

Impact of Agricultural Trade Liberalisation in Bangladesh on Rural Livelihoods

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Abstract

This paper is based on the just completed M.Phil thesis of Dayal Talukder and considers the context of liberalisation and openness of trade and ideas as to how to operate in the agricultural sector as it is viewed globally, and within Asia and then specially within Bangladesh.

The first section looks at the global and regional thinking with respect to openness and universal ideas of liberalisation, both nationally and internationally and some of the thinking regarding the negative impacts on social, cultural and other “non-economic” aspects. Included is consideration of global concerns such as “multifunctionality” and bio-fuel production and their potential impact on rural/agricultural societies. At the local level the impact of producers switching from non-market to market production is looked at with the second section of the paper concentrating on the Bangladesh case and the impacts on the welfare and livelihoods of the rural dwellers, with a high percentage being ‘functionally landless’.

Introduction

Bangladesh is predominantly an agricultural country. Despite shares of agriculture in national outputs have been declining; agriculture has still been considered as an important sector, contributing nearly 25 percent to GDP and employing 62 percent labour force of the economy. Bangladesh started trade liberalisation and deregulation in agricultural sector during the late 1980's and that efforts peaked in the early 1990's. The reform measures included liberalisation of the imported input markets for fertilisers, pesticides and irrigation equipment and adoption of high yielding variety seeds for rice production

leading to a major structural reform and technological transformation resulting in a significant increase in productivity and growth in agricultural sector.

The first section illustrates the global and regional thinking with openness and universal ideas of liberalisation focusing on the main debate between the advocates and critics of trade liberalisation. It also provides the issues and debate on international negotiations of agricultural trade liberalisation including the consideration of global concerns such as multifunctionality and bio-fuel production. The second section presents Bangladesh's agricultural trade liberalisation process and issues. It analyses the changes in welfare of rural households of Bangladesh's economy due to technological transformation in agriculture as a result of agricultural trade liberalisation. It also provides a mapping of gains and losses experienced by the different groups of rural households as a result of these changes. Moreover, it analyses the recent trend in production and price of rice in Bangladesh.

1. Universal ideas on trade liberalisation: debate on gains and losses

The effects of trade liberalisation on development have been a subject of great debate for centuries. The classical economists argue that free trade is an engine of growth while protections lead to wasteful use of resources, thereby adversely affecting economic development. On the contrary, the critics argue that openness has its costs and sometimes it could be detrimental to economic development (Rodriguez and Rodrik 1999: 8; Chang and Kaltani *et al.* 2005: 2).

According to the advocates of trade liberalisation, the shift towards a more open trading regime confers significant benefits (both static and dynamic gains) to the economy. This assertion is based on the belief that there is a strong correlation between trade and development strategy and hence trade liberalisation will influence the long-run growth of an economy (McCulloch and Winters *et al.* 2003: 21).

The static gains from openness are explained by neo-classical trade theories. This advocacy for free trade was based not only on the famous Ricardian principle of comparative advantage but because on the argument that free trade would contribute to development through competition and learning. Openness promotes the efficient allocation of resources through comparative advantage, allows the dissemination of

knowledge and technological progress, and encourages competition in domestic and international markets (McCulloch and Winters *et al.* 2003: 15-16; Chang and Kaltani *et al.* 2005: 2). It is argued that trade liberalisation can help increase in international trade and welfare by exploring the size of the market. This may in turn yield efficiency and bring benefits not only by exploration of economies of scale but also by dynamic and upward shift in production function. Thus, previously shattered domestic firms may become more competitive and gain the confidence to enter into global competition (Chang and Kaltani *et al.* 2005:2).

Dynamic gains have been the focus of modern trade theories and the subject of much of the debate in the literature, in part because it is either poorly understood or difficult to measure (Helpman and Krugman 1985: 266; Krugman and Obstfeld 2006: 209; Rodriguez 2007: 11,). The dynamic gains from trade liberalisation are due to increased market access for exports with the inherent scope for economies of scale, which leads to increasing returns and eventually the accumulation of human and physical capital. This foreign exposure obtained by the export sector in conjunction with the higher returns, inspires entrepreneurship and raises productivity of factors above their pre-liberalised levels, which then drives the process forward. According to advocates of openness, the positive externalities associated with the transmission and diffusion of new ideas or knowledge and adoption of more efficient production techniques and management systems generates dynamic efficiencies, which lowers the incremental capital-output ratio and thereby improves economic performance (McCulloch and Winters *et al.* 2003: 23, 25).

On the other hand, the critics of trade liberalisation argue that very cautious views and steps should be adopted to analyse trade liberalisation. Despite the strong intuitive appeal of the policy of trade liberalisation, a good number of criticisms have been directed towards trade reforms and gains from liberalisation.

The free trade advocacy came under serious challenge in the 1930s, as a run up to the employment problem faced by the global economy during the Great Depression. The search for theoretical foundations to justify the use of trade protection for promoting development led to the formulation of optimum tariff and infant industry argument, and

argument related to externalities or correction of domestic market distortions (Ahmed and Sattar 2004: 2, 3).

The critics argue that if market or institutional imperfections exist, openness can lead to sub-utilisation of human and capital resources, concentration on extractive economic activities, or specialisation away from technologically advanced increasing return sectors (Chang and Kaltani *et al.* 2005: 2). In this case, the underlying imperfection is an institutional weakness that encourages natural-resource depletion for quick gains appropriated by certain influential groups of the economy leading to a serious distortion in income distribution and welfare changes against the weak (poor) groups of the economy (Chang and Kaltani *et al.* 2005: 2).

Trade liberalisation has been under serious criticism because of unrealistic assumptions, such as perfect competition and constant return to scale, underlying with neo-classical Heckscher-Ohlin model of comparative advantage. These restrictive assumptions have been strongly challenged in the light of the real world suggesting that the classical theory leaves significant part of international trade unexplained (Krugman and Obstfeld 2006: 45). This situation has generated '*New Trade Theories*' which recognise the existence of imperfect competition, market power, economies of scale or increasing returns and technological differences between nations (Krugman and Obstfeld 2006: 143, 144; Baldwin and Forslid 2006: 21-22).

Agricultural Trade Liberalisation, Multifunctionality and Bio-fuel Production

Multifunctionality of Agriculture implies with its multiple roles in the economy such as food production, food security, income and employment generation, development of non-farm sectors through multiplier effects, macroeconomic stability etc. Agricultural growth is seen as a necessary factor for successful economic transformation and industrialisation for two reasons: a) to ensure food supply and prevent rising food prices and real wages from undermining industrial development; and to utilise a major natural resource- land as an additional free source of growth that would not compete with resources for industrial growth (Byerlee and Diao *et al.* 2005: 3).

International negotiation on agricultural trade liberalisation had long been excluded from GATT on the ground of food security as well as socio-political reasons. Agricultural trade liberalisation has first included as a subject of multilateral trade negotiation agenda during Uruguay Round in 1994. In this Round, the US and other major 14 agriculture-exporting countries (Cairns Group) put enormous pressure on EU and Japan for liberalising agriculture sector. Eventually, the Round undertook some huge steps forward with its Agreement on Agriculture (AoA), which codified several aspects of agricultural policies and brought their treatment under the GATT much closer to that of manufacturing sector. Although AoA has covered three broad areas such as (1) market access, (2) domestic support, and (3) export competition, it has done nothing to reduce the sensitivity of agriculture in domestic politics (Hossain and Deb 2003: 1; McCulloch and Winters *et al.* 2003: 177). Moreover, certain exceptions were permitted (to Japan and Korea on rice, for example), and all countries can easily impose emergency protection to undo temporarily the effects of the Round, which has undermined the main spirit of the AoA. Similarly, the AoA's some provisions have left ample scope to facilitate governments for declaring base rate of tariffs far exceeding their previous levels of protection (McCulloch and Winters *et al.* 2003: 178).

AoA's such provisions have facilitated the USA and EU to introduce subsidies and domestic support policies for producing bio-fuel in recent years. This support includes consumption incentives (fuel tax reduction), production incentives (tax incentives, loan guarantees and direct subsidy payment), import barriers (import quota and high tariffs on bio-fuel), and mandatory bio-fuel sale/consumption requirements (World Bank 2008: 70, Russi 2008: 1169, Elobeid and Tokgoz 2008: 919). However, bio-fuel production has generated significant debate on 'food versus fuel' policies as well as raised global concern regarding food security and right to food.

Brazil, the member states of EU and the USA are actively supporting the production of bio-fuel from agricultural products such as ethanol from corn or sugarcane and bio-diesel from various oil crops. With the growing demand for these agricultural products to cater to the escalating production of bio-fuel around the world, there is a global concern that recently it has caused the price of these essential food to rise tremendously (Tan and Lee *et al* 2008: 3360).

2. Agricultural Trade Liberalisation: Bangladesh Perspective

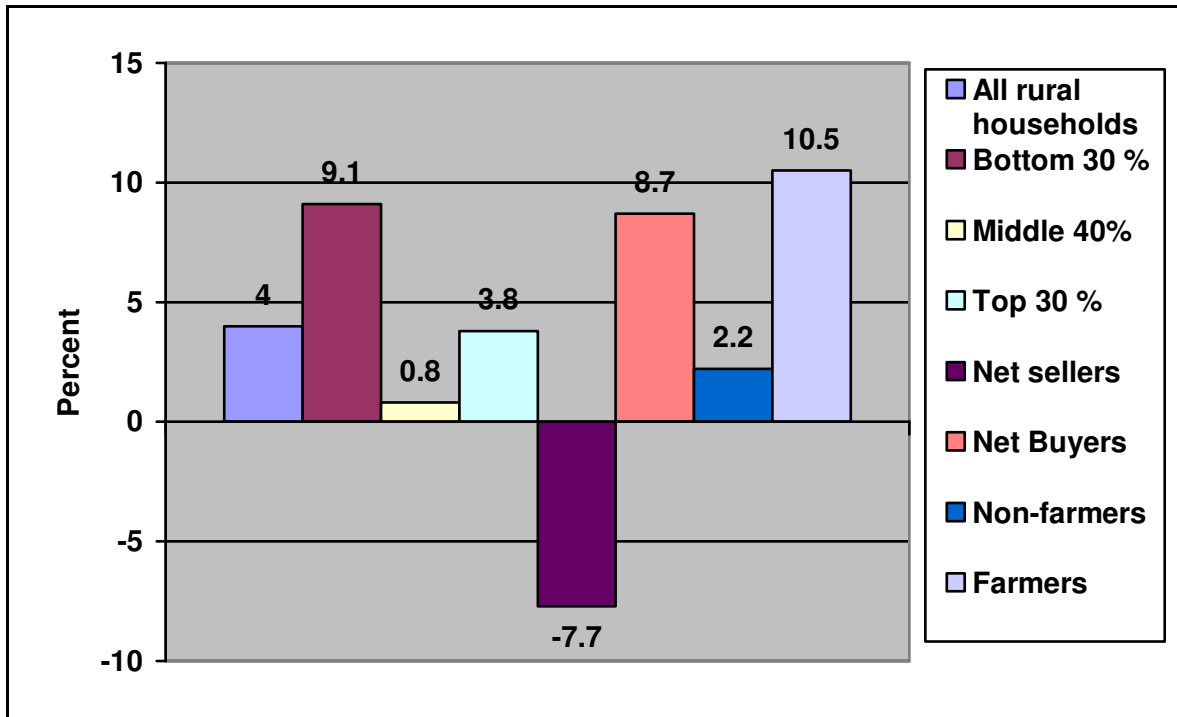
In Bangladesh, agricultural trade liberalisation has influenced technological transformation of agriculture resulting in a significant increase in productivity of rice. According to the database of Bangladesh Bureau of Statistics, the total rice production over the period from 1994-95 to 1999-2000 has increased by 31 percent and from 1999-2000 to 2006-07 by 23 percent. Bangladesh has overcome persistent food shortage and achieved self-sufficiency in food production in the early 1990s. Achievement of self-sufficiency in food-grains is a significant landmark of Bangladesh's economic history; because, self-sufficiency in food production heavily affects both internal and external policies through socio-economic and politico-economic factors such as increasing food security and reducing dependency on foreign food-aid as well as lessening the foreign donors' influence.

However, in Bangladesh, export of rice is not liberalised yet. So, rice is basically a non-traded product and used for domestic consumption. Therefore, rice price is affected much more by the change in productivity of rice and other domestic factors rather than by international price fluctuation (Klytchnikova and Diop 2006: 12). Thus, an increase in productivity of rice has affected the price of rice. During 1995-96 to 2000, the producers' and consumers' prices of rice have declined at the national level by an average of 23 and 22 percent respectively; even in some regions the price declines more than 30 percent (Klytchnikova and Diop 2006: 10).

Rice is the staple food in Bangladesh. Most of the rural households are net buyers of rice. Therefore, they are benefited from a decline in rice price. Figure 1 reveals that during 1995-96 to 2000, they experience a growth in income by 8.7 percent. Similar situation has been reflected in the growth of income for bottom 30 percent of the rural households with an increase by 9.1 percent. However, middle 40 percent and top 30 percent income groups of the rural households experience a very low level of income growth by 0.8 and 3.8 percent respectively over the same period. The worst situation is observed in the case of net sellers of rice. They experience an income loss by 7.7 percent over the same period from price declines. They are predominantly medium and large farmers. Over the same period, all farmers as a group benefit from income growth by 10.5 percent which reflects

the fact that majority of the farm communities are small farmers who are basically net buyers; and they represent more than 80 percent of the farm households. However, all rural households as a community have experienced an insignificant figure of growth in income, by 4 percent over the same period. Similarly, the non-farm community experiences an insignificant growth in income only by 2.2 percent.

Figure 1: Actual income growth of rural households from 1995-96 to 2000



Note: Data compiled from Table 5 (Klychnikova and Diop 2006: 16)

From the above figure, it is argued that the magnitude of the increase in productivity of rice is less than the magnitude of the decline in rice price. In other words, the elasticity of output is smaller than the elasticity of price with respect to technological change. Consequently, net sellers have experienced a substantial loss from this technological transformation as a result of agricultural trade liberalisation. They are basically large and medium farmers and are non-poor households of the rural economy. Klychnikova and Diop (2006: 16) argue that an approximation of the long-term welfare effect that accounts for adjustments in household behaviour yields higher gains and lower losses. The estimated welfare impact ranges from a loss of 14 percent for large and medium farmers

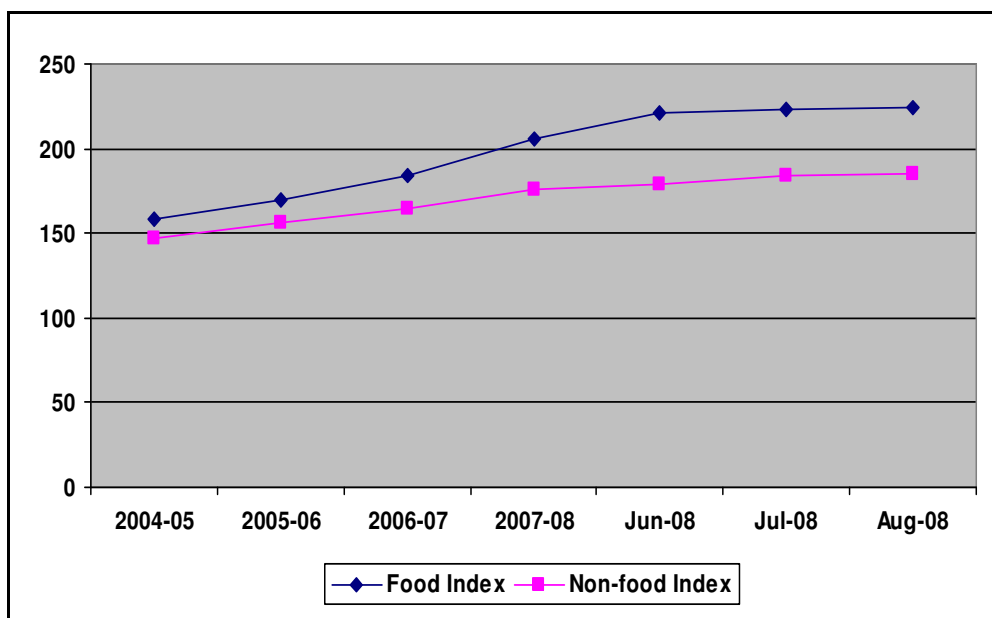
to a gain of nearly 9 percent of total expenditures for net buyers when rice price declines by 22 percent during 1995-96 to 2000. The losses are high especially for the large farmers. On the other hand, agricultural trade liberalisation has increased the welfare of net buyers who are predominantly the poor households of the rural areas. They have experienced a higher income growth. However, this income growth might not be attributed only to decline in rice prices induced by productivity improvement. Klytchnikova and Diop (2006: 22) argue that higher share of agricultural wages; remittance and other income from non-agricultural sources may be associated with higher income growth in the rural areas. This is an indication that agricultural trade liberalisation might have significant role in developing the rural non-farm sector through its multiplier effects and indirect labour market effects derived from the improvement in the rice productivity that is observed in Bangladesh during this period.

Recent trend in rice production and price

Agricultural trade liberalisation in Bangladesh is a partial phenomenon because export market for rice is not liberalised yet. Therefore, large farmers, the net sellers, are in search of alternative options for cash crop since they have experienced losses from decline in rice prices as a result of agricultural trade liberalisation. Recently there is a trend that large farmers are shifting production from rice to cash crop such as banana to cope with recent changes in agriculture.

Rice plays a dominant role in food market in Bangladesh, because it is the staple food of the economy. The production and consumption of rice are basically influenced by domestic factors. Multiple rice crops that spread major rice harvests throughout the year help limit intra-annual price fluctuation (Dorosh 2008: 102). However, recent high food price in the world market due to bio-fuel production and other short term factors such as low food production has affected food prices in Bangladesh significantly. BBS statistical database shows that price of food increased by 65 percent during last four years (2004-05 to 2007-08) by an average of 16 percent annually. This increase in food prices is nearly three times higher than an average of food prices during 1995-96 to 2003-04. As shown in Figure 2, consumer price index for food has increased more sharply than that of non-food index.

**Figure 2: Consumer Price Index for Food and Non-food: 2004-05 to August/08
(1995-96 = 100)**



Note: Data compiled from BBS database: *CPI and Inflation August 2008*, Table 1 [Online]. Available: http://www.bbs.gov.bd/dataindex/CPI_Aug_08.pdf [27 October 2008]

Despite agricultural trade liberalisation has increased the volume of rice production significantly with an annual surplus of more than ten percent of actual demand; the increase in the food price is mostly attributed to global concerns and speculation rather than shortage of food grains (Deb 2008: 17). It is argued that the domestic rice market is imperfect in terms of competition and it is often characterised by oligopolistic trends. The price of rice is mostly controlled by middle-men not by market factors such as demand and supply (CPD 2007: 2). Moreover, the structure of domestic rice market is very complex. The presence of restrictive business practices (e.g. syndication and hoarding) and other disruptive actions (such as deliberate supply shortage) in the rice market contribute to a significant gap between farm-gate price and consumer price of rice (CPD 2007: 1, 2). Therefore, international speculation helped business elements make possible to create an artificial crisis in domestic rice market leading to a significant increase in food prices in recent years. The rural households suffer mostly from increased food price because they are net buyers of rice. They are predominantly poor people in the

economy and are basically small farmers and agricultural labourers, who are functionally landless in the rural areas.

Conclusion

This study suggests that effects of trade liberalisation on development have been a subject of ongoing debate. Although agriculture is still considered an important sector in developing countries, the achievement in the progress of international negotiation on agricultural trade liberalisation has not been considered significant.

The findings and analyses of this study suggest that the change in welfare of rural livelihoods can be attributed to the change in productivity and prices as a result of agricultural trade liberalisation in Bangladesh. This study has found that recent liberalisation and reform measures have removed various distortions from the agricultural input markets leading to the increase in farmers' efficiency and productivity at the farm level. These changes have affected the welfare of the rural households; some are appeared as gainers and some are become losers due to such changes. Among the rural households, net consumers or buyers of rice have experienced an increase in income. On the contrary, net sellers of rice have experienced a decline in income. However, the income of the poor households has increased, which indicates that income growth due to agricultural trade liberalisation tends to be pro-poor during 1995-96 to 2000. Recent price hike in rice market is largely due to global concerns and speculation rather than production shortage in Bangladesh.

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