdrawal of export subsidy in the north

will directly benefit the surplus producers of the South but will negatively impacted on the NFICs like Bangladesh and Indonesia.

Bangladesh is a net food importing LDC. She imports a large amount of food grain from overseas every year. Cheap import due to export subsidy is somehow helping the livelihood of the millions of population in several way- withdrawals of which would really be distressful for them. Bangladesh has a two way position in the arena of the agriculture and international trade as it is a major producer of food grain especially rice and also a major importer of rice in the world market.

Importing countries	Share of paddy rice world production, average from 1998 to 2002	Share of world imports, every type of rice, average from 1998 to 2002.	Customs Tariff, NPF, average 1999		
			Paddy	Brown	Husked
Indonesia	8,5%	13,5%	0	0	0
European Union	0,4%	3,5% (exchanges intra UE exclus) 7,7% (exchanges intra UE inclus)	7,7	N.A.	N.A.
Brazil	1,7%	3,4%	8,7	13	14
Bangladesh	3,4%	4,5%	0	0	0
Japan	2,2%	2%	0	0	0
China	32%	1%	114	114	114

From the available statistics it can be easily revealed that among the rice importing countries Bangladesh stands second, after Indonesia. Bangladesh also has shared about 3.5 % of total rice production of the world. That makes the situation very crucial for Bangladesh to formulate the national strategy for agriculture negotiation at the WTO as it is always argued that the reduction of the agricultural subsidy in the developed economy will benefit the poor producers of the poor countries through the increase of the world price level. But the argument is not always right, as the fragmented markets in most of the LDCs is the main impediment to appropriate the increased price by the small producers. The issue is elaborated in the following chapters. Again the higher price for importing food grain will obstruct food security of urban poor consumers can resulted to a poor improvement of poverty reduction in the country.

Bangladesh agriculture is dominated with small producers and crop intensity in agriculture is already reached its peak. So, the speculation of production boom due to price rise is beyond pragmatism. As the focuses of this report vested on livelihood struggle of the poor people- the consumers and producers, the impact on national production and macro economy is detoured within the context, though some insights are still there regarding the issue.

Production is limiting

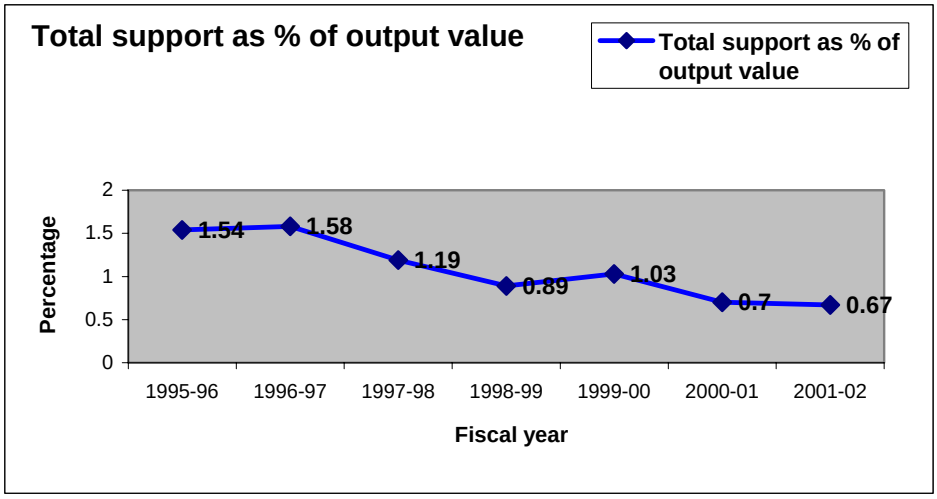
A sustainable food production system will call for increasing productivity through optimal and scientific use of all inputs. Land is a scarce natural resource for Bangladesh. At present, the net land area available for cultivation is about 8.0 million hectares and the total cropped area is about 14 million hectares (BBS, 2004). About 70 per cent of the cropped area is planted with rice every year. There is a little or no opportunity for bringing more land under cultivation. Yet, about 80,000 hectares or 1.0 per cent of the total agricultural land is going out of agriculture every year for other uses (BBS, 2004). Land, even those with irrigation facilities, is continuously being shifted to non-agricultural use.

Today with a cropping intensity of about 178 per cent, Bangladesh produces about 26 million tons of clean rice annually, which have to be increased to 30 million tons by the year 2020 if

we want to maintain the current level of per capita production. As the scope of further increasing cropping intensity is extremely limited, the increase in production will have to be realized by raising yield per unit area.

Raising the yield per unit area is possible with the sustainable and optimum use of agricultural inputs like seed, fertilizer, water, credit etc. But unilateral liberalization of agriculture sector makes the input market highly disfavoured one for small producers in Bangladesh that hinders the potential of yield raise per unit area. Government has hardly any control on the seed market as they supply only 5% of the total need of seed in the farming sector through BADC. Fertilizer market is also opened for private importers and Urea dealers often hoarding it during the peak season to make the artificial price hike. Means of irrigation is also highly concentrated to the rural elites. About 83 per cent of the irrigated area (6.97 million hectares) is served by groundwater under what is often called "minor" irrigation scheme and the rest by surface water sources. Shallow tubewells (STWs), deep tubewells (DTWs) and other small devices account for 75 per cent, 17 per cent, and 8.0 per cent of all groundwater-served areas, respectively. All STWs and most DTWs are privately owned. About 53 per cent of the total surface water irrigated area (1.43 million hectares) is served by low-lift pumps (LLPs) that are mostly privately owned and number between 75,000 and 80,000. These private owners are the water lords who charges high price for selling water to the farmers in the rural Bangladesh.

When market fails to protect the interests of the majority, state have the due role to protect them from adversity- that is often made by subsidy mechanism towards the thrust sectors. Unfortunately Bangladesh government is minimizing its support towards agriculture for last 20 years under the pressure and prescription of the WB and IMF . Available data shows that the support to agriculture as WTO defined Amber Box subsidy amounts only 0.67 percent of GDP value addition of Agriculture while it can be upto 10 percent under the negotiation made to AoA in Uruguay Round. The government support to agriculture is declining over the years directly affecting the poor producers for gaining the momentum in production.



Though cropping intensity is already high and cultivable land is squeezing day by day, still there is possibility to increase production, if support to agriculture is increased tremendously and technological innovation takes place which also need the special arrangement in the policy arena regarding agriculture. But unfortunately the reverse measures are taken over the years under the forced guidance of WB and IMF that seriously hurting agriculture in general and poor in particular. If it continues, there is virtually no hope for increasing production to feed the nation particularly the insecure with available supply of food.

Affected affordability: Wage versus Inflation

At present the wage rate is increasing at a slower rate than that of inflation. Inflation rate is reportedly high in food item than the national average that makes the real threat for the food security of the poor as it directly impact on the affordability of the poor to buy food. This upward price can be minimized if wage increment keeps pace with that of price especially in the sectors where poor have the maximum concentration. i.e. agriculture and construction where majority of the daily labours are engaged. But unfortunately the wage increment in those sectors is very low. In agricultural sector it is 5.33 in 2005 while it is only 3.36 in the same year for construction sector where inflation for food item is 7.9. For rural wage earners the situation is more vulnerable as inflation for food item in the rural areas goes 7.99.

Table: Trends of wage rate indices (base FY70=100)

	FY01	FY02	FY03	FY04	FY05
General	2488.8 (4.15)	2637.2 (5.96)	2926.3 (10.96)	3111.1 (6.31)	3292.9 (5.85)
Manufacturing	2831.6 (4.82)	3034.5 (7.17)	3501 (15.37)	3765.4 (7.55)	4015.0 (6.63)
Construction	2356.5 (3.07)	2443.7 (3.70)	2624.3 (7.39)	2668.5 (1.69)	2758.2 (3.36)
Agriculture	2140.9 (5.10)	2262.4 (5.67)	2442.6 (7.79)	2581.5 (5.69)	2719.2 (5.33)
Fishery	2292.4 (3.24)	2410.8 (5.16)	2562.6 (6.29)	2774.8 (8.28)	2957.3 (6.58)

Source: Bangladesh Bureau of Statistics.
Figures in parentheses are annual percentage changes.

Table: Annual average CPI inflation (base FY96=100)

Group	Weight	FY03	FY04	FY05
National level				
General Index	100.00	135.97 (4.38)	143.90 (5.83)	153.24 (6.49)
Food	58.84	137.01 (3.46)	146.50 (6.93)	158.08 (7.90)
Non-food	41.16	135.13 (5.66)	141.03 (4.37)	147.14 (4.33)
Rural				
General Index	100.00	136.58 (4.74)	144.46 (5.77)	154.03 (6.62)
Food	62.96	136.29 (4.05)	145.22 (6.55)	156.82 (7.99)
Non-food	37.04	137.06 (5.91)	143.18 (4.47)	149.29 (4.27)
Urban				
General Index	100.00	134.49 (3.52)	142.54 (5.99)	151.29 (6.14)

Food	48.80	138.77 (2.09)	149.60 (7.80)	161.14 (7.71)
Non-food	51.20	130.40 (5.00)	135.80 (4.14)	141.90 (4.49)
Source: Bangladesh Bureau of Statistics. Figures in parentheses represent annual inflation.				

In a study, Chowdhury, Farid and Roy (2006) employed a multi-market (MM) model originally developed in 1994 (Dorosh 1994; Dorosh and Haggblade 1995) and found that the price rise in rice and wheat due to agricultural liberalization under WTO would decrease the income of the poor and contribute to the increased nutrition gap as especially for poor.

Table: Simulations 1-6, higher world grain prices with liberalized trade

	Simulation 1	Simulation 2	Simulation 3	Simulation 4	Simulation 5	Simulation 6
Real Incomes						
Urban poor	-0.922	-0.45	-1.544	-0.62	-1.977	-0.93
Urban Non poor	-0.4655	-0.225	-1.08	-0.29	-1.25	-0.61
Rural Landless	-0.79	-0.38	-1.357	-0.53	-1.836	-0.89
Rural Small Farm	-0.17	-0.09	-0.506	-0.22	-0.576	-0.29
Rural Large Farm	0.91	-4.4	0.987	0.25	1.47	0.73
Calories (absolute change, kcal / capita / day)						
Urban poor	-13.7	-7.0	-51.8	-0.23	-65.1	-27.0
Urban Non poor	-7.84	-4.0	0.0	0.0	-7.84	-0.39
Rural Landless	-13.0	-7.2	-28.1	-0.12	-40.2	-21.5
Rural Small Farm	-8.16	-3.80	7.5	3.0	-1.1	-0.57
Rural Large Farm	-9.215	-4.4	-20.07	-9.1	-28.8	-11.0

Note: Simulation 1 – 10% increase in world price of rice.
Simulation 2 – 5% increase in world price of rice.
Simulation 3 – 18% increase in world price of wheat.
Simulation 4 – 7% increase in world price of wheat.
Simulation 5 – 10% and 18% increase in world price of rice and wheat, respectively.
Simulation 6 – 5% and 7% increase in world price of rice and wheat, respectively.

Source: Chowdhury, Farid and Roy (2006)

Results indicate that the real incomes would fall except for the most well-off rural income class across all simulations. At the upper bound increase in world price of both rice and wheat (Simulation 5), real incomes of the rural large farm households rise by about 1.5%, while the urban poor and rural landless lose nearly 2% of their real incomes. This follows from large farmers being net-producers for whom the increase in domestic price in line with increase in world prices raises their revenues. The increase in world price of wheat has much larger effect on real incomes than the increase in world price of rice (Simulations 1 and 3). These changes (rise / loss) in the real income across household types are roughly halved when the increase in the world prices are at their lower bound (Simulation 6). In terms of calorie intake, however, all households witness a decline. Expectedly, the decline is highest amongst urban poor and rural landless, by 65 and 40 calories per capita per day, respectively (Chowdhury.N, Farid.N and Roy.D ,2006)

Unsustainable agriculture hinders the due flourishment of RNF activities

Effective RNA programmes can contribute to create new employment for the rural poor and thus increase wage through triggering competition. The RNF activities include activities outside agriculture that include livestock, fisheries and forestry. Non-farm activities can be classified into three categories: (i) Mostly manual labor based, (ii) Human capital based occupations, (iii) Physical and human capital-intensive activities. Mostly manual labour based activities include self-employed subsistence-oriented cottage industries, wage employment in rural business enterprises, transport operation, and construction labour. Human capital based

occupations include salaried service in public and private organizations, teachers and imams, village doctors, and various types of personal services. Physical and human capital-intensive activities include commercial type rural industries, including agro- processing, shop keeping, peddling, petty trading, medium and large scale trading, and contractor services (Hossain, 2003).

In Bangladesh most of the rural poor are engaged in manual labour-based and human capital based RNF activities that is highly positively related to the sustainability and profitability of agriculture and small and cottage industries. As the profitability of agriculture for small producers is falling over the year following the market adjustment for agricultural input guided by the WB, the due potential of rural non-farm activity is not materialized. More over liberalization of interest rate made a very negative implication hindering the flourishment of the small and cottage industries as it unconcealed this thrust sector from enjoying rationed interest rate. The available data shows that the NCBs and PCBs lending in the agricultural sector is squeezing day by day. And lending in the small and cottage industry sector is tremendously marginalized.

The credit allocation index- calculated as the ratio of sectoral advances to their proportion in the GDP indicates that the ratio was 0.577 for agriculture and 0.859 for small and cottage industry in 1987, but the ratio is decreased to the 0.42 and 0.398 in 1998 for agriculture and small and cottage industries respectively. It creates a multiplier effect in the income, wage and the employment of the poor people.

Market disintegration makes farmers loss in the domestic market

Farmers often face income loss in the domestic market as they have no bargaining power in the market due to various unfavourable institutional arrangements for them like sharecropping system, payments in kind, debt for input collection like fertilizers and irrigation water etc. Various studies are carried out to address the issue in Bangladesh while a most recent study showed that farmers lose Tk 87575 Million in 2005 in the domestic market mechanism due to existing interlocking in the market practice. If this amount is compared with the contribution of crop and horticulture sector in the economy for FY05, it would be more that 1/5 of the GDP share of the sector and 1/6 of the total agricultural share to the GDP. (For detail see Titumir, Ahmed & Sarwar, 2005).

In one way the wage is not keeping pace with the inflation along with investment curtailing in small and cottage industries, in the other way farmers are losing potential income in the domestic market leading the poor peoples survival into a deep question whether they appropriate their food security or go for the way of persistent hunger.

Curtailing PFDS allocation kicks away the poor from last resort

The PFDS (Public Food Distribution System) was introduced with the objective of providing price support and income protection to various sections of the population, price stabilisation, nutritional support, and disaster relief. PFDS became a powerful tool in the hands of the government to exercise control over food situation in the country. Of the monetised channels, the Statutory Rationing (RS) was limited to four cities up to 1972; it was later extended to Rajshahi town in 1973 and to Rangamati town in 1976. Gradually diminished from 15% in 1982 to 5% in 1993. Now it is suspended.

Distribution under Modified Rationing (MR) for rural people remained irregular and was suspended in 1989, only to be replaced by a new rationing system called Palli (Rural) Rationing (PR/RR) in 1990. RR however, was also suspended in 1992. Food grain distribution under the Large Employer (LE) channel of PFDS was, in fact, sale of food at fixed prices to employees of the public sector, and of a selected number of private enterprises.

Beneficiaries of the PFDS channel of Essential Priorities (EP) are the personnel in army, navy, air force, police, Bangladesh Rifles (BDR), ansar and the Village Defense Party (VDP), employees of ordnance factories, and employees and inmates of jails and hospitals. Employees of a wide variety of public sector agencies including boards, departments and directorates, some research organisations, teachers of primary and secondary schools, colleges and madrasahs and local government bodies, and inmates of orphanages and rehabilitation centres receive food at subsidised prices under the Other Priorities (OP) channel of PFDS.

The non-monetised PFDS channel Gratuitous Relief (GR) distributes food as grant-in-aid to distressed people and to those affected during natural disasters. The channel Test Relief (TR) provides food for work during the monsoon season for repair and reconstruction of houses, roads etc. In addition to the above seven, there are a few other Open Market Sale (OMS) is executed when the price of foodgrain soars high in situations of short supply, especially in SR areas. Also in similar situations, the government uses the irregular Marketing Operation (MO) channel to occasionally check price hikes through selling foodgrain to the poor/marginal people at subsidised prices. Under MO, the government sells food directly through mobile carriers, while under OMS foodgrain is sold to the public through retail traders.

Most significant among the non-monetised channels of PFDS is the Food for Work (FFW) Programme. First introduced in 1975 to combat food scarcity, the programme became a regular part of poverty alleviation programmes. Initially, it offered wheat as relief in exchange of labour in various types of work performed in rural areas. Such work includes road rehabilitation/construction, building of small dams for flood control, digging of ponds and canals, desalination of rivers, tree plantation, re-excavation of fish ponds and water tanks, construction of raised land platforms (flood shelter) and the like. The programme subsequently started using food as wage for workers in activities under the Rural Maintenance Programme (RMP), Local Initiative Schemes (LIS) and the Post-monsoon Rehabilitation Programme (PMR). Recently, upon recommendation by the Task Force for Strengthening Institutions for Food Assisted Development (SIFAD), the FFW programme had been restructured for better utilisation of food as a vehicle for development.

Food distributed purely as relief under the Vulnerable Group Feeding (VGF) programme has now been renamed as the vulnerable group development (VGD) programme. This programme distributes food to distressed, pregnant and lactating women and undernourished children @ 31.25 kg of wheat per family per month. A special PFDS channel is the Food for Education (FFE) channel started in 1994 to encourage the poorer section of the people to send their wards to school for education in exchange of food grain. Now the maximum coverage for food distribution for distressed people is amounted for VGD. Maximum of the public food distribution is run from collected food aid and rest is met from public stock that is officially called buffer stock. Over the years food aid to Bangladesh shows a decreasing trend, as it was 1356 thousand MT in 1988/89 now reaches at 290 thousand MT (2004/05).

Table: Food Aid flow in Bangladesh *in 000 MT*

Year	Aid/Grant		
	Rice	Wheat	Total
1998/99	59	1176	1235
1999/2000	5	865	870
2000/2001	32	459	491
2001/2002	8	503	511
2002/2003	4	250	254
2003/2004	4	285	289
2004/2005	12	178	290

Source : MoF, Bangladesh

Public food grain procurement for maintaining a buffer stock also has the same trends and in recent year the stock reaches it's lowest in the history. A food stock reserve of 0.8 million mt is said to be risky in food management to ensure food security. The latest stock is reported to be 0.6 million mt (2005), of which forty-two thousand two hundred and eighty-two mt are in the pipeline. The stock on June 30, 2004 was 0.83 million mt. The most important implication of low food grain stock is the way the state steps towards coping with it. It is evident that government cut the allocation for TR and VGF progammes as the immediate response of shortage in the minimum stock.

*In the wake of low level public food grain stock, the Prime Minster (PM) is reported to have reviewed the situation. The decision is to stop use of food grain for test relief (TR) and food for works (FFW). Instead, cash support for such programmes will be put in place. Additionally, the review meeting also decided to allow duty free import of rice as part of the strategy to meet the impending food crisis. (*Daily Sangbad, December 5, 2004)

All the measures have possible consequences on the livelihood of the poor. If the international price is high, the duty free import seldom can affect the market price and feed the poor. The cash transfer policy also has the due potential of leakage and inflation in the rural areas as well that ultimately do not serve the poor in the long run.

Balance of payment Crisis

Country can ensure food security for her population either producing more food in the country or through import from abroad or by sustainable food aid distribution. Bangladesh has a little hope to increase agricultural production rapidly unless it takes a very dynamic supporting strategy for its agriculture. It also faces a rapid decrease in food aid flow and a sharp increase in the import of the food to meet the production gap in the country. That means that the import will continue to increase in coming years that can effect on the balance of payment situation of the country.

Table: Food import from abroad *In 000 MT*

Year	Food Aid	Import (private+ public)	Total
94/95	935	1633	2568
95/96	738	1689	2427
96/97	618	349	967
97/98	549	1402	1951
98/99	1235	4256	5491
99/00	870	1238	2104
00/01	491	1063	1554
01/02	511	1288	1799
02/03	258	2966	3220
03/04	289	2499	2798
04/05	290	3084	3374

Source: Bangladesh Economic Review, 2006

ERS (Economic Research Service) of United States Department of Agriculture in 2000 projected in a study that long run real world food prices would rise by about 12 percent if global trade liberalization of agriculture carried out. If that is the case, then Bangladesh import bill for food will also increase that will infringe the macro economic stability. In 2004-05 the import bill for foodstuff (Rice and Wheat) was 574 million US dollar accounting 4.36 percent of total import bill in Bangladesh.

Strategic Options for Bangladesh

Under normal circumstances, the reduction in export subsidies raises the world price of the product, benefiting developing country exporters, hurting importers. There is an unavoidable erosion of preferences for NFICs who are enjoying subsidized price of basic foodstuffs. The erosion is not only related to hurting the macroeconomic stability through BoP crisis rather it has a tremendous negative effect on livelihood sustainability of the poor majority in Bangladesh through raising price of basic food items like rice and wheat. So, there should be effective mechanism in the WTO AoA framework that would mitigate the adverse effect on the poor of the NFICs like Bangladesh as stated in the Marrakash Agreement.

From the angle of food security, Bangladesh must focus on the technological advancement, food aid efficacy and need based subsidy, international import insurance or a financial rebate programme for the NFILDCs on the ground of price and affordability of the poor and a countervailing mechanism on the ground of BoP crisis.

1. Technical assistance for agriculture production growth and infrastructure development is needed for ensuring food availability through capacity building in the agriculture. For a dynamic improvement in the production scenario, it is urgently needed to make major investment in the agriculture research, development and technological advancement. There is a need for global compensation fund to provide necessary support to the NFILDCs like Bangladesh as per negotiation made at Marrakesh.

2. The negotiations remained complete silent about the principle of governing the provision of subsidy. The negotiations were nowhere nearer to upturn the arrangements in agriculture 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. The negotiations also maintained heightened silence about the Bretton Woods Institutions that had forced the LDCs to eliminate subsidies to needy farmers under unilateral liberalisations carried out as a part of structural adjustment, continue preaching to eliminate whatever subsidies are given, and do not allow these countries to support the small farmers, even at the allowable *de minimis level.* The negotiation did not deal with and come up with proposals for net-food-importing countries (NFICs). Bangladesh should go for a strategy to make subsidy available for needy one rather the resourceful one. A different box can be created to support the poverty stricken poor producers by pooling resources globally.

3. As the net food importing LDCs are very prone to face the difficulty in the balance of payment issue while the price is expected to rise in the world market there need to have an effective mechanism to compensate the economy with regard to volatility of the international market. A kind of international import insurance or a financial rebate programme for the NFILDCs is needed.

4. A comprehensive package is needed to make agriculture production sustainable as well as maintaining livelihood of the poor. 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.