

Agrarian Transition and Livelihoods of the Rural Poor:
Agricultural Product Market

Agrarian Transition and Livelihoods of the Rural Poor: Agricultural Product Market

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Executive Summary

Agricultural marketing is an essential tool for the uninterrupted supply of products to the consumers. Farmers in the rural areas can achieve potential benefit from their produce if they have access to the markets in which they sell their produce. Market oriented activities in the agricultural sector of Bangladesh have expanded due to the increased diversity of rice crop and expansion of microcredit networks. But there are still various inefficiencies that exist in the marketing of products for the farmers in the rural areas.

Innumerable small farmers in Bangladesh are not able to achieve economies of scale from their produce as they are unable to market their products in due time and place. Agricultural marketing in Bangladesh is characterized by chain of intermediaries who are regarded as obstacle to farmers in getting the right price for their produce. These intermediaries appropriate a large portion of the price of products before they reach from the consumers to the farmers. In different parts of the country these intermediaries take different forms and create a marketing channel for the products of farmers to reach the market.

There are various other factors that hinder the development of agricultural marketing in Bangladesh. The infrastructures of agricultural market and transport are underdeveloped which obstruct the farmers from transporting their products to the market places. For this reason the farmers are dependent to a large extent on the middlemen for marketing their products. Another feature of agricultural product marketing is 'Distress Sale', which represents the vulnerable situation of farmers to sell their product at a very low price just after the harvest. Farmers also lack proper storage facilities. For the various inefficiencies prevailing in the product market, the livelihood of the small and marginal farmers is adversely affected.

Like many other LDCs, farmers in Bangladesh are struggling to compete in the today's liberalized and globalized markets. Due to the increasing liberalization of the agricultural market, farmers are forced to compete in an environment that operates in the interests of the supermarkets, large export-traders and international markets. A great influx of foreign agricultural goods enters the domestic market, which make it difficult for the domestic producers to compete. Farmers in Bangladesh, like many other LDCs are not getting enough support as the farmers of developed countries are getting. The global trade rules of today are against the interest of the small farmers. Due to decreasing support on one hand and increasing competition with the foreign market on the other, the small farmers are constantly facing challenges. They are constantly fighting to secure their position in the agricultural product market.

Section 01

1.1 Introduction

Managing agricultural products starting from collection, storage, distribution and marketing is vital for agricultural growth. Agricultural marketing is an essential tool for uninterrupted, adequate and timely supply of agricultural products, inputs and services to target groups, including producers, consumers and intermediaries. Agricultural marketing is not just a means of distributing agricultural produce but also a way of stimulating new forms of production.¹ In the course of marketing agricultural products, supply can be artificially interrupted and adversely affected by some intermediaries who are not actually the major players in the agricultural sectors. These redundant intermediaries create a marketing channel through which farmers have to supply their produce to the markets, thereby creating a value chain. The value chains have significant impact on the ability of farmers in getting fair price for their output.

Absence of adequate institutional network persists to deal with the marketing of all major commodities such as rice, jute, cotton, sugarcane and tea in the country. Farmers suffer from a number of difficulties that reduce their bargaining power. They are deprived of getting the right price for their product. In addition to the value chain, there are a number of factors that obstruct the farmers from getting fair price for their product. Farmers are compelled to sell their products at the harvest time when the prices are minimal resulting in a very low return for their produce. Small and marginal farmers in the remote rural areas remain ignorant about the current price of their product in the market, their trends, demand and supply which create obstacles for the farmers in getting due price of their products.

Trade rules at the national, regional and international level play crucial parts in creating enabling environment for the agricultural sector to grow. The global trade architecture of today that is institutionalized in the WTO plays role against the small farmers. Opening up of the market due to trade liberalization, declining subsidy as prescribed by WTO and the prevailing inefficiencies in the product markets of Bangladesh- all these factors have led to livelihood distress of the poor farmers in Bangladesh.

This paper aims to reveal the features of agricultural product market, thereby assessing the trend and set-up of the market of agricultural products in the rural areas of Bangladesh. At the same time, it would aim to assess the impact of the shifting value chain on the ability of the small farmers to reach markets. Impact of WTO trade agreement and trade liberalization on food security will also be assessed in the paper.

As rice sector predominantly occupies the total crop production. According to the statistics of 2003-04, rice constitutes 95.43 percent of total crop production. In the recent years vegetable has become a significant agricultural production and contributing to the

¹ Abbott, J.C. 1987, 'Agricultural Marketing Enterprises for the Developing World', Cambridge University Press, Cambridge,

export earning of the economy. This paper will be focusing on the prevailing scenario, specifically the marketing channels prevailing in the rice and vegetable markets.

1.2 Objective of the study

- Assessing the impact of WTO trade agreements and the impact of trade liberalization on food security.
- Assessing the trends in and set up of the product market for agricultural products of Bangladesh
- Assessing the impact of a shifting value chain on the ability of small farmers to reach markets
- Proposing areas of strategic reform for Bangladesh, as well as in the IFIs and WTO.

Section 02

2.1 Trend and setup in the product market for agricultural products

Agricultural product market of Bangladesh has expanded after the introduction of rural works programme in the sixties, which contributed to the road connection from countryside to urban areas. But it remained modest until late seventies. After the seventies, market oriented activities grew, which included increasing production and processing of products. As a result of increasing technical, financial and other types of supports, the market oriented activities grew not only in the crop sector but also in other areas. In case of poultry, dairy and fisheries, commercialization of production increased to a significant extent since early 80s.² In the coastal areas, export oriented production of shrimp expanded.

Market oriented activities expanded also due to the expansion of microcredit networks for the low income rural people. With the expansion of micro-credit network, non-farm employment in small shops, transports like rickshaw and van, petty trade etc increased. Women participation in the market oriented activities also grew to a significant level, which increased women's empowerment.

For the last few years in Bangladesh, there has occurred a rich diversity of crops; for example, hundreds of varieties of rice have been grown. IRRI became the main crop in the process of green revolution. Production of increased rice varieties have led to the increased market oriented activities related to crop production for commercial purpose, expansion of credit market and fertilizer- irrigation equipment marketing.

² Mohammd, A. 2005. 'From Mills to Malls: Polarization, Decomposition and New Formation in Bangladesh', Meghbarta-Online Forum for Activism.

For the last few years increased production of vegetables for commercial purpose have also led to the expansion of export market oriented activities. A number of organizations are working on the process of agri-business development, specially the development, promotion and marketing of horticulture products that are exportable. For example the Horticulture Export Development Foundation, established by the government, plays important role in export diversification and product expansion.

The development of supermarkets is a recent addition of domestic retail marketing of goods. Less than five years ago, supermarkets started appearing. There are now about 30 supermarkets, of which 22 are located in Dhaka city. The supermarkets play a vital role in supplying agricultural products to the middle and high income class of population in the urban areas. The marketing of horticulture products have been brought to this class of people through supermarkets to a large extent. But even though, the supermarket chain is very insignificant in providing marketing facilities to the growing population, organic and eco-friendly farming are increasingly getting popular through this system, although the coverage is very negligible.

In the course of time there have been changes in the setup of the product market of agriculture. Class configuration of markets that is the classes and groups involved in the agricultural product market has taken different forms in the course of time. According to Ben Crow, a range of exchange relations has developed based on the relative sizes of the different classes and their relation to one another.³ The different classes and their relations have led to the different forms and setups of marketing system of agricultural products.

2.2 Impact of WTO Trade Agreement and Trade Liberalization on Food Security

There has been mixed debate on the impact of trade liberalization on the economy. But the impact of it on the food security can be summed up in the sentences of Hezron Nyangiti's study of Kenya- "liberalized trade, including WTO trade agreements, benefits only the rich while the majority of the poor do not benefit but are instead made more vulnerable to food insecurity"⁴

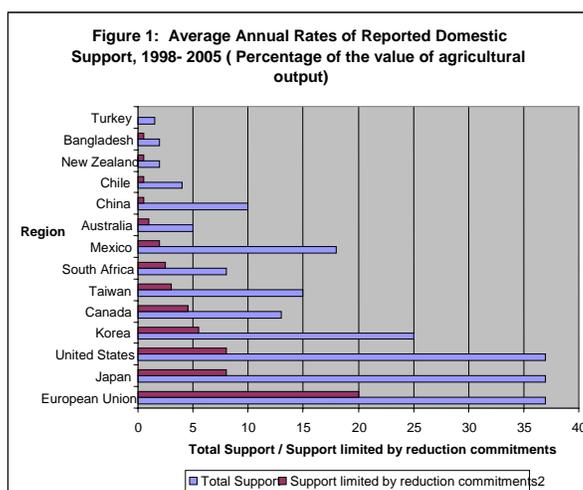
Under the Structural Adjustment Programme (SAP) and AoA, developing countries are required to make certain changes in their food and agricultural policies. The countries are required to open up their markets for food import and reduce their support to the farmers. SAP demands privatization of state-run enterprises, elimination of subsidies and price control. AoA emphasizes on trade liberalization, calling upon its member countries to reduce tariff on food import with exclusion of 48 least developed countries.

Concerning trade negotiation and liberalization, the policies that distort agricultural trade fall into three main categories; market access, domestic support and export subsidies.

³ Crow.B.2001. 'Markets, Class and Social Change: Trading Networks and Poverty in Rural South Asia'.

⁴ Madeley J. 2000, 'The Impact of trade Liberalization on Food Security and Poverty', Forum Syd, Sweden. Available from: <http://www.agobservatory.org>.

Tariff structure in Bangladesh has been simplified including reduction in the number of duty slabs, reducing tariff rates and dispersion among similar commodities. Still, in case of Bangladesh average tariff rate on agriculture and processed food is higher compared to the United States, Canada, Mexico and many other developed countries.⁵ Total AMS for Bangladesh is very small, which is less than 3.5 percent of the value of agricultural output. There is much scope for Bangladesh to increase the support under the provision of WTO rules. Figure 1 shows the difference in the domestic support provided by Bangladesh with some other countries. It is evident from the figure that the rate is much lower compared to many other countries. In the figure, support limited by reduction commitment refers to amber-box support which countries committed to reduce in the Uruguay Round Agreement on Agriculture.



Source: Agricultural Trade Liberalization, CBO, A series of issue summaries from the Congressional Budget Office, November, 2006

The rice sector of Bangladesh received significant domestic support in the form of input subsidies, output price support and provision of financial support from financial institutions. These supports were provided to the rice sector during the 1960s and early 1970s. Bangladesh Agricultural Development Corporation (BADC) played important role in procurement and marketing of seeds and fertilizer. Since the early 1980s, policy reforms were adopted which aimed to reduce government intervention and increase private sector participation.⁶ By 1992, private sector was allowed to procure, import and distribute fertilizer in the domestic market.

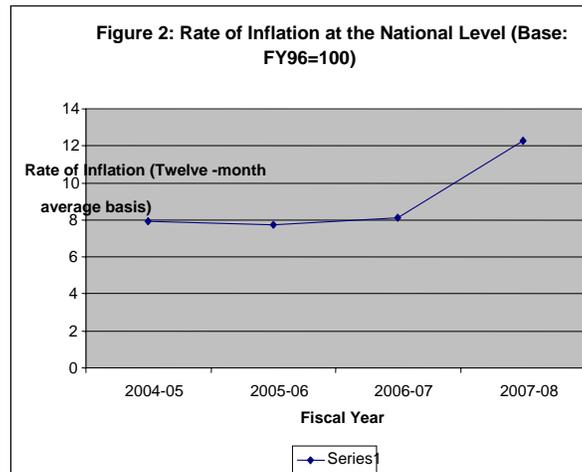
2.2.1 Food Inflation

A study done on poverty and welfare consequences of global rice and agricultural trade liberalization for Bangladesh² by Selim Raihan and Dr. M.A Razzaque shows that liberalization of the rice trade in the world market has significant negative impact on the

⁵ Agricultural Trade Liberalization, CBO, A series of issue summaries from the Congressional Budget Office, November, 2006

⁶ Razzaque, M. A, Laurent E, 2008. 'Global Rice and Agricultural Trade Liberalization: Poverty and Welfare Implications for South Asia'.

welfare and poverty for households in Bangladesh. In the major rice producing countries, complete elimination of agricultural tariffs and subsidies have led to welfare rise and rise in poverty, according to the study. Rise in the price of rice in the world market has been the impact of protective measures adopted by the EU and the USA. Under the circumstances, liberalization measures adopted in the domestic markets of Bangladesh have led to reduced welfare of Bangladeshi consumers.



Source: Bangladesh Bank, Monthly Update, June 2009

Since early 2007, in the backdrop of global hike in food grain price, Bangladesh has been experiencing a rising rate of inflation (Figure 2). High food inflation had made it difficult for the low income household to carry on with their basic expenditures. A World Bank statistic shows that gross income of the poor decreased by 36.7 percent between January 2007 and March 2008. It pushed 2.5 million household below the poverty line.

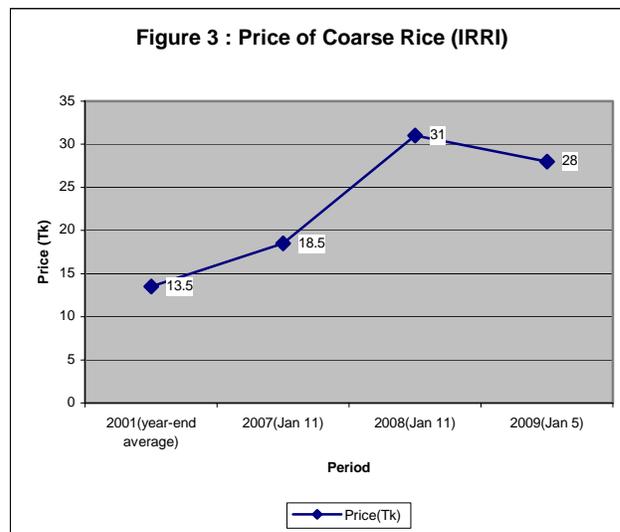
During the last two years food prices have increased exorbitantly globally and the impact had effect on the local markets. Price spiral had enormous negative impact on the livelihood of the poor farmers in the rural areas. Table 1 shows the rising trend in the price level of different food items. During the regime of the caretaker government, prices of goods have increased by 4 to 84 percent, as is evident from the comparison of retail prices in the city markets.

Table1: Rise in product prices

| Commodities | 2001(Year-end average) | 2007 (Jan 11) | 2008 (Jan 11) | 2009 (Jan 5) | Increase percentage | in |
|-------------------|------------------------|---------------|---------------|--------------|---------------------|----|
| Coarse rice(IRR) | 13.5 | 18.5 | 31.0 | 28.0 | 208.0 | |
| Fine rice (Najir) | 18.5 | 24.0 | 41.0 | 38.0 | 106.0 | |
| Coarse flour | 13.0 | 25.5 | 41.0 | 26.0 | 100.0 | |
| Soya oil | 40.0 | 65.0 | 96.0 | 91.0 | 127.0 | |
| Onion | 20.0 | 18.0 | 18.0 | 33.0 | 65.0 | |
| Sugar | 34.0 | 36.5 | 29.5 | 32.0 | 6.0 | |
| Salt | 10.0 | 13.0 | 13.0 | 17.0 | 70.0 | |
| Red lentil | 39.0 | 65.0 | 72.5 | 90.5 | 132.0 | |
| Potato | 8.5 | 18.0 | 14.0 | 20.0 | 135.0 | |

Source: Trading Corporation of Bangladesh and Consumers Association of Bangladesh, January, 2009.

According to the Trading Corporation of Bangladesh and Consumers' Association of Bangladesh, the prices of coarse rice increased by 108 percent since the end of 2001 and 67 percent since January, 2007. Field level observation shows that farmers in the rural



Source: Trading Corporation of Bangladesh and Consumers Association of Bangladesh

areas do not get any benefit from the increased price in the market. On the contrary, the increased prices of products adversely affected the livelihood of the rural poor farmers.

2.2.2 Increasing Dependency on Import

Trade liberalization has led to increasing dependency on import. Weighted average tariff has reduced from 23.6 percent in June 1993 to 6.98 percent in February 2007, whereas unweighted average tariff reduced from about 49 percent to about 13 percent. Number of restricted items have also been reduced to 63 in the import policy of 2003-04 from 193 in the import policy of 1991-93. Due to these changed policies imports have risen

significantly.⁷ This increase in import has been mainly from India and China. The costs of import from these two countries have risen. The rise in cost has substantially increased due to the appreciation of Indian Rupee and Chinese Yuan and the depreciation of Taka. Rupee and Yuan have appreciated by 15-17 percent and 4-6 percent respectively against dollar in the last few years, while Taka has depreciated by about 19 percent between 2003 and June 2007. The depreciation of Taka led to the increase in the domestic price of the imported goods.⁴ Table 2 shows the volume of import from India and China.

Table 2: Bangladesh Import from India and China
(US\$ Million)

| Year | India | China |
|--------------------|-------|-------|
| 2002-03 | 1358 | 938 |
| 2003-04 | 1602 | 1198 |
| 2004-05 | 2030 | 1642 |
| 2005-06 | 1868 | 2079 |
| 2006-07 (upto Feb) | 1402 | 1755 |

Source: Bangladesh Bank

2.3 Policy Measures in Government Planning

After the present government came to power in January 2009, they have been adopting different policies to offset the impacts of rising food and input prices and for making access to agricultural inputs easier to the poor farmers. Fuel and fertilizer prices have been reduced for reducing cost of production for the farmers in the current Boro season.

In the agricultural sector of Bangladesh marketing of commodities are under the control of middlemen, which is not at all favourable for the farmers and the growth of the sector. Department of Agricultural Marketing (DAM) is the weakest of agricultural organizations that exist in the country. In 1999, National Agricultural Policy (NAP) was adopted with several measures for developing the agricultural marketing system. According to the policy, restructuring of DAM would be done and an agricultural price commission would be established to prepare adequate marketing programmes and restructure DAM. Under the preparation of marketing programme proper storage and preservation facilities for crops were to be ensured for uninterrupted supply throughout the year. Processing facilities were to be developed to maintain the quality of agricultural commodities. The programme also included the development of transportation system and market places. Regarding the need to develop information system, the programme included strengthening of market information service. Farmers in remote rural areas are unable to get fair price for their products. Realizing this, the programme planned to undertake measures that would ensure fair price for producers and traders. Price support

⁷ Ahmed M Iqbal, 2008. 'Inflationary trend in Bangladesh and Impact on High Food Commodity Prices'. Unnayan Onneshan, The Innovators.

was also to be provided to the producers to ensure right price in the harvesting season and stabilize price when crop is damaged or overproduction occurs.

Soaring food price, increasing input price, increasing frequency and intensity of natural calamities- all these factors have led the policymakers to review the policy. Draft of a new policy has been adopted in 2008, in which some changes have been done in certain issues. To enhance bargaining power of the farmers and ensure them fair prices for their products, several measures will be undertaken for the development of the marketing infrastructure. In the draft of the policy it has been added that efforts will be taken to minimize the gap between producers' and consumers' price. Establishment of village markets is to be done to allow smooth flow of agricultural products from producers to consumers. As lack of storage facilities exists in the rural areas which is one of the reasons why farmers do not get the right price of their products, establishment of warehouses and cold storage has been emphasized in the policy. One of the biggest problems in agricultural marketing is asymmetric information. According to the draft of the policy, encouragement will be given from the government for collection and dissemination of market information of agricultural products. Encouragement will also be given to private and public initiatives for research on agro-market in order to ensure fair price and quality products. If properly implemented, the measures can bring enormous changes in agricultural marketing system.

Procurement of food grain

Procurement policy of the government aims at ensuring fair price to the farmers. Open Market Sale by the government is intended for supply of food grain to the people at a lesser price than the prevailing market price. Initiatives like vulnerable group feeding, test relief etc have been taken from the government level in addition to open market sale (OMS). But the fact is that many people in remote rural areas are deprived of these government initiatives. As observed during field visit, in some areas there is no system of such procurement in practice. As such farmers are dependent on local merchants for selling their output in the market. During 2007-08, 8.70 lakh MT of food grain was procured against the target of 13 lakh MT (rice- 12 lakh MT and wheat- 1 lakh MT). In the 2008-09 budget revised target for domestic food grain procurement is set at 13.65 lakh MT.⁸

During the Boro season of 2009, there was a bumper production of 1.8 crore tones. The government had announced to procure 12 lakh tones of Boro rice and paddy as a step to ensure fair price to the farmers and create stocks of food grain for the purpose to carry on its food grain operation under different social safety net programmes. But according to analysts, this amount of procurement will not be able to bring significant benefit to the poor farmers. It is the middlemen and millers who are to be benefited from this programme.

According to field based observation, the tendency of hoarding rice by the millers and wholesalers creates a shortage in the supply and leads to a rise in the price. Food ministry

⁸ FPMU, Issue No.18, February,2009

officials have recommended a cap on rice stocks by farmers, hoarders and millers to help fulfill the current food grain procurement target. There must be advanced planning for domestic procurement to help the marginal and small farmers get fair price for their products. The government should seriously look into the implementation of the programme and ensure that it benefits the poor farmers.

Section 03

3.1 Concerning Issues

Agricultural marketing in Bangladesh is a multiple stage procedure. There is a large difference in the price that the farmers get and the retail price of the product. There are innumerable small farmers who are not able to achieve economies of scale from their production. Most of the farmers produce in a small scale as they are not able to bear the high input cost and there is not sufficient credit available to them. The profitability of farmers is low. Farmers do not get their share of increased price in the market.

From field level observation the following issues have been detected;

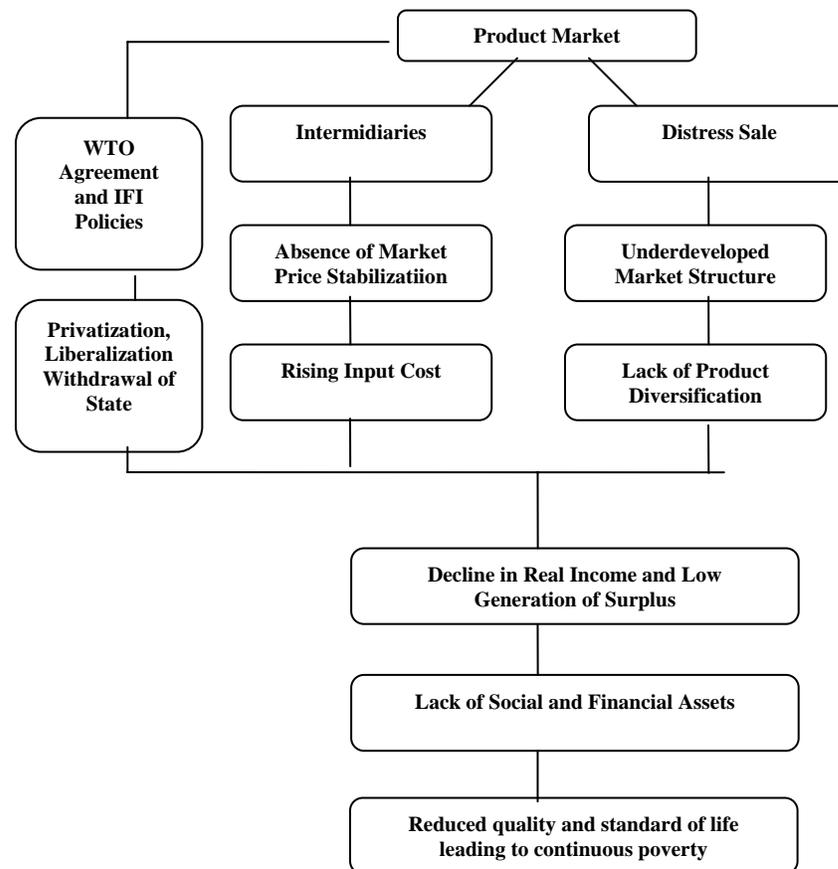
- Farmers do not get any benefit from increase in the price level in the rice market, as seen from field survey, which shows that the increased portion of price is appropriated by the intermediaries before reaching the farmers. Thus the chain of intermediaries can be regarded as obstacle to farmers in getting fair price for their products, and it affects the livelihood of the poor farmers thereby hindering the growth of the agricultural sector.
- The marketing system is characterized by underdeveloped market infrastructure and transport.
- Most farmers in remote rural areas sell their products to the local merchants in the market places and are dependent on the latter for selling their products.
- There is a system of paying rent in the market while selling their produce and it appropriates a significant part of the proceeds they get from selling their products.
- Farmers in many rural areas are forced to sell their output just after the harvest either to repay their loan or to meet their household expenses.
- Lack of storage facility is another reason for which farmers have to sell their product shortly after harvest at low price.

The various inefficiencies prevailing in the product market identified above affect the livelihood of the poor farmers in the rural areas. Along with the various inefficiencies, the trade liberalization process associated with the strategies adopted by the WTO, with their interfaces in the input, capital, labour and product market have produced negative impact on the livelihood of the farmers. Farmers' livelihood assets consist of financial, social,

political, physical and human assets. The interfaces have led to the degradation of the various livelihood assets.

Figure 4 shows the impact of product market inefficiencies and the trade negotiations on the livelihood of farmers. The shortcomings prevailing in the product market along with trade liberalization measures lead to declining real income of the farmers as a result of increasing price during global price hike or inefficiencies prevailing in the product market. Food price rise in the world market leads to an increase in the food price in the domestic market resulting in a fall in the farmers' real income. This reduces farmers' capability to spend in other necessities thereby reducing the quality of their living standard.

Figure 4: Impact on Farmers' Livelihood



On the other hand, the various negative aspects prevailing in the product market leads to a fall in the income of the farmers from their produce leading to a fall in their income. In both cases farmers' real income falls, thereby reducing the quality of their social and financial assets, which in turn leads to continuous poverty and livelihood distress. The various inefficiencies prevailing in the product market are discussed below.

3.1.1 Marketing channel and value chain

As we have seen from the previous discussion, the prevailing marketing channel in the agricultural products market creates obstacle for the poor farmers in getting fair price for their products. Marketing channel prevailing in the rice and vegetables market and their impact on the poor farmers is discussed below;

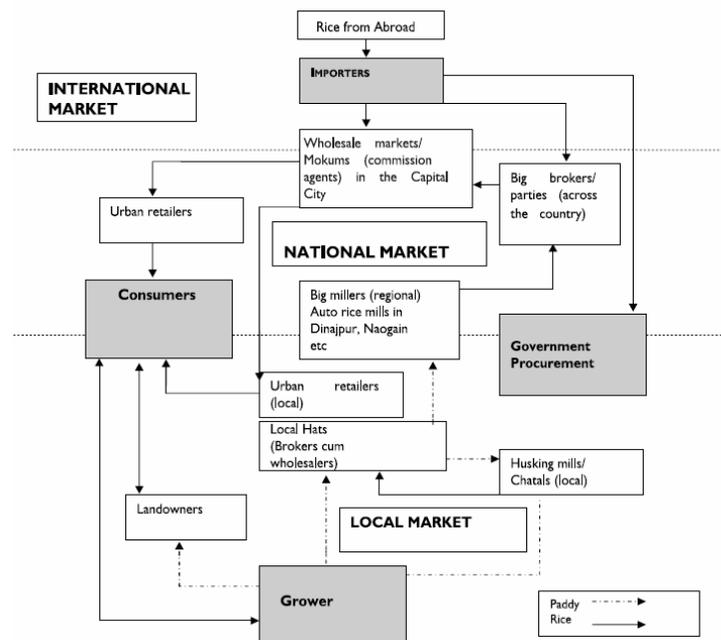
Rice Market

A marketing channel performs the work of moving goods from producers to consumers. The marketing intermediaries make up the marketing channel. Bangladesh has comparative advantage in the production of high yielding rice, but the marketing system prevailing for this major crop is not suitable for bringing fair price to the small farmers. In this section we shall focus on the marketing channel prevailing in the rice market. In rice marketing, marketing channels are the chain of intermediaries through which rice move from farmers to consumers.

Rice trading within the country maintains an interlocked ‘input- output’ market and price appropriating network through producers to consumers. Sales of paddy are linked to loans made by millers, landlords and brokers, in which the producers have to pay the loan in kind form. There is also the prevalence of sharecropping.

The marketing channels that prevail in advanced and backward areas of Bangladesh are shown in figure 5 and 6 respectively. The figures are based on a previous study done by Unnayan Onneshan in the districts of Bogra and Dinajpur. In the course of time the same marketing channels are still predominant countrywide.

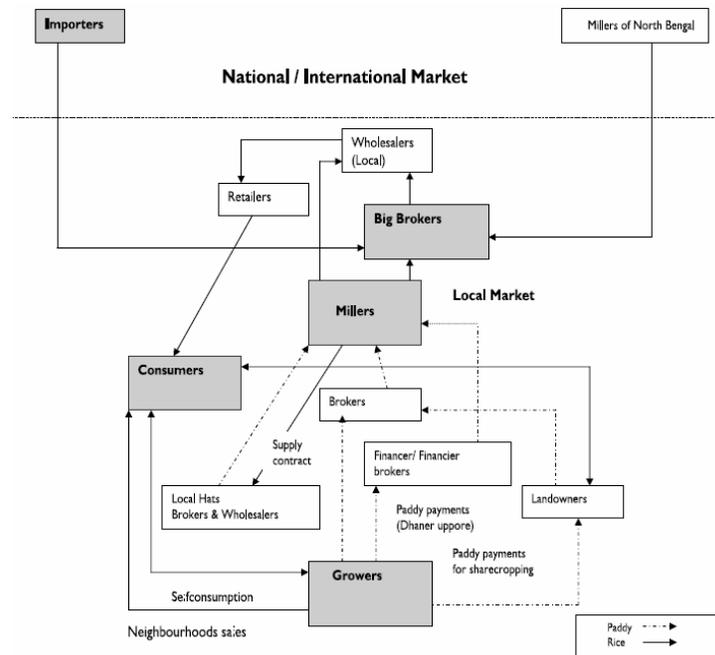
Figure 5: Rice Trading Network in the advanced area



Source: Undercutting Small Farmers, Rice Trade in Bangladesh and WTO Negotiations, Unnayan Onneshan, The Innovators.

In figure 5 the marketing channel of the advanced areas is shown. Producers in the advanced areas sell their product directly in the local haats. But in case of sharecroppers, a certain portion of their produce has to be given to landowners according to agreements. Crops may also be sold to local husking millers called chatals. Small brokers on the basis of commission collect paddy from the millers in the haats and big millers collect it from the brokers. There are also some broker-cum-wholesalers who collect paddy for millers, buy back from them and sell it to the urban retailers. The big millers supply a large part of the paddy to the big regional brokers, while supplying a small part for government procurement. It is the big regional brokers who supply to the wholesale markets in the metropolitan cities. Private traders, who import rice, supply it to the big brokers and sometimes to the wholesale markets.

Figure 6: Rice Trading Network in the Backward Area



Source: Undercutting Small Farmers, Rice Trade in Bangladesh and WTO Negotiations, Unnayan Onneshan, The Innovators.

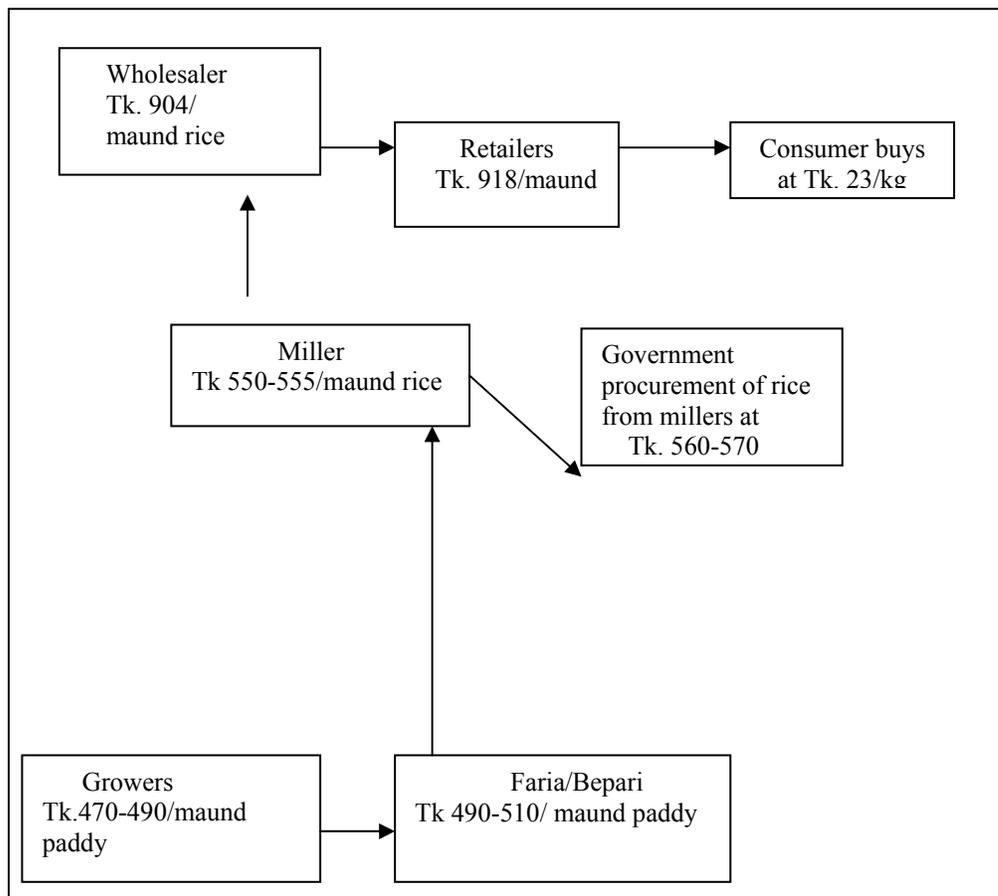
In the backward areas, sharecropping is predominant. Producers rarely go to the markets to sell their product. Figure 6 shows the way of rice trading in the backward areas through brokers, millers, wholesalers and retailers. There exists an informal market in the backward areas, where sales to neighbours comprise a substantive portion of paddy. The producers have hardly any surplus to sell in the market. Middlemen eat up most of the profit, leaving a small amount to the growers. During procurement drive, government procures a very little paddy or rice from the backward area. The local millers get paddy from brokers who earlier collect it from the producers. Not frequently the brokers who give loan to poor farmers buy paddy from them at lower prices as per agreement between the two parties before the harvest.

Producers generated surplus appropriated by the middlemen

From field level observation in Tangail it has been found that, rice growers incur significant loss due to existing trading practice. The market survey conducted for the report shows that there exists gap between the farmers' selling price of paddy and market price of rice in the area.

Price of IRRI -28 was observed in the market, from which the processed rice is named as *Paijam/Miniget*. The data was collected during the peak-harvesting season when there was a falling trend of price in the rice market.

Figure 7: Price differentiation at different levels



Source: Case study in Tangail, June, 2009

In figure 7, it is seen that farmers sell their paddy just after the harvest at the price of Tk. 470 to 490 to the farias or beparis, who in turn sell them to the millers at the price at the price of Tk. 490 to 510 per maund. The government buys the processed rice from the millers at the price of Tk. 560-570. Millers sell their rice to the wholesalers at the price of Tk. 550-555, which is sold by the wholesalers at about Tk 904 to the retailers. There is differentiation in price at which the retailers sell rice to consumers according to areas.

However, in Tangail it has been seen that the price varies from Tk.917 to Tk 1000 per maund.

Vegetable market

Climate of Bangladesh is favourable for vegetables production. There are more than 90 varieties of vegetables grown in the country, of which 50 percent are produced for commercial purpose. In Bangladesh on an average 1.74 M.tons of vegetables are produced in 0.27 million hectare area.⁹Vegetables growing areas of Bangladesh have increased from 0.196 million hectare in 1993-94 to 0.302 million hectare in 2005-06, according to the 1993-2006 Statistical Bureau Report. Vegetables of Bangladesh are divided into two categories- Winter vegetables and Summer vegetables. A major portion of the vegetables are grown during the winter season. Winter season vegetables are cabbage, broccoli, tomato, brinjal, beans, radish, carrots, cauliflower etc. While among the summer vegetables are sweet gourd, bitter gourd, ribbed gourd etc.

Table 3: Actual Production of Vegetables in Bangladesh

| Fiscal Year | Area(Lac hectare) | Production(Lac M.ton) |
|-------------|-------------------|-----------------------|
| FY06 | 6.38 | 87.45 |
| FY07 | 6.5 | 93.05 |
| FY08 | 6.51 | 89.1 |
| FY09* | 7 | 100 |

* Revised Target

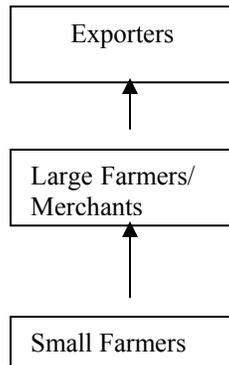
Source: Bangladesh Bank Quarterly Update, May, 2009

Food processing in Bangladesh is not fully developed. As such vegetables crops are domestically sold in the local markets or exported in fresh form or in primitive processing form. As vegetables mostly decay within days if not processed or refrigerated, they have to be sold as soon as possible. In recent years the private sector has come up in the processing of vegetables and such other perishable items. This has led to the increased demand of these goods in the international market. Still there remain few stages of supply chain through which products from farmers reach the local and export market. The marketing channel of vegetables varies according to area and products.

As the demand of vegetables in the international market is increasing, a large number of private exporters are now being engaged in vegetables export. The exporters are in some cases directly linked with the farmers or they get products from local shopkeepers or *beparis*. Figure 8 and 9 shows the marketing chain of vegetables from the farmers to the exporters.

⁹ Department of Agriculture Extension, Food Crops Wing

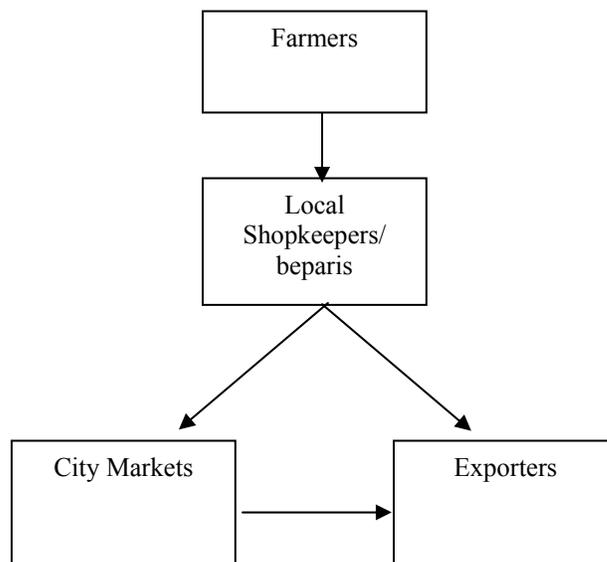
Figure 8: Marketing to Exporters (A)



Source; Horticulture Export Development Foundation

In Figure 8, for products such as different types of lemon (Zara Lebu, Ada Lebu, Satkora and vegetables like Brinjal, Pumpkin and some other types, the large farmers play the role of merchants. They collect the products from the small farmers and sought it out before supplying to the exporters. It has been found from field level observation that small farmers sell a *hali* (4pc) of *Zara Lebu*, (specific kind of lemons), at the rate of Tk 40 to the large farmers , whereas the large farmers sell at the rate of Tk. 60 to the exporters. The exporters have direct contact with the large farmers and collect the products from them.

Figure 9: Marketing to Exporters (B)



Source: Horticulture Export Development Foundation

In case of products such as Pointed Gourd, Ridge Gourd, Ladies Finger etc the local shopkeepers and beparis play the role of middlemen. They collect products from the farmers and supply them to the exporters. In some cases, the products are sold by these

beparis in the city markets, from where the exporters buy their products. In this case, farmers get less price as the increased price paid by the exporters is absorbed by the local shopkeepers or beparis.

In the vegetable market, there is hardly any link between the exporters and the small farmers. The small farmers do not get any kind of guarantee that all their products will be bought by the exporters. There is no such agreement between them. The large farmers as depicted in figure 8, buy the products according their choice and requirement from the small farmers and supply them to the exporters. Thus the small farmers are dependent on the large farmers to a large extent. As they do not have any direct agreement with the exporters, they are bound to accept the price offered by the middlemen turned large farmers.

As the small farmers do not have any kind of link with the exporters, they are also deprived of the proper price of the product. As we have seen from our field level observation, in case of lemon, the small farmers are getting Tk. 20 less in every *hali* of the product, which incurs a significant amount of loss to them.

There are some other problems that prevail in the vegetable market, and they are as follows:

- The transportation system in the rural areas is not so developed. As the vegetables have to be marketed in a very little time, the underdeveloped transportation obstructs the smooth flow of marketing of the vegetables
- For exporting vegetables, the private companies need Sanitary and Phyto-sanitary Certificate (SPS) from the Plant Protection Wing of Department of Agriculture Extension. The certificate has to be collected in a day as the vegetables may perish if kept for long..
- Farmers in rural Bangladesh have no crop insurance. This necessity is felt in case of vegetables production. The products are frequently damaged or perish during transportation and the farmers face huge loss.

3.1.2 Fluctuation of Price Level and Distress Sale

One of the difficulties of marketing agricultural product is the fluctuation of the price level. Just after the harvest the market price of crops fall and increase later. This is because just after the harvest farmers sell their produce as soon as possible to repay their loan. Lack of storage facilities also plays a compelling role in the affair. At this time of the year, produced output outruns the demand and thus the price falls. As the price is low during the harvest, the farmers are deprived of their due income from their product.

To overcome this problem, the government often buys crop especially paddy from the farmers at a fixed price. As the price fixed by the government is higher than the market price, the farmers are supposed to gain from this. But this is not often possible as it is

costly and problematic to sell the crops in selling outlets.¹⁰ In many areas government procurement have not been introduced, as observed during the field survey. As a result, farmers are dependent on the middlemen to sell their product.

Fluctuation in price is seen more in cases of vegetables and fruits than those of cereal crops. Farmers buy rice during off-peak season, i.e. post harvest period, because then they run 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. Farmers buy higher quantity as they cannot store enough for off-peak season. So, by the time they start buying, price of rice start increasing in the local market. Thus, the small farmers are worst sufferers due to limited market access and inter-temporal price fluctuation.

Box 1
Distress Sale – A case study

Md Jasim of Srimantopur in Comilla is a marginal farmer. With a seven member family, it is difficult for him to carry on with his family expenditure. He bought seeds from a local NGO.

But Jasim said “The NGO gives seeds, the volume of which is very small, so I have to buy more from the market”. “I do not get any storage facilities” said Jasim for which he had to sell his products at half price during the previous season. If it had been possible to store his product, he could earn Tk 1, 20,000 which he sold for only Tk 60,000 just after the harvest. For the last three years he has been doing the same.

Distress sale shows the vulnerability of the small and marginal farmers of Bangladesh. Their vulnerability forces them to sell their product at a very low price in the market. There is a negative relationship between the size of farm and distress sale. It has been seen that within a month after the harvest, small farmers have to take two-third of their product to the market for sale. For small, medium and large farms it is 59%, 40% and 27% respectively. It proves that small farmers are forced to sell their product in the market after the harvest to meet their necessary requirements rather than to get profit from this. It has been seen that farmers get a price which is 6 percent less than the average price of whole year when they sell their produce within a month after the harvest¹¹. Big farmers who can store their product do not have to face loss as the small farmers due to the difference in the market price of the whole year and selling price just after the harvest. They store the crop and sell it when there is upward trend in the price level at the market.

¹⁰ Shahabuddin, Quazi & Nabiul Islam, 1999, ‘*The Domestic Rice Procurement Programme in Bangladesh. An Evaluation*’, FMRSP Working Paper no.13, FMRSP, Bangladesh, IFPRI, Washington.D.C

¹¹ Bayes, A and Hossain Mahabub, 2007, ‘*Gramer Manush Grameen Aurthony: Jibon Jibikar Poroborton Porjalochona*’

3.1.3 Socio- economic Status and Participation in Market

According to a study conducted by Mahabub Hossain and A. Bayes in 2007, half of the sharecroppers participate in marketing and sell 28 percent of their total output. Among the landowners 57 percent participate and sell 28 percent of their total product. Both sharecropper and the land owners get 6-7% less price. Among the farms that are fragile 58 percent market their product and the volume is 61 percent of their total production. One-third of poor farmers have sold their crops during the year 2003, whereas in the year 2004 it was one-fourth of the total.³ In course of time, the participation of farmers in marketing their product has increased and in case of small and marginal farmers the percentage is greater.

3.1.4 Rising Input Cost

It has been observed that rising input cost causes decline in the yield of farmers. In the course of time, cost on inputs has increased. There has been a downward trend in the profitability from different major crops. Though there are some ups and downs in the trend of profitability over the years (from 1980-81 to 2005-06), liberalization did not increase the profitability of major crops, rather the estimation suggest that return to cost ratio has declined over the years (Table 4).

Table 4: Return - Cost Ratio of Different Crops

| Crop | Year | 1981-82 | 1986-87 | 1991-92 | 1996-97 | 2001-2002 | 2005-2006 |
|-----------|------|---------|---------|---------|---------|-----------|-----------|
| Aus Local | | 0.96 | 1.04 | 1.09 | 0.66 | 0.76 | 0.62 |
| HYV Aus | | 1.28 | 1.33 | 1.36 | 0.82 | 0.76 | 0.81 |
| LT Aman | | 1.49 | 1.85 | 1.48 | 1.06 | 1.06 | 0.96 |
| M. Aman | | 1.46 | 1.79 | 1.65 | 1.09 | 1.27 | 0.99 |
| L. Boro | | 1.22 | 1.13 | 0.98 | 0.65 | 0.83 | 0.70 |
| M. Boro | | 1.44 | 1.69 | 1.32 | 0.98 | 1.02 | 0.89 |
| M. Wheat | | 1.33 | 1.14 | 1.16 | 1.09 | 1.04 | 1.07 |

Source: Failing Farmers' Liberalization in Agriculture and Farmers' Profitability in Bangladesh, *Rashed Al Mahmud Titumir, Golam Sarwar*

The decline in crop sector profitability can occur due to the rate of increase in yield which is outstripped by the rising input cost or increased lower farm gate price of agriculture produce compared to rate of increase of the input price. The rate of increase in the cost of inputs is rapid, determined externally and artificially through non-market mediation i.e. hoarding, syndication and other means of artificial crisis, which reduce the profitability of the farmers.

Box 2
Rising Transportation cost

Mojammel Haque of Srimantopur in Comilla is a marginal farmer who faces a lot of difficulties in marketing his products. The nearest market from his house is 5/6 kilometer away. He has to carry his products by a small van which takes a long time. For each trip he has to pay Tk 200 as fair. In total he has to pay about Tk. 1000 as transport cost in marketing his product, which is a big amount for a marginal farmer like him.

“Sometimes I do not get *beparies* (intermediary/ local merchant) in the market place, so I have to bring my product back home for that day”.

3.1.5 Vulnerability of Women

Women participation was very low during early 70s in market-oriented and income-generating activities. Participation of women outside household has been expanding since early 80s with the increasing activities of NGOs including microcredit. In the agricultural sector of Bangladesh women are more vulnerable than men. It is very difficult for women under the prevailing social structure to carry their agricultural produce to the market. They have to depend on the male members of the family for transporting their product to the market. As observed in the field visit, women are more dependent on the *Beparis* (intermediary/local merchants) for marketing their products and have to agree on whatever price they offer for the products.

3.1.6 Agricultural Export Scenario

By the time the WTO was established, liberalization of Bangladesh export regime was fairly advanced. There were few export duties and export trade was mainly in private hand. Jute and jute goods dominated the export trade in early 70s, ready-made garments have dominated since the late 80s. For the last few years, export items have shifted from agricultural products to processed goods.

The government rarely implements export incentive programmes in the form of cash compensation, tax breaks and export promotion measures. The incentives are implemented on a selective basis. Table 5 provides the trend in the export of primary products.

Table 5: Trends in the Export of Primary Products

| Products | Total Export (Million \$) | | | Percentage of Total Export | | | Growth | | |
|-----------------------|---------------------------|---------|----------------------|----------------------------|---------|----------------------|---------|---------|----------------------|
| | 2006-07 | 2007-08 | 2008-09 (July-March) | 2006-07 | 2007-08 | 2008-09 (July-March) | 2006-07 | 2007-08 | 2008-09 (July-March) |
| Primary Products | 832.27 | 987.56 | 650.89 | 6.83 | 7 | 5.59 | 7.71 | 18.66 | -14.67 |
| Frozen Food | 515.32 | 534.07 | 355.67 | 4.23 | 3.78 | 3.06 | 12.24 | 3.64 | -13.01 |
| Tea | 6.94 | 14.89 | 11.71 | 0.06 | 0.11 | 0.1 | -41.63 | 114.55 | -13.39 |
| Agricultural products | 87.82 | 120.13 | 93.81 | 0.72 | 0.85 | 0.81 | -16.68 | 36.79 | 3.8 |
| Raw Jute | 147.15 | 165.06 | 102.84 | 1.21 | 1.17 | 0.88 | -0.76 | 12.17 | -19.62 |
| Others | 75.04 | 153.41 | 86.86 | 0.62 | 1.09 | 0.75 | 56.24 | 104.44 | -28.86 |

Source: Bangladesh Economic Survey, 2009

Among the primary products, the majority of share in the export earning comes from frozen foods. Contribution of agricultural products to export earning and growth rate is very low. During the fiscal year 2006-07, there was a negative growth rate in the export earning from agricultural products. During the first nine months of the fiscal year 2008-09 also the growth rate has been very low, which shows that the agricultural sector of the country needs reforms and development to a significant level.

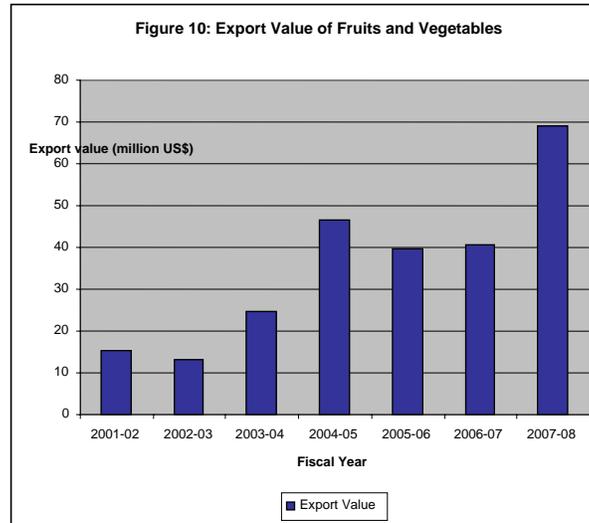
Export of Vegetables and fruits have been contributing to the export earning of our country for the last few years. Table 6 shows the trend in the export earning from fresh fruits and vegetables.

Table 6: National Export Earning from fresh fruits and vegetables

| Year | National Export (MT) | Value (million US\$) |
|-----------|----------------------|----------------------|
| 1999-2000 | 10,270 | 14 |
| 2000-01 | 9,503 | 12.79 |
| 2001-02 | 12,761 | 15.32 |
| 2002-03 | 9,792 | 13.24 |
| 2003-04 | 16,144 | 24.7 |
| 2004-05 | 29,100 | 46.41 |
| 2005-06 | 19,460 | 39.59 |
| 2006-07 | 19,805 | 40.53 |
| 2007-08 | 33,626 | 69.12 |

Source: Horticulture Export Development Foundation

As it is seen from the table, there has been significant increase in the export of fruits and vegetables for the past few years. Figure 10 shows that in spite of some ups and downs, in the recent year's value of export of fruits and vegetables have risen to a significant extent



Source: Horticulture Export Development Foundation

3.1.7 Contract Farming

The system of contract farming involves agreement between farmers and companies for production and supply of agricultural commodities. Under the agreement there may be commitment from the farmers to supply specific product in certain quantity at a certain quality standard. There may be two types of model under contract farming: which are Centralized model and Intermediary model. Under the system of centralized model a company contracts with large number of individual farmers. On the other hand, under the intermediary model companies contract with intermediaries who in turn contract with individual farmers. In case of agribusiness, contract farming has become an increasingly potential issue. In case of contract farming the responsibilities to be performed by the entrepreneurs are as below;

- Provide quality seeds to contract farmers for increased production
- Provide training to contract growers
- Provide field extension services
- Provide guarantee for buying back products from farmers

Farmers' benefits from contract farming are as follows;

- They receive technological support from entrepreneurs
- They receive prompt payment on delivery
- It fosters closer cooperation among farmers and entrepreneurs

In Bangladesh contract farming has been practiced by BRAC and PRAN group. But the poor farmers in the rural areas have not benefited from that as will be seen in the case study cited below.

Case Study on Contract Farming

Ali Akbor has 2 acres of land. He lives in Srimantopur Village of Chandina Thana of Comilla District. Last year he did contract farming with BRAC. He produced beans for BRAC. BRAC used to export those beans to Europe. The BRAC only sold seeds to him and he had to bear the cost of fertilizer, labor and irrigation. He also bought seed at a very high price- 200 taka per kilogram. He produced from that seed but unfortunately the harvest was not so good. When he took his produce to the local BRAC's collection center, they sorted his produces in three categories. For the best category they offered 12 Taka per kg, for the medium category they offered 6 taka per kg and for the worst category they offered minimal 2 taka per kg. That made him loss for his harvest and he suffered a loss of Taka 50 thousand. Although they told that the worst category was not qualified for selling to market but he found that the officials of BRAC collection center sold it to wholesalers in Dhaka. Then he sold some of his remaining produces to Dhaka through local traders. But the BRAC authority prohibited him by saying that they have contract with the producers of binding sale to them.

So it is evident that although BRAC do not go to any written agreement with the farmers they transfer all the risks to the farmers. They only supply seeds but it is also sold to the farmers at a high prices. They buy farmer's produces at very cheap prices. Further they differentiate their produces in categories and offer minimal price to them for the lower categories. That price is below the production costs of the farmers. The farmers are bound to sell to BRAC although there is no written contract. Farmers are further prohibited from selling any of their goods directly in the markets.

During the discussion with Mr. Ali Akbor it comes out that in contract farming he wants written contract in which will bear the clause of loss sharing. The organizations who offer seeds to the farmers should initially offer a minimum price to them at which they have to buy their produces after harvest.

3.1.8 Vulnerable to natural disaster

Agricultural sector of Bangladesh has always been vulnerable to unfavourable weather and climate conditions. Weather and climate are key factors that affect agricultural productivity of Bangladesh. Global climate change makes the issues of increasing food demand and problems of agricultural land and water resource depletion more acute. Climate change is likely to result in increased flooding, increased vulnerability to cyclone and storms, increased salinity intrusion and increasing temperature.

Prolonged floods have had detrimental impact on crop yield during 1974 and 1987. As a result, there was a shortfall in production of about 0.8 and 1.0 MT respectively. During the period 1962-1988, on an average 0.5 million tons of rice were damaged annually by flood.¹² A total of 788,295 MT of Aman was damaged in 10,565 sqkm area during the

¹² DG Internal Policies of the Union Policy. 2007-2009. Climate Change Impacts and Responses in Bangladesh. Department Economic and Scientific Policy.

Cyclone Sidr in the year 2007.¹³

Natural disaster makes significant impact on the marketing of agricultural products. During flood roads and highways go under water and severely affect the marketing of farmers' products. Farmers have to transport their products to the local market by rickshaws (three wheel vans). Farmers have to transport the products at their own cost with lots of difficulties. Therefore, it is very difficult for them when the already underdeveloped roads remain under water. For women farmers it is more difficult. From the field observation it is seen that during the rainy season, when the flood appears and the roads go under water, sometimes significant portion of the crops are damaged during transportation incurring huge loss to the poor farmers.

As farmers in the remote rural areas do not have improved storage facilities, after the harvest they try to store little amount of the products when it is possible for them, but during floods and cyclones, the stored products are damaged.

Box 3

Problems in Transportation of Crops

Many farmers like Darog Ali Mia and Badshah Mia are of the many marginal farmers of the village Kopakhi in Delduar upozila under the Tangail district. They face severe problems in transporting their crops to the market. The markets are very far and there is not enough transport available to carry their products to the market. Moreover, during the monsoon, when there is flood, almost half of their produced crops are damaged during transportation.

3.1.9 Product Standard

It is very challenging for the farmers to maintain their product standard while supplying to the market. As has been seen from the field level observation, the underdeveloped infrastructure and transport system along with the impacts of natural calamities make it difficult for farmers to transport their products to the market in their best form. Much of the products are damaged and the farmers incur huge loss for that.

Frozen food, vegetables and fruits have been the popular exportable agricultural goods. In case of exporting of products especially vegetables and fruits, farmers face various types of problems which render them unable to maintain the quality of their products. Exporters usually collect products through middlemen in traditional ways. It has been observed through a study of Hortex and Export Promotion Bureau that the collection of products through this process leads to enormous post-harvest loss, which is sometimes more than 30% of the products.

¹³ Giasuddin, A.C.2008. High Land Expert Panel on Water and Disaster/ UNSGAB: Impact of cyclone Sidr in Bangladesh. CEGIS, Bangladesh.

In developing the agro-processed food sector and maintaining the product standards, there are a number of obstacles that the exporters and processors face as described below in brief:

- Financing of upgrading and growth of products

Processors engaged in contract farming and involved in the processing of foods for exports have to bear the cost and risk of inputs during the growing season. A major portion of their fund is used for this purpose. As a result there remains no adequate fund for buying improved equipments. The processors are forced to buy 50% to 100% more inputs because of the poor quality of alternative sources of inputs.

- Power and water supply

In out-of town locations where there are food-processing facilities, electricity power is available for only 5 hours per working day on an average. In some cases it is even reduced to 2 hours. Loss of electricity also hampers the supply of water and gas. It has been seen that due to lack of any advanced notice of the load shedding, production is disrupted and it may increase the temperature of the refrigerators, which defrosts the frozen goods. In some cases the entire products may have to be thrown away.

- Transportation and logistics

Transportation facilities and logistic management for the exporters are very weak. There is hardly any link between the processors and exporters for the shared use of storage facilities. There is also lack of containers and trucks.

- Maintenance of food processing equipments

There is lack of food processing equipments. Even before exporting of the products, they cannot be tested as there is lack of testing equipments. This leads to problems for the exporters as sometimes the products are not accepted by the foreign buyers. According to an official of Horticulture Export Development Foundation, due to lack of proper testing of products before exporting, they face problems in the export of products, specially vegetables and fruits.

Box 4

Lack of Testing Equipments

A huge amount of exported Zara Lebu(specific kind of lemon) from Bangladesh has been destroyed at the Hithro airport, London during the month of January,2009. This was because the products were infected with *Cytrus Tanker*, a specific kind of disease, which was not detectable by our experts as there is lack of scientific equipments for testing.

Source: Hortex Foundation

Exporter's awareness about health and safety standards of products is moderate and they sometimes do not bother to implement the process of proper testing of their products in scientific ways. This may lead to a negative impact on our export in future as recently some buyers have started asking for quality improvement and better packaging.

Section 04

4.1 Policy Recommendation

The nature of agricultural marketing system in Bangladesh is complex as stems from the fact that there are innumerable small farmers spread all over the country, whereas marketable surplus is very small. There are almost 13,098 small, medium and big sized markets in the country. As has been observed in the field visit, marketing of most agricultural products is largely handled by the private sector. The marketing system is characterized by information asymmetry, underdeveloped transportation system, lack of efficient market structure etc. It is urgently needed to bring changes in the system to ensure fair price for the poor and marginal farmers. Following recommendations may be suggested for the development of the agricultural marketing system.

• Ensuring proper flow of information to the producers

It is necessary that farmers get information regarding prices of products, their demands in the local and international market etc at the right time. To ensure this following measures may be taken:

- Data collection on farmer's price and consumer's price should be done on the basis of regular surveys. Regular survey may be carried out in the public markets. In the case of Bangladesh, as products have to move through multiple stages before reaching the consumers from the producers, it is necessary to get the prices prevailing at the different stages of the value chain in order to get the precise information on price.
- For farmers to be able to understand and use price data, they need to know how to compare the price of good quality products with that of inferior quality. The information of data collected on price of goods will not be of use unless quality is taken into account. It is because prices of good quality products will differ from that of inferior quality. Hence there is necessity to adopt a national grading system, which will help to differentiate the prices of products according to their quality.
- Mode of delivering the information should be such that can reach farmers in the remote rural areas. Some radio and television programmes are already broadcast (Mati-o-Manush in Radio Today and Krishi Dibanishi by Bangladesh Television). These programmes have created positive impact on the rural poor farmers, according to the field based observation. Still farmers need information on price at the right time. In this case commercial application of mobile technology may be suggested as it is generously available in rural areas.

- The point of delivering information is a problem, so information booths may be established in the public local markets, as it is a centralized meeting place for producers and consumers.

- Establish a Producers' Organization

A producers' organization can be established in each village under the farmers' cooperative. The organization will look after the marketing of products of the small and marginalized farmers. Under the producers' organization, there will be a joint marketing center which will perform function in providing information to the farmers, collect products from the farmers and through establishing distribution centers provide a link between the farmers and final consumers. The producers' organization will carry on with the following functions;

- Joint purchase of farm materials
- Management of credit service
- Provide warehouse for the poor farmers
- Provide facilities for processing and packaging of agricultural goods for marketing
- Provide member farmers with information regarding market price of products, demand of products in the national and international market etc.
- Direct marketing of products through "Distribution Market" outlets in different regions with fresh food section where primary products will be sold.

The producers' organization will be under farmers' cooperative and consist of a joint marketing center, information providing agency, product collection center and a distribution center which will be providing services for marketing agricultural products.

- In the rural areas of Bangladesh transportation system is not developed. As observed in the fields, the farmers have to carry their products to the markets by small vans and rickshaws. During rainy season it is very difficult and the crops are damaged by the time they reach the markets. Thus it is necessary to develop the transportation system and enable farmers to carry their products unspoiled to the markets on time.

- Paying rent in the markets is a huge problem for the farmers in the remote rural areas. From field level observation most of the farmers in the rural areas are faced with this problem. For each Tk 100 they get for their crops, they have to pay Tk. 10 as rent. This system of paying rent should be stopped. Initiatives may be taken by the government level to change the system.

- Women in rural areas face more problem than men in transporting their products to the markets, as observed in the field visit to the rural areas. While undertaking measures for developing the transportation system, special measures should be adopted for women. Producers' organization as suggested above can help women to carry their products to the market place.

Policy Recommendation for Bangladesh Regarding WTO Trade Agreement

- Bangladesh should carry on providing domestic subsidy for fertilizers, irrigation equipment, and diesel and other agricultural inputs in a mechanism that it effectively works for the real benefit for the poor farmers. The objective is to reduce the input cost and keep it at a level meaningful with respect to the return from yield. Current AMS levels are below what is permitted by the AoA. Bangladesh should comply with the LDC's aggregate AMS levels – product specific and non-product specific and then apply the restriction. It will give greater flexibility to raise the domestic support for rice production.
- Bangladesh should take regulatory measures to ensure a better access of the small and poor farmers to the output market. Through grain procurement policy it can serve the poor better than before. Other policy reforms are necessary to raise the bargaining power of the poor farmers in the market. Government procurement price should be high so that it can benefit the producers by raising the market price of paddy.
- Bangladesh should take steps to increase its tariff within the bound rate and regulatory duty. With the WTO regulation, Bangladesh still has a provision to increase the tariff on agriculture as the bound tariff rate is 200 percent but the applied tariff is much lower.¹³

Policy Matrix and Advocacy Agendas

| Area | Problems | Policy |
|---------------------------------------|---|--|
| Price Variation | <input type="checkbox"/> Inter market price variation in advanced and backward regions <input type="checkbox"/> Price difference according to harvest <input type="checkbox"/> Farmers deprived of the right price | <input type="checkbox"/> Ensure storage facilities for poor farmers <input type="checkbox"/> Ensure market information service for farmers |
| Marketing Channel | <input type="checkbox"/> Multiple marketing stages <input type="checkbox"/> Appreciation of price by middlemen | <input type="checkbox"/> Reduce the influence of middleman in the marketing process |
| Marketing Efficiency | <input type="checkbox"/> Producers have no bargaining power <input type="checkbox"/> Unavailability of market information | <input type="checkbox"/> Establish Producers' Organization under farmers' cooperative for providing facilities in agricultural marketing |
| Trade Negotiation under WTO agreement | <input type="checkbox"/> Obligation of Bangladesh to freeze domestic support has created adverse effect on the poor farmers <input type="checkbox"/> Implementation of AoA forced Bangladesh to open up market as a result of which cheap low quality rice entered the market which reduces competitiveness of the marginal farmers in the market. | <input type="checkbox"/> Bangladesh should take regulatory measures to ensure a better access of the small and poor farmers in the output market. <input type="checkbox"/> Bangladesh should take steps to increase its tariff within the bound rate and regulatory duty. |

Some advocacy agendas can be set at national and local level to develop agricultural marketing system in Bangladesh.

Agendas to be adopted at national level

- Government should take action against hoarders and market manipulators to control country's marketing system.

- Public procurement system should be extended to areas which are deprived from any support from government in marketing their products and the poor farmers should get the ultimate benefit from the programme instead of the middlemen.
- Crop insurance can be introduced specially in areas which are prone to natural calamities to save the small and marginal farmers in those areas.
- Transportation system should be developed in remote rural areas.
- As there is provision for increasing tariff level under WTO rules, initiatives should be taken to increase the tariff rate.

Agendas to be adopted at local level

- Rent paying system in the local markets takes away a large part of the yield that farmers get from selling their output. Such system should be abolished.
- Storage facilities should be undertaken by local government initiatives and private sector may be encouraged to follow the suit.
- Fertilizer distribution system by dealers at the local level contains problems regarding the right time and quantity of fertilizer distribution. In this case open market sale is preferred by the farmers. Thus open market sale of fertilizer should be extended.
- Farmers in rural areas get seeds from NGOs. But that is not according to their requirement. Government can distribute improved seeds at subsidized price among the small and marginal farmers.

4.2 Concluding Remarks

Agricultural marketing requires changes for bringing sustainable development to the agricultural sector. Decrease in profitability of farmers due to getting low price for their products lead to unwillingness among farmers to invest in agricultural development. Present government has taken measures to reduce cost of production for the small and marginal farmers by reducing the price of fuel and fertilizer. But there is need to monitor the implementation of the policies adopted. The subsidized fertilizer should reach the target group and it should be ensured. Subsidy programmes in the past have suffered various setbacks for which a large portion of the subsidy has gone to undeserving farmers due to irregularities. Thus monitoring is crucial in this regard. Without developing the marketing structures at the local level it will not be possible to ensure fair price for the poor farmers in the rural areas. Different systems prevailing in the rural areas e.g. influence of middlemen, payment of rent while marketing products etc should be changed for developing the livelihood of the poor in the rural areas.

Annex I

Selection of study area

The study has been conducted in three areas predominant in agriculture representing small and marginal farmers of the country. The areas are Kopakhi in Delduar upazila under the districts of Tangail and Srimantopur in Chandina upazila under the district of Comilla.

In the area of Delduar upazila in Tangail, about 81 percent of farm households consist of marginal and small farmers. 10.13 percent of farmers are landless. The major crops of the area are the different varieties of rice including IRRI, Boro and Aman. In the area of Chandina upazila in Comilla, 52.61 percent of farmers are small and marginal. 23 percent farmers are landless. This area is also predominantly agricultural.

Nature and Source of study

The study is explanatory in nature. It comprises of both qualitative and quantitative data and information. In order to achieve the objectives of the study, data have been collected from both primary and secondary sources. Primary data have been collected through field visits which are mostly qualitative. Secondary data are obtained from reports, journals, research papers, newspapers and books. Information on relevant issues are collected from websites available on the internet.

Method of data collection

Relevant information on the concerned issue has been collected through questionnaire survey. A structured questionnaire has been developed for the purpose. Information regarding the time of selling output, system of marketing, problems associated with storage and marketing, farmers' view regarding necessary changes to be brought in the output market etc are collected through the questionnaire survey. Primary data and information collected through questionnaire have been summarized and analyzed for the purpose of the study. Focus group discussions with farmers and officials of NGOs and government offices have been carried out.

Method of data processing

Qualitative data collected through questionnaire has been analyzed to identify the important aspects of the output market in Bangladesh. Information collected through Interviews of individual farmers has been incorporated in the paper as case studies. The case studies given in the paper reveal the problems and views of poor and marginal farmers in the rural areas of Bangladesh. There are some special cases and some cases that reveal the problems prevailing generally in the rural areas. Secondary data are analyzed to understand the trend in the price levels of different goods in the market, return-cost ratio of different crops, the trend in the volume of subsidy provided by the government etc.

Annex II

Questionnaire for Survey

1. When do you sell your product?

Just after the harvest When the price goes up

2. To whom do you sell your produce?

Faria/Bepari Miller Government Others

3. Do you have storage facilities?

Yes No

4. During rise in the price of products last year, did you get any profit from that?

Yes No

5. What types of problems do you face while marketing your products?

6. What changes should be brought in the marketing system?

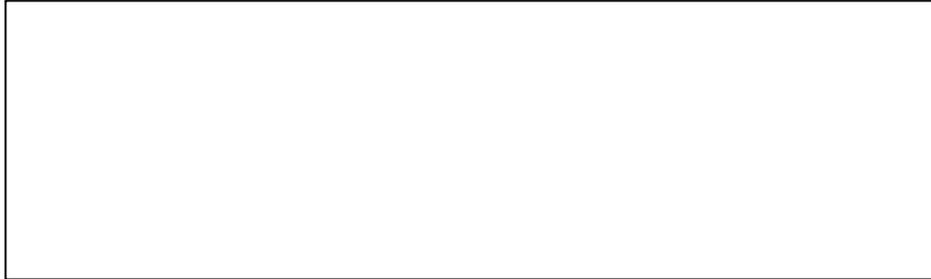
7. Is there any contract farming in your village?

Yes No

8. Are you involved in any type of contract farming?

Yes No

9. If you are involved in contract farming, are you facing any problem? Give details.



10. What type of problems do you face during natural disasters?



11. Do you face any problem for maintaining the quality of your product? Please give a brief statement.



References

Abbott, J.C. 1987. *Agricultural Marketing Enterprises for the Developing World*, Cambridge University Press, Cambridge.

Agricultural Trade Liberalization, CBO. 2006. A series of issue summaries from the Congressional Budget Office, November, 2006.

Bayes, A and Mahabub, H.2007.*Gramer Manush Grameen Aurthony: Jibon Jibikar Poroborton Porjalochona.*

Crow.B.2001. 'Markets, Class and Social Change: Trading Networks and Poverty in Rural South Asia'

DG Internal Policies of the Union Policy. 2007-2009. Climate Change Impacts and Responses in Bangladesh. Department Economic and Scientific Policy.

FPMU. 2009. 18(1), February, 2009.

Giasuddin, A.C.2008. High Land Expert Panel on Water and Disaster/ UNSGAB: Impact of Cyclone Sidr in Bangladesh. CEGIS, Bangladesh

Mohammad, A. 2005. ' From Mills to Malls: Polarization, Decomposition and New Formation in Bangladesh', Meghbarta-Online Forum for Activism.

Shahabuddin, Q. & Nabiul, I. 1999. '*The Domestic Rice Procurement Programme in Bangladesh. An Evaluation*', FMRSP Working Paper No.13, Bangladesh, IFPRI, Washington.D.C.