

Report No. 82

**Impact of Agricultural Trade Liberalisation on
Cropping Pattern in Bangladesh**

Publisher

Centre for Policy Dialogue (CPD)

House No 40/C, Road No 11 (new),
Dhanmondi R/A, Dhaka-1209

Bangladesh

Tel: (880 2) 8124770, 9141703. 9141734

Fax: (880 2) 8130951

E-mail: cpd@bdonline.com

Website: www.cpd-bangladesh.org

First Published March, 2006

Copyright © Centre for Policy Dialogue (CPD)

Price Tk. 42.00

ISSN 1818-1538

The Centre for Policy Dialogue (CPD), established in 1993, is a civil society initiative to promote an ongoing dialogue between the principal partners in the decision-making and implementing process. The dialogues are designed to address important policy issues and to seek constructive solutions to these problems. The Centre has already organised a series of such dialogues at local, regional and national levels. The CPD has also organised a number of South Asian bilateral and regional dialogues as well as some international dialogues. These dialogues have brought together ministers, opposition frontbenchers, MPs, business leaders, NGOs, donors, professionals and other functional group in civil society within a non-confrontational environment to promote focused discussions. The CPD seeks to create a national policy consciousness where members of civil society will be made aware of critical policy issues affecting their lives and will come together in support of particular policy agendas which they feel are conducive to the well being of the country.

In support of the dialogue process the Centre is engaged in research programmes which are both serviced by and are intended to serve as inputs for particular dialogues organised by the Centre throughout the year. Some of the major research programmes of the CPD include **The Independent Review of Bangladesh's Development (IRBD), Trade Related Research and Policy Development (TRRPD), Governance and Policy Reforms, Regional Cooperation and Integration, Investment Promotion and Enterprise Development, Agriculture and Rural Development, Ecosystems, Environmental Studies and Social Sectors and Youth Development Programme.** The CPD also conducts periodic public perception surveys on policy issues and issues of developmental concerns.

Dissemination of information and knowledge on critical developmental issues continues to remain an important component of CPD's activities. Pursuant to this CPD maintains an active publication programme, both in Bangla and in English. As part of its dissemination programme, a CPD Dialogue Report series is brought out in order to widely disseminate the summary of the discussions organized by the Centre.

The present report contains the highlights of the dialogue titled ***Impact of Agricultural Trade Liberalization on Cropping Pattern in Bangladesh*** held on May 05, 2005 at CIRDAP Auditorium, Dhaka. The dialogue was organised under CPD's TRRPD Programme.

Report Prepared by: *Narayan Chandra Das*, Research Associate, CPD.

Assistant Editor: *Anisatul Fatema Yousuf*, Head (Dialogue & Communication), CPD.

Series Editor: *Professor Rehman Sobhan*, Chairman, CPD.

Dialogue Report

Impact of Agricultural Trade Liberalisation on Cropping Pattern in Bangladesh

1. The Dialogue

The Centre for Policy Dialogue (CPD) organised a dialogue titled *Impact of Agricultural Trade Liberalisation on Cropping Pattern in Bangladesh*¹ at CIRDAP Auditorium, Dhaka on May 05, 2005. *Mr M Syeduzzaman*, Former Finance Minister and CPD Board of Trustee Member, presided over the dialogue while *Dr Uttam Kumar Deb*, Senior Research Fellow, CPD, presented the keynote paper. *Mr Mirza Fakhrul Islam Alamgir*, MP, the Hon'ble Minister of State, Ministry of Agriculture, was present at the dialogue as the chief guest. *Dr Mohammad Abdur Razzaque*, Hon'ble Member of Parliament (MP), was present at the dialogue as the guest of honour while *Mr Siddiqur Rahman Choudhury*, Secretary, Ministry of Commerce, was the special guest. The dialogue was participated by academia, government officials, agriculturists, researchers of various government and non-government organisations.

2. Introductory Remarks by the Chairperson

Mr M Syeduzzaman initiated the dialogue by welcoming all the participants with a note of appreciation to the chief guest, guest of honour and special guest. *Mr Syeduzzaman* introduced the key themes of the discussion. He mentioned that liberalisation of agricultural trade has come up with number of policy reforms such as tariff reforms, reforms of prices of inputs and outputs, reforms of the market delivery system of inputs and outputs, and introduction of new technology.

Mr Syeduzzaman told the audience that the study carried out by *Dr Deb* has covered a large number of crops; changes in gross and net cropped area; changes in prices and production overtime; and Domestic Resource Cost (DRC), Nominal Protection Coefficient

¹ The presentation is based on the report titled “*Trade Liberalization and Bangladesh Agriculture: Impacts on Cropping Pattern, Resource Use Efficiency and Effective Incentives*” presented by *Dr Uttam Kumar Deb* under Research Programme IV of the South Asia Network of Economic Research Institutes (SANEI) at the Centre for Policy Dialogue (CPD).

(NPC) and Effective Protection Coefficient (EPC) based on both import parity and export parity prices. He added that some of the facts highlighted in the paper are generally known such as declining area under Aus crop, increasing area under HYV Boro, and declining area under wheat and jute.

Mr Syeduzzaman also added that the paper has brought out policy suggestions in respect to some non-cereal crops for example potato, pulses, sugarcane, oilseeds and cauliflower which are important for consumers. It has also brought out some relational behaviour in respect to some crops such as increasing area under those crops in which Bangladesh has comparative advantage and decreasing area under those crops in which the country has no comparative advantage. He appreciated and congratulated *Dr Deb* and his associates for their hard work on the paper. He then invited *Dr Deb* to present the keynote.

3. Keynote Presentation by Dr Uttam Kumar Deb

Dr Uttam Kumar Deb, Senior Research Fellow, CPD made the keynote presentation titled “Agricultural Trade Liberalisation and Changes in Cropping Pattern in Bangladesh”. *Dr Deb* started off his presentation by stating that Bangladesh agriculture has experienced substantial policy reforms and liberalisation of agricultural trade over the last two decades. As a member of the World Trade Organization (WTO), Bangladesh has already committed to the principle of free trade. He informed the participants that the WTO Uruguay Round Agreement of Agriculture (AoA) calls for “tariffication” of all physical controls on agricultural trade, and reductions in tariffs, domestic support and export subsidies in a time-bound programme. He added that currently negotiations are moving forward for South Asian Free Trade Agreement (SAFTA) and on-going negotiations in the WTO might also result in new opportunities and commitments for further liberalisation in Bangladesh agriculture.

He remarked that it is now intriguing to know the nature, extent and trends in agricultural trade liberalisation occurred during the last two decades and the impact of agricultural trade liberalisation on crop production and area under different crops in Bangladesh.

Nature, Extent and Trends in Agricultural Trade Liberalisation

Dr Deb observed agricultural policy reforms carried out by Bangladesh classified as: (a) input market related reforms, and (b) output market related reforms. Input market related reforms include liberalisation of investment in minor irrigation sector, fertiliser trade and distribution system, import of agricultural machineries, seed delivery system and management of national agricultural research and extension system. Output market related reforms include food procurement and distribution system (abolished rationing system, open market sales of foodgrains, and procurement of foodgrains at market price), import and export policy of foodgrains, reduction in tariff rates and removal of quantitative restrictions, he maintained.

The keynote speaker said that Bangladesh has substantially simplified and rationalized its tariff structure, and reduced the number of tariff rate. Total number of restricted items has been reduced from 20 in 1991/92 to 13 in 2000/01 and number of banned items has been reduced from 11 to 2. During the same period, total number of tariff rates has been reduced from 8 to 4 and maximum tariff rates have been reduced from 100 percent to 37.5 percent, he observed. Additionally, he added that simple average tariff rate on all products has been reduced from 47.37 percent in 1991/92 to 17.05 percent in 2000/01 while that for agricultural products has been reduced from 69.22 percent to 45.19 percent. During the same period, weighted average tariff rate for all products was reduced from 23.56 percent to 12.29 percent while that for agricultural products was reduced from 40.68 percent to 23.84 percent.

While talking about the input market liberalisation, *Dr Deb* informed the participants that import of seeds (rice, wheat seed, potato seed, and maize seed) seemed to be more liberalized. Initially private sector was allowed to import all fertilisers except nitrogenous fertiliser but now private sector can also import nitrogenous fertilisers. During the period 1991/92 to 1996/97, all fertilisers (chemical and organic) except nitrogenous fertilisers (Urea) were allowed to import with zero tariff. He described that in 1991/92 tariff rate on nitrogenous fertiliser was between 2.25 to 6.79 percent. Import duties on different types of machines used in crop, horticultural, poultry and dairy farming were reduced from more

than 70 percent in 1991/92 to 20 percent or less in 2000/01. But tariff rate for diesel used for irrigation is still very high (100 percent), he observed.

Dr Deb used Trade Dependency Ratio (TDR), Growth Rate of Exports and Ratio of Tariff Revenue to Import as indicators of the extent and trends in agricultural trade liberalisation. He provided the comparison of extent and trend in agricultural trade liberalisation with that in all products by applying these three indicators. He explained that TDR for agricultural products increased from 0.10 in 1980/81 to 0.34 in 2000/01 and during the same period, it has increased from 0.21 to 0.28 for all products. During 1991/92 to 2000/01, TDR for agricultural products increased from 0.17 to 0.34 while for all products it increased from 0.23 to 0.28. Thus, he mentioned that this trend in TR implies that Bangladesh agriculture has been substantially liberalized during 1990s and liberalisation in agriculture was more than that in overall economy.

The Keynote Speaker further explained that year to year export growth rate indicates fluctuating but upward trend. Ratio of tariff revenue to imports for agricultural products fell from 0.48 in 1991/92 to 0.24 in 2000/01 while for all products it fell from 0.27 to 0.19. Thus, he stated that degree of liberalisation as revealed through ratio of tariff revenue to import indicates substantial liberalisation for agricultural and industrial products.

While talking about market access, *Dr Deb* provided the estimates of market access opportunities for selected agricultural products- rice, wheat, onion, pulses, sugar, and edible oils. In 2000/01, compared to the period 1986-88, market access opportunities for these selected crops increased substantially. In the case of rice it has increased from 0.27 percent to 3.33 percent, for wheat (from 35.31 percent to 35.52 percent), for onion (from 0.37 percent to 22.37 percent, for pulses (from 0.75 percent to 86.78 percent), and for sugar (from 39.07 percent to 90.79 percent). Market access for edible oils has increased from 109.25 percent in 1986/87 to 445.29 percent in 1999/00. *Dr Deb* mentioned that Bangladesh did not apply export subsidy subject to reduction commitments during the fiscal years 1995/96 to 2001/02. Aggregate Measure of Support (AMS) for agricultural products was 0.68 percent of the total value of agricultural products in 1995/96 and 0.51 percent in 2001/02. Participants have been informed that according to the WTO rules, if

product specific market support as AMS, non-product specific support as AMS or total AMS is below the *de minimis* level, then as per the WTO rule it is considered as “0” AMS. The allowed *de minimis* level for Bangladesh is 10 percent of total value of its agricultural products. Thus AMS (product specific, non-product specific and total) for Bangladesh during the period 1995/96-2001/02 was considered as “0”, he further added.

Dr Deb provided the Nominal Protection Coefficient (NPC) (and Nominal Rate of Protection (NRP)) for 12 selected agricultural commodities. This measure of protection is a simple estimate of the extent to which the particular product has been affected by government intervention. He informed the participants that in the 1980s, rice enjoyed high protection. Nominal protection for rice has gradually been declined since early nineties and in recent years it is very nominal i.e., less than 2 percent. In 2000/01 and 2001/02 nominal protection for rice was negative. Similarly, for wheat, market protection was considerably high in the 1980s and early 1990s and then it declined and was negative during the period 2000/01 to 2003/04. Throughout the study period, nominal protection for sugar was found to be very high, he added. It varied between 41 percent (was in 2003/04) and 186.66 percent (was in 1987/88) during the period 1980/81 to 2003/04. Pulses, potato, tobacco, onion, banana also enjoyed high protection. In contrast, nominal protections for tea, jute and cotton were found to be negative, he maintained.

Realising the limitation of the measure of nominal protection (as it does not take into account of protection of inputs) the keynote speaker also provided the estimates of Effective Protection Coefficient (EPC) for a number of agricultural products. EPCs take into account customs duty and other protection measures in both the input and output markets, and thus, indicate the situation of market protection. Participants were informed that in 1989/90, effective protection in the rice market was high. Since 1990/91, rice market was not effectively protected; even in 1995/96 effective protection of rice was negative. Wheat was not effectively protected in the early 1980s but during the period 1984/85 to 1990/91 it was protected significantly and after that effective protection for wheat has gradually declined. Jute market was not protected in the eighties but protected in the nineties while sugar was effectively protected throughout the study period. Pulses, oilseeds, vegetables, fruit were also protected in effective sense. Cotton market was

protected in the late eighties but it has not been enjoying effective protection since 1994/95, he observed.

In order to assess the comparative advantage for a number of commodities, *Dr Deb* presented Domestic Resource Cost (DRC) both at export and import parity prices. Participants were informed that at export parity price, Bangladesh has comparative advantage in production of HYV T.Aman, jute, lentils, potato and vegetables (Brinjal, Barbati, Tomato, and Cabbage) indicating that Bangladesh can economically gain from production and export of these commodities. On the other hand, at import parity price, Bangladesh has comparative advantage in production of HYV Boro, HYV Aus, T. Aman HYV, lentils, potato and onion, indicating that Bangladeshi consumers will be benefited if these are produced locally rather than being imported from international market. Bangladesh does not have comparative advantage in production of wheat, mustard seeds, chilli (dry) and spices.

Changes in Cropping Pattern

Dr Deb analysed changes in area under different crops, changes in gross cropped area (GCA), net cropped area (NCA) and irrigated area at the national level² for the period: (i) early eighties (1980/81-1982/83), (ii) early nineties (1989/90-1991/92) and (iii) early 2000s (2001/02-2003/04). He added that Net Cropped Area (NCA) in Bangladesh decreased by 3.1 percent in the early nineties, compared to early eighties. It decreased by 2.4 percent in the early 2000s, compared to early nineties. Gross Cropped Area (GCA) increased by 6.6 percent between early eighties and early nineties due to increased intensity of cultivation while GCA increased by 2.0 percent in the early 2000s, compared to early nineties.

Dr Deb stated that irrigated area in Bangladesh had increased by 57 percent in early nineties, compared to early eighties and it increased further by 68 percent in the early 2000s compared to the early nineties. He observed that cropping intensity had increased from 154 percent in the early eighties to 181 percent in the early nineties and then it decreased to 177 percent in the early 2000s. Citing the results of an extensive farm level

² *Dr Deb* estimated both at national level, district level and eco-region level in the main study but considering the space limitation he reported only at national level in the keynote paper.

survey (Deb, 2003), he also informed the participants that cropping intensity decreased from 176 percent in 1987 to 163 percent in 2000. He added that seven cropping patterns exist in farmers' field in Bangladesh. These are (1) rice-fallow; (2) Rice-Rice; (3) Non rice; (4) Nonrice-Nonrice; (5) Rice-Nonrice (6) Rice-Rice-Nonrice; and (7) Rice-Nonrice-Nonrice. Participants were informed that share of all cropping patterns except two (Nonrice-Nonrice and Rice-Rice-Nonrice) have increased. Share of Nonrice-Nonrice cropping pattern was constant and share of Rice-Rice-Nonrice cropping pattern has declined. More importantly, share of triple cropping has decreased, he remarked.

Comparing area under different crops in the nineties with that in the eighties the keynote speaker mentioned that area increased under T.Aman rice, Boro rice, wheat, barley, maize, potato, fruits, sugarcane, tea, pulses, oilseeds, and vegetables (brinjal, tomato, cauliflower, cabbage, and radish). On the other hand, area under total rice, Aus rice, total Aman rice, B.Aman rice, sweet potato and tobacco decreased during the same period. Comparing area under different crops in the early 2000s with that in the early nineties, he observed that area increased under total rice, T.Aman rice, Boro rice, wheat, maize, potato, fruits, tea, vegetables (brinjal, tomato, cauliflower, cabbage and radish). He also observed that area under Aus rice, total Aman, B.Aman rice, barley, sweet potato, sugarcane, tobacco, pulses and oilseeds decreased during the same period. In the case of wheat, he observed that though in the early 2000s area under wheat was more than that in the early nineties but it has been gradually decreasing since 1999/00. Area and production of wheat was 27.2 percent and 34.3 percent lower in 2003/04 compared to that in 1999/00.

Based on the nature, extent and trend in agricultural trade liberalisation, the keynote paper has defined 1980/81-1991/92 as the pre-liberalisation period and 1992/93-2003/04 as the post liberalisation period. *Dr Deb* reported growth rates of area, production and yield of different crops for the pre-liberalisation and post liberalisation periods. He observed that growth rates of both area and production of Aus HYV, T.Aman HYV, Boro HYV, potato, tea, pulses, brinjals, tomato, cauliflower, cabbage and radish were significantly positive in the post liberalisation period although many of these crops had either negative or slow growth in the pre-liberalisation period. He added that growth rates of both area and production of Aus local, B.Aman, T.Aman local, Boro local, Barley and oilseeds have

decreased in the post liberalisation period. Sugarcane, pulses, and oilseeds experienced positive growth both in area and production in the pre-liberalisation period while in the post liberalisation period, growth rates of both area and production of those crops declined.

Impact of Trade Liberalisation on Cropping Patterns

After reporting changes in cropping pattern and trends in agricultural trade liberalisation, the keynote speaker tried to correlate these two. He recalled the earlier findings that Bangladesh has comparative advantage in production of HYV T.Aman, jute, lentils, potato, and vegetables (brinjal, Barbati, tomato and cabbage) at export parity prices while it has comparative advantage in production of HYV Boro, HYV Aus, T. Aman HYV, lentils, potato and onion at import parity prices. Both area and production of Aus HYV, T.Aman HYV, Boro HYV, potato, tea, pulses, brinjals, tomato, cauliflower, cabbage and radish have experienced significant positive growth in the post-liberalisation period although many of these crops either had negative or slow growth in the pre-liberalisation period. On the other hand, both area and production of Aus local, B.Aman, T.Aman local, Boro local, barley, sweet potato, sugarcane, tobacco, pulses and oilseeds have declined in the post-liberalisation period. He also recalled that in the pre-liberalisation period sugarcane, pulses and oilseeds experienced positive growth in both area and production. He observed that area under crops having comparative advantages has consistently increased during the post-liberalisation period. On the other hand, area under crops having no comparative advantage has been declined consistently. Thus, *Dr Deb* opined that liberalisation of agricultural trade has affected changes in cropping pattern in Bangladesh.

Emerging Changes and the Policy Concerns

Dr Deb mentioned a number of policies following his findings and asked the floor to discuss on the proposed policies.

Price Policy: Increase in area under high price-risk crops is associated with the increase in income-volatility for the farmers. Thus he urged for discussion on three alternative policies: price insurance, contract farming, and chain marketing with export facilities.

Export Promotion: To promote crops which have comparative advantage and those with export potentials (potato, and vegetables such as tomato, cabbage, cauliflower, raddish), *Dr Deb* requested to discuss two alternative policies: (1) revisiting fiscal policies e.g., reduce operative tariff on imports of diesel or provide subsidy to keep cost of production low, and (2) increase domestic support (R&D, subsidy, seed delivery) to increase competitiveness in crop production.

Sugarcane: Observing that sugarcane area is declining rapidly in response to liberalisation of sugar market and Bangladesh is likely to increasingly dependant on imported sugar in future; *Dr Deb* suggested discussing whether sugar industry can be encouraged to process imported raw sugar.

Research and Extension Policy: *Dr Deb* also requested the participants to focus on R&D policy required to meet the needs of the new cropping patterns and underscored the need to develop effective public-private-NGO partnership for technology generation and dissemination to increase the competitiveness and comparative advantage.

Changing Cropping Patterns in the Context of WTO Negotiations: He added that the on-going negotiations on the AoA are important for Bangladesh because reduction in high tariff and tariff escalation under the on-going negotiations will reduce preference margin for Bangladesh under GSPs. But it will open export opportunities for items like potato and vegetables. Thus, he mentioned that to materialise export opportunities for items with export potentials (potato and vegetables) Bangladesh will have to increase supply side capacity and must strengthen trade related capacity building in the area of SPS-TBT compliance.

4. Open Floor Discussion

Following the presentation by Dr Uttam Kumar Deb, *Mr M Syeduzzaman*, chair of the dialogue, made some comments on the presentation and then opened the floor for discussion. *Mr Syeduzzaman* noted that the paper has correctly identified factors behind the liberalisation of agricultural sector but in addition to those shown by Dr Deb, there are two independent studies commissioned by Bangladesh government, which are helpful to

understand the liberalisation in agricultural trade in Bangladesh. One study was conducted by IFPRI. IFPRI was indicated to conduct the study and to make recommendations on the public food distribution and procurement system, food prices and fertiliser subsidies. The second study known as agricultural sectoral review was conducted after the 1987 flood commissioned by the Bangladesh government and funded by United Nations Development Programme (UNDP). The paper made extensive recommendations about price reform, tariff reforms on agricultural inputs, system of distribution and institutional method of delivering.

Mr Syeduzzaman remarked that *Dr Deb* has raised many policy concerns and the presentation is very informative for the discussants to identify policy recommendations. In addition to questions raised by *Dr Deb*, he also added a number of questions for open floor discussion: (1) How the changes in prices have affected the small farmers? (2) How the changes in prices have affected the producers and consumers? (3) How price fluctuations can be minimized for the benefit of both consumers and producers? (4) Whether land allocated to sugarcane can be reallocated to alternative crops in which Bangladesh enjoys comparative advantage?

Various issues highlighted during the discussion session were related to: impact of trade liberalisation, subsidy and other assistance to agriculture, achievement of self sufficiency, sugarcane/sugar, and profitability and volatility in agriculture and export potentials of agricultural products. There were also discussions on WTO negotiation on agriculture, agricultural research and development strategy, and other policy concerns.

Trade Liberalisation Period

Dr Jahangir Alam disagreed with *Dr Deb*'s observation that 1980/81-1991/92 is the pre liberalisation period and 1992/93-2003/04 is the post liberalisation period. He felt that trade liberalisation started in 1980s, then became momentum in 1990s and completed in 2000s. Thus, he opined that 1980s should be the initial period of reform, 1990s should be reform period and 2000s should be post reform period.

Dr Mohammad Abdur Razzaque mentioned that trade liberalisation started in Bangladesh agriculture before formation of World Trade Organization (WTO) and particularly when Structural Adjustment Policy (SAP) and Enhanced Structural Adjustment Policy (ESAP) were initiated. As a result of trade liberalisation, a number of policy changes have taken place like retract of quota system, retrench in tariff rates.

As regards the trade liberalisation period, *Dr Debapriya Bhattacharya* mentioned that trade liberalisation started in Bangladesh following the Structural Adjustment Policy (SAP) and the Enhanced Structural Adjustment Policy (ESAP). Therefore, the period chosen by the keynote speaker reflects the real world situation.

Impact of Trade Liberalisation

While commenting on the impact of agricultural trade liberalisation, the discussants focused on impact of trade liberalisation on cropping patterns as well as on foodgrains production and trade. *Mr Sayed Alamgir Farrouk Chowdhury*, Former Secretary, said that during the period 1991-1995 Bangladesh's average import of foodgrains was 1.5 million tons per year while during the last 6 years it was 2.4 million tons. He observed that 2.4 million tons imported foodgrains (which is 9.23 percent of 26 million tons domestic production) benefited the consumers by retaining balance between food demand and supply. He suggested that we should take into account what would happen if that amount of foodgrains was not imported.

Dr Jahangir Alam, Member Director (Agril. economics) of Bangladesh Agriculture Research Council (BARC), drew attention to the role of trade liberalisation on the changes in cropping pattern. He argued that there can be some other factors other than trade liberalisation, which could have an impact on cropping patterns. The first one is the technological change. He added that if there is technological change, the DRC ratio is likely to change. Citing the example of HYV Boro, and potato he said that in these sectors technological innovation was responsible for having comparative advantages. *Dr Alam* opined that hypothetically, trade liberalisation is likely to intensify rather than to diversify. In that case we would like to know aggregate diversity ratio to observe whether it is going on the positive side or on the negative side. He went on by stating that the crop sector

diversity has increased in the pre-liberalisation period, slowed down in the liberalisation period and stagnated in the post liberalisation period. *Dr Alam* added that due to liberalisation, prices of agricultural inputs have gone up and profitability, on the part of producers, has come down. In response to *Dr Alam's* comment, *Dr Uttam Deb* clarified that the technology factor was duly addressed in the study particularly through the regressions.

Mr Syed Jamaluddin, Independent Consultant and Former Secretary General of FBCCI, opined that trade liberalisation in Bangladesh has taken place from the pressure of IMF and World Bank but under the rules of WTO, Bangladesh is not required to reduce any support to agriculture implying that Bangladesh has liberalized its trade unilaterally. *Mr Jamaluddin* questioned *Dr Deb* if it is not required in the WTO rule then why Bangladesh liberalized its agriculture. Commenting on *Dr Deb's* findings that import of some items has increased substantially, he argued that it implies that Bangladesh has liberalized its agriculture and thus, given market access to the rich countries. He continued by stating that, now, our interests should be on how much market access developed countries like Korea and Japan will give to Bangladesh where the rate of protection on agricultural commodities is very high.

According to *Dr Gul Hossain*, General Manager of East West Seed (Bangladesh Ltd.) liberalisation of input markets like fertiliser, irrigation, seeds and other inputs has significant positive impact on the production of foodgrains and thus Bangladesh has achieved self-sufficiency in foodgrains production. He observed that since the British period, for the first time, Bangladesh has achieved food self sufficiency. This food self sufficiency has been attained in the face of declining arable land and declining share of national budget in agriculture. Indicating this success as a historical achievement, he noted that much of this credit goes to our farmers and we should reward them. Referring to his own calculation *Dr Hossain* informed the participants that with the same amount of land 26 people are fed in USA, 400 people in India, 600 people in China and 2151 people in Bangladesh. He added that Bangladesh agriculture sector has performed better and also has been transformed to commercial agriculture.

Dr Sajjad Zohir, Senior Research Fellow of the Bangladesh Institute of Development Studies (BIDS) said that in the 1980s liberalisation of input markets, particularly fertiliser market was the main reason behind the success of Bangladesh agriculture sector. He argued that the analysis of the changes in cropping pattern could be made elaborately in the context of Bangladesh. While commenting on the Nominal Protection Coefficient (NPC), *Dr Zohir* said that when price in the domestic market increases for any reason other than trade liberalisation, NPC is likely to change and in such a situation one may wrongly interpret the change of NPC as the effect of protection. He also suggested that while estimating the impact of trade liberalisation on cropping pattern, one must separate impact of trade liberalisation from other factors, as those factors may be responsible for changes in cropping pattern. As a clarification of *Dr Zohir's* argument on separating the impact of trade liberalisation on cropping pattern from other factors *Dr Deb* said that he presented a section of the full study “Trade liberalisation and Bangladesh Agriculture: Impacts on Cropping Pattern, Resource Use Efficiency and Effective Incentives”. One of the other sections of the study contains such an effort raised by *Dr Zohir*.

Mr S M Shah Alam, Author & Director, RDB, stated that liberalisation may have both negative and positive effects but we should accept the positive one. He emphasised on the adoption of more High Yielding Varieties (HYV) in agriculture to boost up agricultural production.

As regards the impact of tariff reforms, *Dr Mostafa Abid Khan*, Deputy Chief, Bangladesh Tariff Commission, stated that tariff reform has no impact on import of foodgrains rather import completely depends on the gap between domestic demand and supply. There is also no relation between international price and domestic price, he added. *Dr Khan* emphasised on identifying the factors that determine prices of products in the domestic market. If it could be determined it would be easier to identify whether trade liberalisation has impact (if any) on agriculture. Referring to the studies of Tariff Commission, he also opined that liberalisation may have no effect on agriculture as well as on cropping patterns in Bangladesh.

Joining the discussion on impact of trade liberalisation, *Mr Siddiqur Rahman Choudhury*, Secretary of Commerce, agreed with *Dr Deb*'s observation that Bangladesh agriculture is no longer subsistence farming and trade liberalisation has an impact on the changes in cropping patterns in Bangladesh.

Regarding the impact of agricultural trade liberalisation *Dr Mohammad Abdur Razzaque*, Member of Parliament (MP), said that as a result of reduction in tariff as well as of shifting import to private sector, there was significant effect on the import of shallow tube-wells (STWs) which boosted up irrigated area. He observed that import of fertiliser and seeds were also shifted to private sector but it did not have enough positive impact on Bangladesh agriculture sector. He rather opined that it could be better if import of seeds and fertiliser was under BADC.

Dr Razzaque underscored the need for privatization but he stressed on a number of issues along with privatization, such as facilitator role played by the government, build up institutional capacity and consultation with the experts in relevant areas. He mentioned that as a result of agricultural trade liberalisation import of agricultural products increased substantially but there was little effect on exports. Import of agricultural products increased at the rate of 9 percent during the period 1980/81 to 2001/02 but export which is mainly comprised of shrimps rather than crops increased only at rate of 2 percent during the same period. He went on by stating that foreign products have already captured Bangladesh market and thus, we should decide to what extent our economy should be liberalized.

Dr Debapriya Bhattacharya, Executive Director, CPD, agreed with the arguments of some of the discussants that trade liberalisation is not the only factor behind the success in agriculture. Other factors like technological change, public support mechanism etc also attributed to the success in Bangladesh agriculture along with the liberalisation. *Dr Bhattacharya* noted that liberalisation in input markets like markets for seeds, fertiliser etc. was more successful in Bangladesh. The CPD Executive Director added that which sector of agriculture to be prioritized may not be decided on the basis micro consideration like comparative advantage or price of that sector. In this regard, he emphasised more on other issues like employment, food security, poverty, and equity consideration.

Subsidy and other Assistance to Agriculture

Mr Sayed Alamgir Farrouk Chowdhury said that Bangladesh has made no commitment at the WTO on export subsidy, implying that it can not give export subsidy but it can give subsidy in agriculture under AMS. He regretted that although Bangladesh can give subsidy in agriculture by 10 percent of agricultural GDP, it is giving only less than one percent but developed countries are giving huge subsidies in their agriculture. He also opined that subsidy of Tk. 300 crore to agriculture was not properly distributed in the last year.

Supporting *Mr Chowdhury's* argument *Dr Gul Hossain* opined that Bangladesh should boost up agricultural subsidies to enhance competitiveness of the farmers. Developed countries are giving huge subsidies in agricultural inputs, which lower the cost of production faced by the farmers. He argued that irrigation cost for Bangladesh agriculture is the highest in the world implying that agricultural products are losing their competitiveness in the world market. He went on by saying that without addressing the problem of high cost of production, only talking about trade liberalisation will not help much.

Joining the discussion on agricultural subsidy, *Professor M A Sattar Mandal* mentioned that it is very difficult to properly distribute subsidies on diesel or on other inputs. Thus, he suggested that rather than giving subsidy in inputs, the current procurement programme in paddy initiated by the government as a price support policy can be continued and expanded to other crops.

Dr Mostafa Abid Khan mentioned that subsidy may not have significant effect on domestic production. He observed that during the last few years subsidy in agriculture was low, but no significant effect on production was observed. According to him it is not important matter that whether subsidies are given in agriculture or not.

Joining the discussion on agricultural subsidy, *Mr Hasanul Haq Inu*, President of Jatiyo Samajtantrik Dal, said that government must pay subsidy in agriculture either in input or in output. He emphasised on giving subsidy in diesel and urged the government to take necessary steps in this regard. *Mr Inu* suggested that government should provide diesel to

the farmers at subsidized price by retaining high prices for diesel used in other sectors. Referring to his own calculation he further added that it will require about Tk. 200 to Tk. 230 crore to give 30 percent diesel subsidy for agricultural usage. He also added that government should allocate money in the national budget for making agro-processing industry in the rural area.

On the need for procurement support and subsidy in agriculture, *Mr Siddiquir Rahman Choudhury* said that government has no problem of money and willing to spend for procurement and subsidy but the problem is how to implement it. Citing the example of Vietnam, he added that government in Vietnam pays the farmers for procurement in advance. He regretted that if Bangladesh government gives money for procurement, there is less possibility to get back the money as there is no farmers' association. He mentioned that subsidy has not been appropriately allocated to them who really need it. He urged that government, NGOs and others should come forward to form Farmers Association.

Dr Mohammad Abdur Razzaque also placed his opinion to increase subsidy in agriculture. He argued that subsidy is not being properly distributed but we should not stop here. We need to develop best strategy so that subsidy reaches to the farmers. He noted that IMF and World Bank will not support giving subsidy in agriculture but we have to decide ourself and in this regard we should consult with our experts and economists. Citing the example of Japan he mentioned the Japanese government pays 1.4 percent of GDP as subsidy to agriculture but share of agriculture to GDP is only 1.2 percent. The reason behind giving subsidy in agriculture more than the value of agricultural output is to attain self-sufficiency in foodgrains production. He mentioned that subsidy is critically important for achieving self sufficiency in food production, commercialization of agriculture and price stability.

Dr Debapriya Bhattacharya mentioned that there is absence of adequate institution or organisation to absorb the public policy. He stressed on the need for formation of modern farmers association in this regard. If this issue is not addressed properly, there will be pilferage and misuse of subsidy.

Achievement of Self Sufficiency

Mr Hasanul Haq Inu put much emphasis on the attainment of food self-sufficiency. He observed that Bangladesh is still an agricultural country where industrial expansion is yet to be achieved and thus, it will be difficult for Bangladesh to feed its people by importing food as do the industrial countries. He emphasised much on government intervention in this regard. As a result of agricultural trade liberalisation, Bangladesh has imported foodgrains and overcome the problem of food shortage as well as escaped from hunger but it should no longer depend on imported foodgrains for security consideration in the future.

Mr Siddiqur Rahman Choudhury also talked on the issue of achievement of self-sufficiency in agriculture. In his view, self-reliance is more important than attaining self-sufficiency in all sectors. He clarified that if we have surplus in one sector, we can import other products. However, he felt that attaining self-sufficiency in rice and wheat production is needed.

Joining the discussion on self-sufficiency in food production, *Dr Razzaque* mentioned that food security means food for all and the food which is nutritious. He observed that Bangladesh has attained self-sufficiency in foodgrains production but remained deficit in food nutrition which can be achieved by diversifying the agriculture. According to him, Bangladesh agriculture is the most diversified in the world where more than 50 crops are produced but there remains shortage in production.

Sugarcane/Sugar

Dr Deb's observation that Bangladesh does not have comparative advantage in sugarcane production provoked considerable discussion. *Dr Jahangir Alam* stated that although Bangladesh does not have comparative advantage in sugarcane production, we should not abandon this sector. He suggested that with the increase in investment in sugar/sugarcane research and development, this sector could be made more competitive.

Joining the discussion on sugarcane and sugar *Mr A F M Fakhru Islam Munshi*, President, Ayurvedia Pharmacy Ltd and Agribusiness Development organisation of Bangladesh (ADOB), emphasised on lowering tariff on sugar for the well-being of consumers. He

maintained that high price of sugar due to high tariff on it, sugar-based industry has lost its competitiveness and foreign products have already captured the domestic market. He went on by stating that one can observe such a situation in real ground that ‘Malaysian Porotas’ are being sold in Bangladesh. He observed that during the last couple of years, sugarcane sector has failed to attain efficiency; price of sugar is increasing whereas its production is falling. He, thus, expressed doubt whether this sector could be strengthened or not.

Joining with *Mr Munshi* on the discussion of sugarcane *Mr Siddiqur Rahman Choudhury* also expressed his doubt whether sugarcane sector could be improved by further investing in this sector. He added that probably Bangladesh’s soil condition is not suitable to make it competitive.

As regards the sugarcane/sugar production situation, *Dr Mohammad Abdur Razzaque* observed that sugarcane grows mainly in less irrigated, less fertile, less rainfall area where other crops do not grow. Thus Bangladesh should not abandon the production of sugarcane. Commenting on *Mr A F M Fakhru Islam Munshi’s* argument that increasing price of sugar as a result of high tariff rate on it affects Bangladesh’s agro based industry and in turn helping foreign producers to capture the domestic market, *Dr Razzaque* argued that sugar-based industry could be given bonded warehouse such that they could compete. He mentioned that we should take into account how much subsidies are given to sugar which is exported to Bangladesh at lower price.

Profitability and Volatility in Agriculture, and Farmers’ Welfare

Most of the discussants agreed with *Dr Deb’s* observation that Bangladesh agriculture has succeeded but questions were raised by some discussants that whether the farmers have benefited from the success in agriculture. *Professor M A Sattar Mandal* mentioned that according to the *Dr Deb’s* findings that crop area are increasing in those crops which enjoy comparative advantages and trade liberalisation plays a role to the changes in cropping patterns. He added that one of the main problems faced by the small farmers of Bangladesh is the low profitability. Small-holder dominated agriculture in Bangladesh shares about sixty percent of total agriculture output.

Professor Mandal mentioned that according to *Dr Deb's* finding, at the peak harvest season, crop having most comparative advantage is Boro. He added that if price of Boro rice is Tk. 350 per mound, then gross margin will be covered, roughly retaining some profit margin. He observed that during the last week, price of Boro rice started to come down in Jamalpur, Tangail and major parts of Mymensingh (where he visited) to Tk. 250 or Tk. 270 per mound although peak harvesting season has not yet started. Thus, he argued that the comparative advantage should be related with these small farmers. *Professor Mandal* urged CPD or any other organisation to conduct study in this regard.

Mr Hasanul Haq Inu said that about 70/80 percent population of Bangladesh live in villages and thus, success in agriculture is critically important for the wellbeing of the rural people. He regretted that small and marginal farmers are now out of market. In this regard, he blamed the government (both the present and past government) for their lack of taking proper initiatives. He underscored government's assistance to form marketing cooperatives such that small and marginal farmers get proper market price for their products.

While talking about profitability, *Mr Siddiqur Rahman Choudhury* said that profitability in agriculture is very low particularly for small farmers. He added that changes in prices of agricultural products have dual effects in the sense that if price increases producers are benefited but consumers are worse off and vice versa. To address this problem, *Mr Chowdhury* supported *Mr Inu's* suggestion that there should be marketing co-operative among the farmers.

Dr Debapriya Bhattacharya said that agriculture has succeeded in Bangladesh but farmers have not benefited accordingly from the success in agriculture. Commenting on *Dr Deb's* observation that for rice there is negative protection, he noted that this implies that farmers are exploiting themselves. He added that such a situation in agriculture may not sustain in the long run and it necessitates proper policy supports like either protection in output side or assistance in the input side to make it sustainable. *Dr Bhattacharya* added that volatility in prices of vegetables is associated with volatility in its production. This volatility in agriculture has broader implication on poverty reduction, employment, future prospects

etc. In order to lower the volatility in vegetable production, he supported *Dr Deb's* policy suggestions that there might be price insurance or contract farming or chain marketing with export facilities. He emphasised on the initiation of proper public policy by the government in this regard.

Export Potentials of Agricultural Products

Following *Dr Deb's* presentation that Bangladesh has comparative advantage in a number of agricultural products, *Mr Syed Jamaluddin* questioned *Dr Deb* that if we have comparative advantage, then why Bangladesh is not exporting those items. He noted that jute is sold in international market at price lower than cost of production. In this regard, *Dr Deb* clarified that comparative advantage is the necessary condition for export but not the sufficient condition. For realisation of export potentials, we need to develop our infrastructure, business linkage, and other support in this regard.

Joining the discussion on export potentials of agricultural products *Mr A F M Fakhrul Islam Munshi* said that one of the main barriers of exports of agricultural products is the Cargo problem. He added that government should take initiative to provide cargo facilities to the agro product exporters.

Mr Siddiqur Rahman Choudhury informed the participants that export of agricultural products increased from US\$ 41 million in FY 2004 to US\$ 56 million in July-March, FY2005 which implies that Bangladesh has the export potentials for agricultural products. He argued that bottlenecks behind the low export of agricultural products are not related to WTO rule rather these are our internal problems like cargo and packaging problems. He mentioned that recently some improvements are achieved in this regard and as a result export of agricultural products has surged up.

Commenting on export of agricultural products, *Dr Mohammad Abdur Razzaque* said that increase in exports in FY 2005 was possible mainly for two reasons: (1) present government has given 30 percent cash incentives and, (2) last government allocated some money for agro processing industry and that money has been spent in this year. As regards cargo problem for the export of agricultural products, *Dr Razzaque* questioned why *Biman*

will give the cargo facilities at cheap rate. He remarked that agriculture ministry should give subsidy to give cargo facilities to the exporters at cheap rate.

Dr Bhattacharya raised a critical issue as regards the export of agricultural commodities. He suggested that agricultural export items must be tested in modern laboratory to satisfy the rule of *standard and compliance*. He mentioned that government should play a role in this regard; private sector can come forward set up modern laboratory; and exporters' association should strongly monitor the quality situation.

WTO Negotiation on Agriculture

Mr Sayed Alamgir Farrouk Chowdhury raised the issue of building up bargaining capacity at the WTO negotiation. He added that at present the important issue is the advalorem equivalence of tariff cuts. Bangladeshi delegates should be aware about the advalorem equivalence while negotiating at the WTO and how this advalorem equivalence will affect Bangladesh. He mentioned that two ministerial conferences failed because of Agriculture and Non-Agriculture Market Access (NAMA). As an LDC, Bangladesh is not required to take any commitment except bound tariff rates which is 200% in agriculture but Bangladesh is affected by the policies taken by other countries. Thus, Bangladesh should observe carefully whatever policies are taken by the developed countries, he opined.

Dr Sajjad Zohir said that while negotiating at the WTO Bangladeshi delegates can not play the proactive roles in addressing the concerns of Bangladesh. Recalling the bound tariff rate (200%) in agriculture, he argued that it was proposed at the WTO without any priori information. He emphasised that research should come up with the relevant policies which can be placed in the WTO negotiations.

Agricultural Research and Development Strategy

Mr A F M Fakhru Islam Munshi argued that government sector lacks adequate research. Bangladesh has liberalized its economy but agriculture and commerce ministry have not conducted any study to identify the effect of trade liberalisation. He regretted that we have a sugarcane research institute but it has not been able to give any output.

Dr Nazira Quraishi Kamal, Director (Research), Bangladesh Rice Research Institute (BRRI), argued that BRRI is continuing its efforts in research and till now 44 varieties have been disseminated and a number of varieties are in the pipeline.

Commenting on *Mr A F M Fakhru Islam Munshi's* observation that ministry of commerce lacks adequate research *Mr Siddiqur Rahman Choudhury* said that a number of studies has been conducted in the pre-MFA phase out. He underscored the need for research in agriculture and noted that if any research is successful in Bangladesh then it is agricultural research.

Other Policy Concerns

Dr Sajjad Zohir stated that whenever we talk about agricultural trade liberalisation, beyond India's policies there is nothing. He stressed on the need for conducting research in this regard such that Bangladesh's agricultural policy may follow the Indian agriculture policy.

Mr Hasanul Haq Inu supported *Dr Zohir's* argument that agricultural policies in Bangladesh should follow the Indian Agricultural policies. Bangladesh fails to maintain balance with its neighbouring country India as regards the liberalisation policy and extracting benefits from the liberalisation. He emphasised on addressing this issue more critically.

5. Speech by the Chief Guest

Mirza Fakhru Islam Alamgir, State Minister for Agriculture, thanked *Dr Deb* for his keynote presentation on *Impact of Agricultural Trade Liberalisation on Cropping Pattern in Bangladesh*. He mentioned that it is very important work on a technical issue. He added that not much effort has been given to study the impact of trade liberalisation on cropping pattern in Bangladesh.

He informed the participants that agriculture was brought under the purview of General Agreement on Tariffs and Trade (GATT) in 1994. For implementation of rules agreed in the Uruguay Round of Multilateral Trade Negotiation, the GATT Secretariat has been

transformed into the WTO in January, 1995. He added that although Uruguay Round Agreement on Agriculture (AoA) calls for minimising physical control on agricultural trade, reductions in tariff, domestic support and export subsidies, developed countries like USA, European Countries, Japan etc. continue to provide domestic as well as export support while WTO restrains others to do the same.

Citing the example of USA, he noted that US Farm Bill signed in May, 2002, provides US\$ 135 billion in new subsidies to next 10 years. Rice farmers receive US\$ 75000 per household from the government in the form of direct payment. Europe, Japan and even India provide a huge subsidy to their agriculture, he added.

Mr Alamgir added that Bangladesh is facing the challenge of ensuring food security to its population with decreasing arable land while poverty reduction is one of its millennium goals. He mentioned that under the WTO rules Bangladesh can provide 10 percent of the value of agricultural output as subsidy and under the provision of export subsidies. Bangladesh is exempted to reduce domestic support and export subsidy. He regretted that in the previous years Bangladesh provided very little support to its agriculture. He assured the participants that realising this situation, present government has undertaken measures to provide domestic as well as export support to agriculture. He mentioned the following specific measures: (1) Interest on agriculture loan up to Tk. 5,000 has been exempted; (2) Interest rate on agriculture has been lowered to 8 percent from 14 percent; (3) 20 percent rebate for electricity bills; (4) 30 percent cash incentives for export; (5) 25 percent subsidy for imported fertilisers; (6) Subsidy for urea; (7) No duties on machinery for agriculture production like irrigation pumps, power tillers, fertilisers, pesticides, seeds, and cold storage; and (8) Creation of infrastructures, like Dams, deep tube wells, canals for irrigation, roads & markets.

The State Minister for Agriculture noted that compared to other developing countries these measures are not enough and underscored the need to provide more support to agriculture to make it more competitive. He continued by saying that without formulating policies very carefully liberalisation will have far reaching impact on production, consumer welfare, government revenue, the balance of trade and the rural employment situation. He

further added that due to some measures taken by government, we have found some changes in cropping pattern. Rice production has increased significantly. Because of import of hybrid seed of maize & vegetables production has increased considerably. He also mentioned that we observe changes in other sectors of agriculture like poultry, dairy and fisheries where government provided support as well. He also emphasised on giving subsidy in diesel for agricultural use.

Supporting *Dr Razzaque's* argument that although Bangladesh does not have comparative advantage in sugarcane, it should not abandon sugarcane sector, *Mr Alamgir* said that since large number of people are employed in sugar industry and sugarcane production, abandon of this sector will have broader implication on poverty reduction and employment.

Supporting *Dr Deb's* observation that trade liberalisation has an impact on cropping pattern in Bangladesh, he stated that it is obvious that agricultural trade liberalisation has influenced our cropping pattern and crops which have comparative advantages, are gradually replacing those crops, which do not have comparative advantage. In the previous years we have seen that maize, potato, vegetable and water melons have gained whereas jute, wheat, sugar cane, oil seed have gone down. In fact rice continues to dominate in our agriculture, he remarked.

Supporting the argument of some discussants that farmers have not benefited from the success in agriculture, he said that businessmen have benefited more from this success. As a result of trade liberalisation significant impact was on input markets which, in turn, had positive impact on the production of agricultural commodities, he maintained.

Mr Alamgir remarked that in the context of these changes and reality of trade liberalisation, WTO rules and free market economy, we will have to re-assess the scenario and formulate policies which will enable us to increase our capacity to compete more efficiently in the global market as well as in the domestic market. He said that as agriculture is the mainstay of Bangladesh we shall have to strengthen our research,

extensions and marketing systems radically. We should provide more support to the farmers to increase the production of those crops which enjoys comparative advantages,.

He stated that Bangladesh agriculture has yet to be transformed fully to commercial agriculture. In the past, achievement of self-sufficiency was given more priority in agriculture policy formulation but now, our priority is on the transformation of subsistence agriculture to commercial agriculture. He added that we have done agricultural sectoral review and with this we are now thinking of how to reorganize the agricultural sector.

Mr Alamgir finally noted that the challenges of ensuring food security and halving poverty by 2015 can only be achieved if we address these concerns more efficiently.

6. Concluding Remarks by the Chairperson

Mr M Syeduzzaman, the Chair, thanked everyone for their active participation at the dialogue and valuable inputs. He, then, declared formal closing of the dialogue.

List of Participants

(In Alphabetical Order)

Name	Designation
<i>Ms Ferdowsi Alam</i>	Associate Programme Officer, Bangladesh Resource Centre for Indigenous Knowledge (BARCIK)
<i>Dr. Jahangir Alam</i>	Member Director (Agri-economics), Bangladesh Agriculture Research Council (BARC)
<i>Mr. Qazi Khaze Alam</i>	Director, Natural Resources, PROSHIKA
<i>Mr S M Shah Alam</i>	Director, Rural Development Bangladesh
<i>Mr Mirza Fakhurul Islam Alamgir, MP</i>	Hon'ble Minister of State, Ministry of Agriculture, Government of Bangladesh
<i>Advocate Md Rahmat Ali</i>	Member of Pariliment
<i>Mr. Nurul Anwar</i>	General Secretary, Farm Sramik Federation (BAFLF)
<i>Dr M A Baset</i>	Senior Scientific Officer, Agricultural Economics Division, BARI
<i>Dr Debapriya Bhattacharya</i>	Executive Director, CPD
<i>Mr Afzal Hossain Bhuiyan</i>	Programme Support Coordinator, Ecological Agricultural Programme, PROSHIKA
<i>Mr Tapash Kumar Biswas</i>	Fellow, IRRI (EC-Foshol)
<i>Mr Naveed A Choudhury</i>	Operation Analyst, World Bank
<i>Mr Sayed Alamgir Farrouk Chowdhury</i>	Former Secretary, Government of Bangladesh
<i>Mr Momtaz Faruki Chowdhury</i>	Chief Operating and Business, Development Officer, Agro-based Technology Development Project-II (ATDP-II)
<i>Mr Siddiqur Rahman Choudhury</i>	Secretary, Ministry of Commerce
<i>Ms Jenni Christensen</i>	Third Secretary, Delegation of European Commission
<i>Dr Subash Dasgupta</i>	Assistant Representative (Programme), Food and Agriculture Organization (FAO)
<i>Mr Imam Gazzali</i>	Trainer , Bangladesh Agricultural Farm Labour Federation (BAFLF)
<i>Dr A K Enamul Haque</i>	Department of Economics, East West University
<i>Mr Shah Md Helaluddin</i>	Assistant Secretary, Ministry of Agriculture
<i>Mr Ayub Hossain</i>	Deputy Director, SAMATA
<i>Dr Gul Hossain</i>	General Manager, East West Seed (Bangladesh Ltd.)
<i>Professor Mofazzal Hossain</i>	Department of Horticulture, Bangabondhu Sheikh Mujibur Rahaman Agricultural University (BSMRAU)
<i>Mr Md Zahid Hossain</i>	Director General, Ministry of Food
<i>Mr Hasanul Haq Inu</i>	President, Jatiyo Samajtantrik Dal
<i>Dr S M Fakhurul Islam</i>	Associate Professor & Head, Department of Agricultural Economics, Bongobondhu Sheikh Mujibur Rahman Agricultural University (BSMRAU),
<i>Mr Haziqul Islam</i>	Additional Director (Policy), FPMU, Ministry of Food and Disaster Management
<i>Mr M Rafiqul Islam</i>	SSO, Agricultural Economics Division, BRRI
<i>Mr Syed Jamaluddin</i>	Independent Consultant, Former Secretary General, The Federation of Bangladesh Chambers of Commerce and Industry (FBCCI)
<i>Mr A S M Juel</i>	Research Officer, Bangladesh Centre for Advanced Studies (BCAS)
<i>Dr Nazira Quraishi Kamal</i>	Director (Research), Bangladesh Rice Research Institute (BRRI)
<i>Mr. M Fazlul Karim</i>	Deputy Director, Dhaka Chamber of Commerce & Industry

Name	Designation
<i>Dr Mostafa Abid Khan</i>	(DCCI) Deputy Chief, Bangladesh Tariff Commission
<i>Dr Noel P Magor</i>	Manager, International Rice, Research Institute (IRRI)
<i>Ms Shaila Mahmud</i>	Research Officer, Bangladesh Centre for Advanced Studies (BCAS)
<i>Professor M A Sattar Mandal</i>	Department of Agricultural Economics, Bangladesh Agricultural University
<i>Ms Anne Marchal</i>	First Secretary, Delegation of European Commission
<i>Mr Noorul Islam Miah</i>	Livestock Scientific Officer, Department of Livestock Services
<i>Mr A F M Fakhrul Islam Munshi</i>	President, Ayurvedia Pharmacy Ltd and Agribusiness Development Organization of Bangladesh (ADOB)
<i>Dr B A A Mustafi</i>	CSO & Head, Agricultural Economics Division, BRRI
<i>Dr Firdousi Nahar</i>	Assistant Professor, Department of Economics, University of Dhaka
<i>Mr S B Naseem</i>	Consultant, Food and Agricultural Organisation (FAO)
<i>Ms Rehmuna Nurain</i>	Documentation Officer, Bangladesh Environmental Lawyers Association (BELA)
<i>Professor Mustafizur Rahman</i>	Former Vice Chancellor, Bangladesh Agricultural University and Dean, Arts and Social Sciences, UDA
<i>Dr Abdur Razzaque</i>	Member Director (Crops), Bangladesh Agricultural Research Council (BARC)
<i>Dr Mohammad Abdur Razzaque</i>	Member of Parliament
<i>Dr Debi Narayan Rudra Paul</i>	CSO and Head, Agricultural Statistics Division, Bangladesh Rice Research Institute (BRRI)
<i>Dr Arun Kumar Saha</i>	Project Implementation Officer, Asian Development Bank, Bangladesh Resident Mission
<i>Mr Ahmad Salahuddin</i>	Manager, Coordination and Capacity Building Research Programme, International Rice Research Institute (IRRI),
<i>Mr Johney Montu Sarker</i>	Char livelihood Programme Coordinator, Department for International Development (DFID)
<i>Mr M Syeduzzaman</i>	Member, CPD Board of Trustees and Chairman, Bank Asia
<i>Mr Ruhul Amin Talukder</i>	Additional Director, Food Planning and Monitoring Unit (MOFDM), Ministry of Food & Disaster Management
<i>Mr Md Zahiruddin Talukder</i>	General Manager (Seed Distribution), Bangladesh Agriculture Development Corporation (BADC)
<i>Mr Md Shafi Uddin</i>	Former Secretary, and Adviser, Dhaka Ahsania Mission
<i>Mr Mahfuz Ullah</i>	Chairman, IUCN National Committee and Secretary General, CFSD
<i>Dr Sajjad Zohir</i>	Senior Research Fellow, Bangladesh Institute of Development Studies (BIDS)

List of Journalists
(In Alphabetical Order)

Name	Designation
<i>Ms Ferdous Abbey</i>	Staff Correspondent, Channel I
<i>Mr Mominul Haque Azad</i>	Staff Reporter, The Daily Ajker Kagoj
<i>Mr Salahuddin Bablu</i>	Senior Reporter, The Daily Inqilab
<i>Mr Kabir Bhuiyan</i>	Reporter, The Daily News Today
<i>Mr N Karim Bhuyan</i>	Staff Reporter, BSS
<i>Mr A Elias</i>	Staff Reporter, The Daily Bangladesh Observer
<i>Mr Badrul Hasan</i>	Reporter, Bangladesh Television
<i>Mr Delowar Hassan</i>	Staff Reporter, The Daily Dinkal
<i>Mr Akbar Hossain</i>	Staff Reporter, The Daily Star
<i>Mr Kawsar Iqbal</i>	Staff Reporter, The Daily Shamachar
<i>Mr M Iqbal</i>	The Daily Desh Bangla
<i>Mr Md Nurul Islam</i>	Staff Reporter, The Daily Bangladesh Observer
<i>Ms Rozina Islam</i>	Staff Reporter, The Sangbad
<i>Mr Safiqul Islam</i>	Staff Reporter, The Daily Jugantor
<i>Mr S M Jahangir</i>	Staff Reporter, The Financial Express
<i>Mr M A Baten Joy</i>	Staff Reporter, The Daily Naya Diganta
<i>Mr Asjadul Kibria</i>	Senior Staff Correspondent, New Age
<i>Mr Md Kamruzzaman</i>	Staff Reporter, The Daily Dinkal
<i>Mr Ab Al Mamun</i>	Reporter, News Network of Bangladesh (NNB)
<i>Mr Neaz Morshed</i>	Staff Reporter, The Daily Samakal
<i>Mr Shamsuzzaman Nipu</i>	Staff Reporter, The Daily Naya Diganta
<i>Mr Lutfor Rahman</i>	Staff Reporter, The Daily Ajker Kagoj
<i>Mr Abdur Razzak</i>	Staff Reporter, The Daily Sangram
<i>Mr Hasan Imam Rubel</i>	Staff Reporter, The Prothom Alo
<i>Mr Saidur Rahman Rumi</i>	Staff Reporter, The Daily Sangram
<i>Mr S M Salahuddin</i>	Staff Reporter, BD News
<i>Mr Shanchita Shitu</i>	Reporter, The Daily Amader Somoy
<i>Mr Asif Showkat</i>	Senior Staff Reporter, The Daily News Today
<i>Mr Helal Uddin</i>	Staff Reporter, BNA