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Agricultural Policy Reforms and Structural Adjustments in Bangladesh

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Abstract

This paper depicts the agricultural policy reforms and structural changes in Bangladesh from independence to the present times. Bangladesh agriculture has experienced major structural changes and achieved major successes over the last three and a half decades. Reforms began in the late 1970s and early 1980s by liberalizing the input markets. Both domestic and trade policy got a vibration of liberalization in the early 1990s. After the independence, Bangladesh followed a highly restrictive trade and exchange rate policy characterized by import regulations, high import tariffs, export taxes, persistent quantitative restrictions and an overvalued exchange rate. With a decade long half-hearted attempt towards trade liberalization, the democratic government in 1991 took courageous steps towards reforming the trade regime. Reforms instigated during this period included reducing and compressing tariffs, implementing and publishing a less complicated import tax structure, gradually eliminating non-tariff import restrictions, and promoting exports through income tax exemptions, bonded warehousing, and flexible exchange rate management. The recent Import-Export Policy 2009-2012 is a major step to the continuation of the liberalization of international trade.

JEL Classification: Q10, Q17, Q18

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1.0 Introduction

Bangladesh is a delta-land connecting to the Bay of Bengal. It is called a riverine country because hundreds of rivers pass across the country like veins of human body towards the Bay of Bengal from the Great Himalayas. The three major rivers named Padma, Meghna and Jamuna has constituted the Deltaic land made Bangladesh agriculture based economy. The history of Bangladesh agriculture was rich and well written in lots of books in British periods because its land was so fertile that it was the main attraction for the Greater India's production house. Bangladesh got independence in 1971 after 9 months long liberation war against Pakistan. The agriculture sector of Bangladesh also bears the history of Bangladesh because the most ups and downs have been observed in this sector and still today it is bearing the most important sector of the country.

During the period of 1970s there were much state engagement in the provision of farm inputs and agriculture marketing. Reforms began in the late 1970s and early 1980s by liberalizing the input markets. Both domestic and trade policy got a vibration of liberalization in the early 1990s. While the country benefits from alluvial soils and annual flooding that allows wetland rice to be grown, average farm sizes were – and remain – small, in part owing to the heavy pressure of population in rural areas. The agricultural economy at independence was moreover growing only slowly: yields of rice, by far the main food crop, had risen by just 1.5% a year from 1950 to 1971 (Hossain 1988).

In the early 1970s the situation of Bangladesh was uncertain because of the political disparity of the West Pakistan that lead to extensive poverty, high vulnerability, and seemingly so few resources per capita that the country seemed locked into poverty. The country was thus heavily dependent on food aid to feed its growing population. The extensive state control over market and the public ownership of key enterprise and also trade and input control by Bangladesh Agricultural Development Corporation (BADC) put the economy in the form of 1974 famine. The political instability of the post-independence also made the agriculture sector vulnerable.

The share of agriculture has been declining over the years in Bangladesh now. The share of agriculture to GDP has declined from 32% in 1980-84 to 23% in 2000-04. The growth rate of GDP growth in Bangladesh has accelerated steadily since the beginning of 1980s. The average growth rate of GDP increased from 3.2% during 1980-84 to 5.56% during 2009-10.

Thus, like most other countries, Bangladesh's sustained economic growth has been accompanied by a structural transformation along with a declining share of agriculture, though the positive agricultural GDP growth rate. Agriculture is the single largest producing sector of the economy since it comprises about 18.6 in 2010 of the country's GDP and employs about 45% of the total labor force. After 2009, Bangladesh is achieving more than 6% GDP growth rate where in the last fiscal year 2011-12 it was 6.32% and the agriculture growth rate was 5.09% having a sectoral share of 15.58% in the GDP. The acceleration in per capita income growth has increased because the population growth rate has declined over the last twenty-five years (from 2.2 to 1.5 percent per year) and the national income is increasing by the other sectors like service sector and incoming remittance of the expatriates.

2.0 Evolution of agricultural policy in Bangladesh

The evolution of the agricultural policy can be seen in two parts- before independence and after independence. Here will discuss briefly about the pre-independence and then widely for the post-independence.

2.1 Pre-independence period (before 1971)

Agricultural trade policy and price incentives mechanism in East Pakistan (present Bangladesh) through to 1971 were heavily influenced by overall trade and macro-economic considerations of united Pakistan. During the 1950s and 1960s, Pakistan followed an import-substitution trade strategy that involved taxation of agricultural exports and protection of domestic industry through import tariffs. It also tended to avoid currency devaluations and instead rely on quantitative controls on imports to limit effective demand for foreign exchange at the official exchange rate (Lewis and Guisinger (1971). In the early 1950s, Pakistan introduced quantitative import controls through a system of import licenses to favour use of foreign exchange for capital and intermediate goods and limit imports of consumer goods. At the same time, cotton and jute exports were taxed through export duties. Overvaluation of the Pakistan rupee, combined with these explicit export taxes, contributed to a 70 percent decline in the real value of total exports between 1952 and 1958 (Dorosh and Valdes 1990, p. 15).

In 1959, the government's introduction to the export bonus scheme in an effort to spur export Earnings represented an effective devaluation of the exchange rate for exports receiving vouchers and for imports purchased with these vouchers (World Bank 1963).

Jute was the most important export earnings of that time. The high implicit taxation of raw jute reduced domestic prices and production incentives, leading to lower levels of exports and higher world prices. To some degree, this policy may have facilitated the development and adoption of synthetic fibers that ultimately replaced jute in many markets. Value added in jute milling in East Pakistan was low in the late 1960s, but profits were high because of the export bonus scheme (World Bank 1975).

2.2 Post-independence period (after1971)

After the independence, Bangladesh followed a highly restrictive trade and exchange rate policy characterized by import regulations, high import tariffs, export taxes, persistent quantitative restrictions and an overvalued exchange rate similar to policies of the 1960s. The policy regime in this period was particularly restrictive for the agricultural sector. The government had a monopoly on import of most agricultural commodities and placed major restrictions on exports of raw jute, the major agricultural export. As a result of these distortions, agricultural price incentives were substantially reduced throughout the period (Rahman 1994).

The agricultural reforms have been undertaken from the early 1980s to the mid-1990s. Two waves of reforms took place namely in the early to mid-1980s where subsidies on inputs were cut back and domestic trading of inputs was liberalised.

The second wave of reforms showed up in late 1980s and early 1990s that included the liberalisation of imports of inputs, private trading in grain markets both domestically and internationally and major reductions to longstanding programmes for public distribution of grains.

Over the era of fifteen years, comprehensive and widespread reforms in agriculture policy were initiated. As a result, the market for both inputs and outputs had been almost completely liberalized than any previous time of considerable and pervasive state interventions and

controls. Domestic support and subsidies to agriculture shrink down than public investment in agriculture research and extension, flood control and rural infrastructure development. In the breadth and depth of agricultural reforms, Bangladesh stands alone amongst its South Asian neighbours, where reforms have been much more limited (Ahmed 1996).

The reform appears to have been very successful because the public transfer to farmers and to food consumers have been reduced while private markets in the input and outputs have functioned reasonably well. One of the signs of reform is that since the reforms, Bangladesh has observed sustained increases in the production of rice, and fall in the wholesale and retail price of rice.

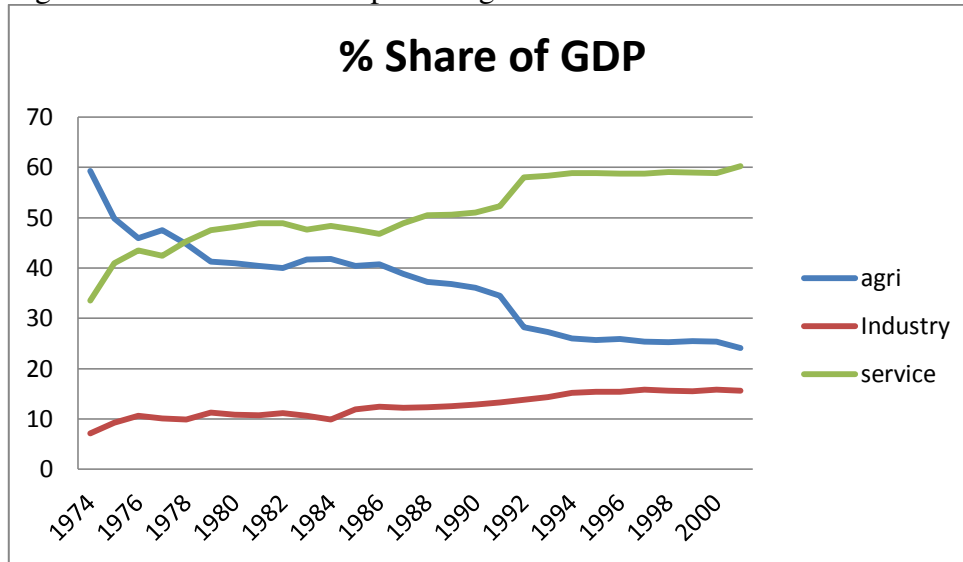
2.2.1 Characteristics of agricultural structure in Bangladesh

Bangladesh agriculture sector consists of four sub-sectors such as crop and horticulture, animal farming and forest and related services. The sectoral share of agriculture is declining over the years as the major share is taken out by the service sector in the beginning of the 1980s. With the pace of growth of the industrial sector, the service sector started to flourish and took the first position in Bangladesh. In figure 1, the percentage share of agriculture to GDP over the years has been shown with comparison to other sectors. In 1974, after independence, agriculture was the most important sector which held almost 60% of the total GDP but in 2001 it became only 24% of GDP. Though the population has increased and doubled from 70 million to 140 million, the production of agriculture got also a sufficient amount to feed this people. The share of agriculture became smaller because the pace of the growth of other sectors was higher than agriculture.

The major agriculture products of Bangladesh are cereal- Aus, Aman, Boro rice, wheat and other cereals; beverage-tea and other beverage; fibre- jute and other fibre; fruits, oil-seeds, pulses, sugarcane and vegetables (table 4).

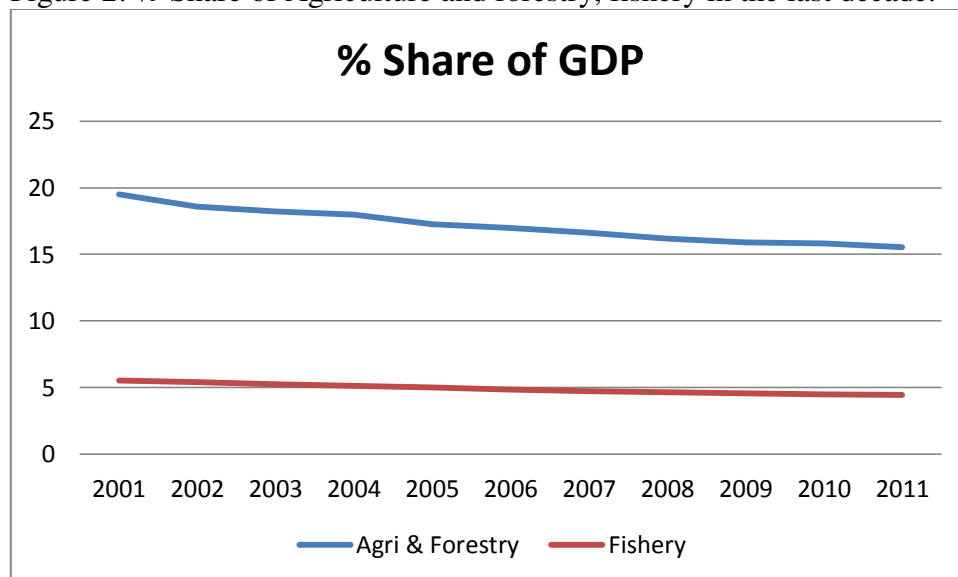
The recent trend of agricultural contribution toward GDP is still declining. In the last decade, the share goes from 19.51% in 2001 to 15.52% in 2011. The share of fisheries also declined from 5.51 in 2001 to 4.43 in 2011. The total of agriculture share in 2011 constituted almost 20% of total GDP. The trend of agriculture in the last decade is depicted in figure 2.

Figure 1: Sectoral share as a percentage of GDP.



Sources: Based on BBS (1993, pp.66-67; 2003, p.489). ADB (various issues).

Figure 2: % Share of Agriculture and forestry, fishery in the last decade.

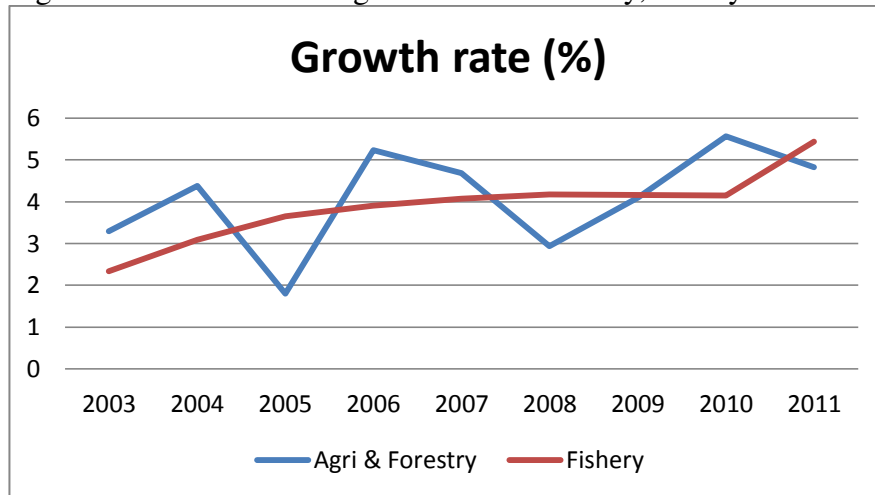


Source: Bangladesh Economic Review 2011

If we look at the growth rate of agriculture in last decade (figure 3), then we see it is almost 4% to 5% and the fishery is almost consistently increasing from 3.65% to 5.44% in 2011. The reason behind the growth of fisher is that new farmers are coming out to produce fish than the traditional source of fish like in lakes and rivers. Even some strict policy of the government to stop fishing the mother fish with eggs and the small fishes, it increases the amount of fish production in Bangladesh. The major sector of agriculture is crop sector where the most

important is rice. Bangladesh is now facing a mono-crop situation as Bangladesh is intensively producing rice because of the food sufficiency issues.

Figure 3: Growth rate of Agriculture and forestry, fishery in the last decade.



Source: Bangladesh Economic Review 2011

The growth rate of agriculture has consistently increased and now becomes almost 4% to 5% at a constant price over the last decades. Bangladesh is also promising a hard food security for growing population. The population has already been doubled in last 40 years and it is assumed to be 200 million in next 20 years (figure 5). But the land is limited and becoming less and less for agricultural production. The intensive production method is hampering agricultural productivity which is also an important issue. Government in every year is making a buffer stock of food grain from domestic market and international market as well. Bangladeshi agricultural sector is less trade distorting and assumed to be market oriented. The trade policy will also be discussed in the later chapters.

According to some international findings the growth rate of agriculture and other sectors is quite impressive for decades. The table 1 shows the ADB's analysis of the agriculture sector of Bangladesh. The F-statistics of the test of difference in variance in growth rates in 1974-90 and 1991-2001 periods have found significantly distinct from each other. In the last 30 years on average agriculture grew at a 2.47% rate. And at present agriculture is growing at 4.82% without fisheries (5.44%) in 2011.

The importance of agriculture in Bangladesh is also understood by the percentage of population that are employed within this sector. After the liberation war, it was almost 80%

of the population were engaged in agriculture but later on the share of agricultural population are declining and now it is almost 50%. On the other hand the service sector has increased

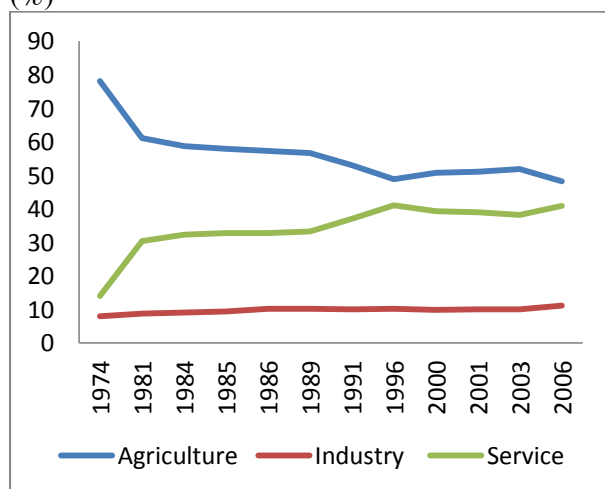
Table 1: Growth rates 1974-2001

GDP and its components	Mean value			Variance			F-statistic for test of difference in variances in growth rates in 1974-90 and 1991-2001 periods
	1974-1990	1991-2001	1974-2001	1974-1990	1991-2001	1974-2001	
GDP	3.46	4.88	4.02	6.74	0.27	4.60	24.29 (p=0.0000)
Agriculture	1.99	3.21	2.47	16.46	4.62	11.83	3.56 (p=0.0235)
Industry	2.49	7.50	4.46	30.36	2.39	25.08	12.72 (p=0.0001)
Services including construction	5.66	5.22	5.49	1.11	0.55	0.91	2.02 (p=0.1296)

Sources: Based on BBS (1993, pp.66-67; 2003, p.489). ADB (various issues).

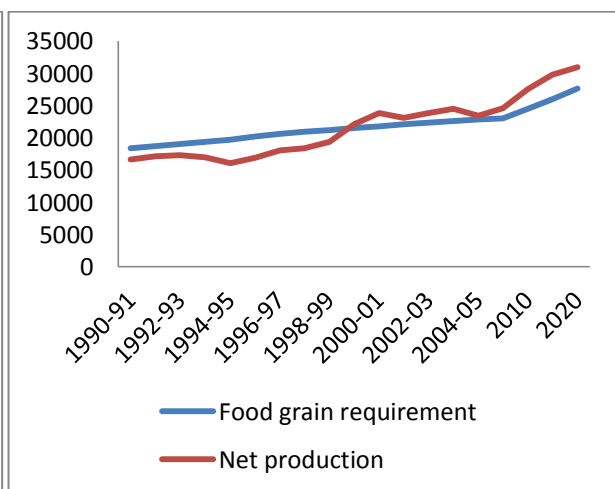
the share of employment. Industrial sector is almost the same share of employment over the last 40 years. In agriculture, the involvement in agribusiness and trade is also enormous. Most of the traders in rural areas are from agribusiness and somehow related with production and distribution. So the importance of agriculture in Bangladesh is very high. Figure 4 and figure 5 represents sectoral employment and food grain requirement of Bangladesh over the years. It is clear that Bangladesh is producing more than the population needs.

Figure 4: Sectoral Distribution of Employment (%)



Source: Bangladesh Bureau of Statistics, Labor Force Survey

Figure 5: Food requirement statistics



Source : Bangladesh Bureau of Statistics (BBS), Department of Agricultural Extension (DAE) and Ministry of Food (MOF)

3.0 Building Blocks of Development Plans

The development of Bangladesh agriculture is based on the development plans on five years basis. After the independence, Bangladesh so far has undertaken 5th five year plan and 3 two years plans. The political turmoil and international pressure on development project sometimes hampers the five year plans but Bangladesh has her own development plan to move forward. Last year Bangladesh has taken 6th five year plan and table 2 shows all five years plans.

Table 2: Growth performance in the Five Year Plans

Plan period	Annual average growth (%)	
	Target	Actual
First five year plan (FY73-FY78)	5.5	4.0
Two year plan (FY78-FY80)	5.6	3.5
Second five year plan (FY80-85)	5.4	3.8
Third five year plan (FY85-FY90)	5.4	3.8
Fourth five year plan (FY90-FY95)	5.0	4.2
Fifth five year plan (FY97-FY02)	7.0	5.1
FY02-FY06		5.5
FY06-FY10		6.3
Sixth Five Year Plan (FY11-FY15)	8.0	

Source: Bangladesh Bureau of Statistics

First Five Year Plan (FY73-FY78):

The First Five –Year plan set out and published in 1973. A substantial expansion of public ownership of the productive sectors took place in 1972, before the formulation of the plan in 1973. The plan recommended actions which would carry further forward the consolidation and enlargement of the public and co-operative sectors. Trading both national and foreign were the most important areas of private enterprise in agriculture. It was suggested in the plan that lower ceilings on landholdings should be considered seriously in the future, and in the meantime, efforts should be made to reinforce the economic position and bargaining power of the poorer farmers and landless tenants. Additionally, the plan proposed the extension of co-operative enterprises in various fields, particularly internal distribution, housing and construction.

Second five year plan (FY80-85)

The second five year plan began in 1980 and ended in 1985. There are some major changes in the domestic support in agriculture by the government in this period. Government focused on

input management, fertilizer and machinery equipment for the development of agricultural sectors. All of these policies are domestic policy to foster the growth of this sector. Some of these policies are shown below-

Input management: In 1980, Government eliminated pesticides subsidies and liberalized the import and distribution of inputs to the private sector. Government had been overburdened with the highly subsidized input market management where 15% of the tax revenue has to spend for this input subsidy.

Fertilizer: In 1978–84, reform in the fertilizer management was strictly introduced. Bangladesh Agriculture Development Corporation (BADC) which had state monopoly before withdraws from retailing and thana level wholesaling. Licensing was abolished; movement restrictions were removed (except for 8km border zone); Prices were deregulated; Subsidy was reduced, from 50% of cost in FY1979 to 21% by FY1982.

Machinery: In 1980–85 irrigation system also got importance. The low lift pumps and tube wells were sold by BADC to private parties that backed up by special credit.

Third five year plan (FY85-FY90)

Fertilizer: In 1987 private traders were allowed to buy at factory gates and ports.

Machinery: In 1987 for irrigation, private dealers allowed to import engines and pumps. In 1988 for irrigation, standardisation rules limiting and models of equipment removed. In 1989 for Power tillers, the import restrictions and standardisation rules lifted up.

From 1988/89 to 1995/96, input subsidy got down from 2.53% to 0.83% of value of output; Price support got down from 0.20% to 0.01% of output; Producer Subsidy Equivalent got down from 2.73 to 0.84.

Fourth five year plan (FY90-FY95)

Inputs: In 1990, for seeds a new policy was proposed.

Fertilizer: In 1992 for fertiliser, free import from world market was introduced. From 1994–95, fertiliser shortages was experienced re-imposition of government controls on dealers, with licensing, quotas, and delimitation of sales areas.

Machinery: In 1995, for power tillers, tractors the duty free import introduced and support the buyers with credit.

Marketing: In 1992, rural rationing was withdrawn and statutory rationing was abolished. In 1991-93, public procurement was reduced.

In 1991-93, Liberalised grain trade reduced tariffs on imports:

Import-weighted average tariffs	FY94	FY96	FY02
Primary commodity	27.2%	13.2%	9.4%
Intermediate inputs	22.9%	22.7%	16.2%
All commodities	24.1%	17.0%	9.7%

When the international diesel price came down from a high price in 1980, the reform got benefit because even if reformers cut subsidy on fertilizer, the price fell on the domestic markets. Similarly, as irrigation equipment got more available, and cheaper, the price of diesel to keep the pumps operating was falling.

With the key reforms in the input markets, the fall in the prices of inputs was so strong that allowed more efficiency in distribution of inputs with reduced marketing margins. But in large share they came from movements in international prices. Reformers, at that time, were able to take advantage of incidental events in world markets.

The opening up imports and abandoning rules for importing certain standard model reduced the cost of pumps and tubewell equipment on the open market than before. This was a great steps to sustain agriculture sector in that time.

The input market reforms accelerated the use of fertiliser and tubewell irrigation which allowed winter cultivation of irrigated rice (the boro crop). Formerly the bulk of domestic rice production came from the aman crop that planted during the summer. Double cropping along with the use of modern varieties and increased fertiliser led to major increases in rice production. While technology accounted for some the improvements, reforms encouraged its use. In 1992 Bangladesh was producing between 20% and 32% more rice than it would have done had the reforms not taken place (Ahmed 1995).

The reforms in 1980s were successful in two dimensions. First, government could save from cutting subsidies on inputs. Second, input dealers and farmers responded which brought green revolution varieties of rice to be adopted and started cropping land more than once a year. This allowed rice production to expand during the 1980s and 1990s well ahead of population growth so that by the early 2000s the country was close to domestic self-sufficiency.

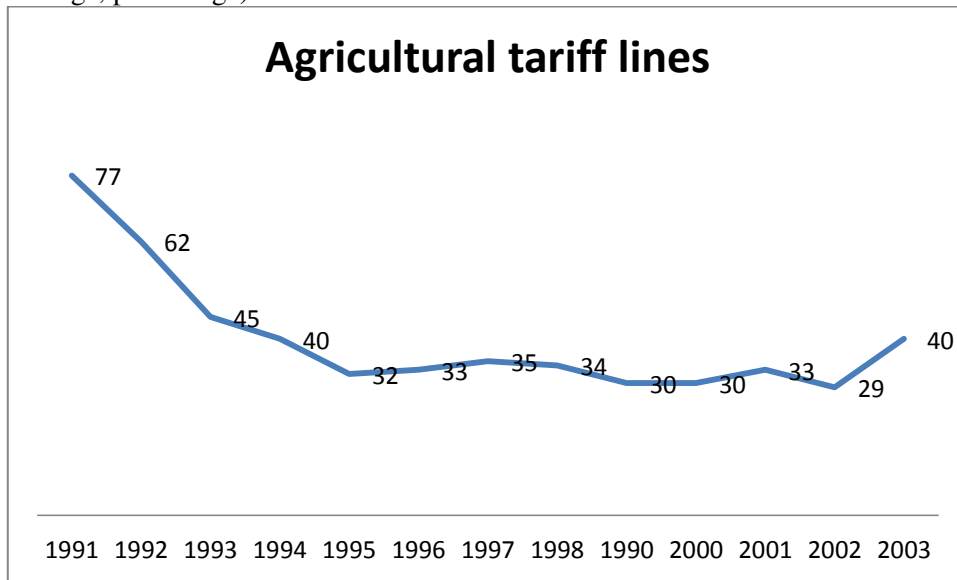
Most of these reforms mainly related to the domestic support policies and input management. But the major agriculture policy reform was introduced in the collaborative policies which involves the liberalization of import and export of agriculture commodities. Bangladesh is now in the trade liberalization policies and also following the rules of WTO agriculture policies.

4.0 Agricultural Trade Policy Reform

Disappointed by the consequence of the policy as reflected in slow economic growth and continued problem in the balance of payments and under continued pressure from donors, Bangladesh began initial reforms in its trade and exchange rate policies in the early 1980s. The major trade and exchange rate policy liberalization also involved broad liberalization of trade and exchange rate policies of agricultural trade and pricing reforms. By the mid-1990s, the distortion in the agricultural output price had been virtually eliminated on rice and wheat, and total distortions were minimal. Bangladesh sharply raised import tariffs on rice in response to subsidized exports by India in 2001, but domestic rates of assistance calculated relative to international market prices indicate only small overall agricultural price distortions in Bangladesh in the present decade (Ahmed et al. 2007).

The import tariff of agriculture has been reduced significantly from 1991-2002 that has been shown by the figure 6. In just 10 years' time, the country has liberalized its trade policy and exchange rate policy to fixed to floating. The graph clearly shows the liberalization of agriculture trade policy in Bangladesh.

Figure 6: Agricultural Import tariff rates of Bangladesh, 1991-2003 (unweighted average, percentage)



Source: World Bank (2004, p. 50)

The total picture of import tariff of Bangladesh from 1991-2003 can be seen from the table 3.

Table 3: Import tariff rates of Bangladesh, 1991-2003 (unweighted average, percentage)

Year	All tariff lines			Industrial tariff lines			Agricultural tariff lines		
	Custom duties	Para-tariffs	Total rate	Custom duties	Para-tariffs	Total rate	Custom duties	Para-tariffs	Total rate
1991	71	3	74	70	3	73	77	0	77
1992	58	3	61	57	3	60	62	0	62
1993	43	2	46	43	3	46	46	0	45
1994	34	3	38	34	4	37	37	2	40
1995	29	3	32	28	3	32	30	2	32
1996	28	3	32	28	4	31	30	2	33
1997	27	6	33	27	6	33	29	5	35
1998	27	6	32	26	6	32	28	5	34
1999	22	7	29	22	7	29	25	5	30
2000	21	7	29	20	8	28	25	5	30
2001	21	8	29	20	8	29	25	8	33
2002	20	7	26	19	7	26	24	5	29
2003	19	10	29	18	9	27	23	17	40

Source: World Bank (2004, p. 50)

Bangladesh carried on inward-oriented and import-substituting trade policies from independence in 1971 until 1990s. The brief history of agriculture trade policy reform is discussed below.

The 1970s: inward-oriented trade policies

Confronted with a severe balance of payment crisis after 1971, the first government followed highly restrictive trade and exchange rate policies. To protect the domestic industry, it took quantitative restrictions on imports, high tariff rates, fixed and overvalued exchange rate policy to control imports and protection for the domestic industry. However, the protectionist philosophy of the political government stayed intact for trade regime even after the possibility of a balance of payment crisis decreased substantially in mid-1970s after the 70% devaluation of Bangladeshi currency Taka against USD from 8.9 to 15.1 in 1975. It also did continue with even a recovery in export earnings, an increase in foreign aid and a decline world price of grain and other commodities.

In early 1970 government allowed the use of foreign exchange earned by Bangladeshi nationals to be used for importing selective categories of commodities (system later called the Wage Earner's Scheme, WES). In this way until 1977, government exercised dual exchange policy by using Export Performance Licence (XPL) and Import Entitlement Certificate (IEC).

In the beginning of restrictive trade policy, most agricultural commodities were on the restricted or banned lists of imports. It was aimed to ensure remunerative prices to producers by protecting them from external competition. Simultaneously, there were also restrictions on the export of agricultural commodities. Even some agricultural exports were subject to export duties. The purpose was to ensure sufficient availability of agricultural commodities in the domestic market.

In 1976, to promote exports of non-traditional items, some fiscal incentives were provided. In the Export Policy Order of 1976, export earnings of non-traditional items were doubled from 15-20% to 30-40%. To promote exports of textile products made with imported raw materials, duty drawback schemes were put into place.

The aftermath of that autarkic trade and exchange rate policy, however, was unsatisfactory in terms of export growth, the balance of payments, and overall economic growth, especially in comparison to the rapid growth of the East Asian economies that followed a more outward-oriented development strategy. In fact, the export promotion processes that were gradually introduced in the late 1970s were limited in scope and slowly implemented. The overall trade

policies were inward looking and the economy especially the external sector in particular remained overregulated.

The 1980s: initial trade policy reforms

A wide ranging policy reform package, called the New Industrial Policy (NIP) initiated and stated to implement in 1982 with the objective of liberalizing the economy.

A substantial number of nationalized companies, especially jute and textile sectors, were privatized within a few years, and steps to increase foreign and domestic investment were put in place. However, only some degree of trade liberalization took place under the NIP or its successor, the Revised Industrial Policy (RIP) that is introduced in 1986.

Eventually, there was only sluggish progress in trade liberalization in the 1980s, particularly with respect to reductions in import tariffs (Bakht 2001b). Some liberalization of agricultural exports that occurred are- withdrawal of export duties on raw jute and tea in 1981, withdrawal of export duties on dried fruits, fresh fruits, oil cakes, coriander seed, dry chili, dry ginger, black pepper, turmeric, tobacco, vegetables and potato in 1986. Restrictions remained even after 1995 on exports of jute seed, wheat, pulses of all kinds, shrimp other than frozen, frogs of all kinds (dead or alive) and their legs, and onions. The export restrictions on rice and wheat bran and molasses were removed in 1998.

1990s: major trade liberalization

With a decade long half-hearted attempt towards trade liberalization, the democratic government in 1991 took courageous steps towards reforming the trade regime. Reforms instigated during this period included reducing and compressing tariffs, implementing and publishing a less complicated import tax structure, gradually eliminating non-tariff import restrictions, and promoting exports through income tax exemptions, bonded warehousing, and flexible exchange rate management.

Before 1990s, Bangladesh was heavily dependent on quantitative restrictions to control imports, mainly for agricultural commodities. Around 37% of the tariff lines for agricultural commodities (21% of all commodities) were either banned or restricted in 1987 (World Bank

1994). By 1984, all quantitative restrictions on agricultural commodities were removed and imposed only 2% of tariff lines of all commodities faced quantitative restrictions. Precisely, private sector imports of rice and wheat were permitted in the early 1990s, ending the government monopoly of imports on food grain. The export ban of fine quality rice was lifted but ban remained for exports of ordinary coarse rice.

In the early 1990s trade liberalization brought tariff rates down sharply. Total protective import duty (both customs duties and para tariffs) declined from 74% in 1991 (unweighted average off all tariff lines) to only 32% in 1995. Similarly, import tariffs and total tax incidence on the import of major agricultural goods declined sharply during the early 1990s. Duties on refined edible oil, sugar, milk-powder, and spices were subject to comparatively high duties, while raw cotton, wheat, rape seed and lentils faced lower duties.

Trade reforms have caught up in recent years. Though customs duties declined from 29% in 1995 to 19% in 2003, para tariffs such as surcharges, license fees, regulatory duties, value added tax and supplementary duties increased sharply, mainly due to a sharp increase in supplementary duties. As a consequence, total protective import duty rates have remained essentially unchanged on average since the mid-1990s. For some commodities that were already protected (including processed fruits, cement, soap, cotton shirts and sheets, some ceramic and steel products, batteries, bicycles and toys), total protection rates increased by more than 30% between 1997 and 2003 (World Bank 2004).

Impacts of agricultural price and trade policies on nominal rates of assistance (NRA)

It is important to agriculture's competitiveness within the economy that the extent to which non-agricultural tradable sectors is assisted by government policies. The collective effect of import tariffs and quotas on domestic prices of non-farm import-competing goods could be stated as an implicit tariff rate, defined in terms of the ratio of domestic prices (measured at the border) to import prices. Ahmed et al. (2007) calculated estimates of that implicit tariff. The calculations provided a NRA for import-competing parts of the non-farm sector which provided a reasonable measure that can be compared with the NRA for tradable agriculture using the relative rate of assistance (RRA) concept shown in the Table 5. RRA shows the extent to which prices received by farmers are depressed relative to prices faced by producers

of other tradable in the country. The estimates tell that even though agriculture's NRA has been positive in some years, it has always been well below the NRA for non-agricultural tradable.

Trade policy of recent years (after 2000 to present)

Bangladesh's current trade policy is a mixed policy which is regulated by number of policies, order and acts structured under a broader liberalization framework. The objective of export policy is to strengthen export-led industrialization through increasing export, enhancing productive capacity of export-oriented industries and facilitating the sector by capacity building of local industries. On the other hand, the import policy is aimed to make import regime compatible to WTO. It also aims to simplify the procedure to import capital machineries and raw materials, provide facilities for technological innovation and permit import of essential commodities on emergency basis. *The Import Policy Order 2009-2012* and the *Export Policy 2009-2012* explain export and import targets, priority sectors which need special support, strategies to promote import-substituting, domestic market oriented and labour intensive industries. The export and import policies are formulated and implemented by the Ministry of Commerce and import tariff, para-tariff and other duties, are determined by the Ministry of Finance. The monetary policy highlights on inflation management and equitable growth by adjustment of different monetary variables such as money supply, level of interest rate and exchange rate etc. *Industrial Policy 2010* and *SME Policy Strategies 2005* postulate policy directions with reference to industrialisation particularly in case of micro, small, medium and public sector enterprises. *The Sixth Five Year Plan (2011-15)* and *Ten Year Perspective Plan (2011-21)* have outlined the long term targets connected to export and import during 2011-2021.

So a numerous policies of short, medium and long term, rules, regulations, acts and orders are in operation in Bangladesh to regulate international trade. This is important to state that while import policy is a legally binding document; export policy is not legally binding. The reduction of tariff of agriculture and industrial commodities doesn't reduce at the same pace. While agriculture product tariff was high like 18.5% in 2000s, the tariff rates for intermediate agricultural products have experienced faster reduction. Industrial product got higher reduction in 2000s.

5.0 Conclusion

Bangladesh agriculture has experienced major structural changes and achieved major successes over the last three and a half decades. Despite having numerous problems and constraints, a quiet agricultural revolution has taken place which has enabled the country to achieve its national food security in the production of food grain. Agriculture continues to advance in response to various factors including natural calamities, socio-political changes, population growth, urbanization, new technology, opportunities in the rural non-farm sector and commercialization. Besides government macroeconomic, trade and agricultural pricing policies, which have contributed a major role in shaping price incentives in production and consumption, will continue to be significant determinants of agricultural growth as well. Bangladesh has gained major benefits from trade liberalization in terms of food security for example private sector imports have helped stabilize markets after major production shortfalls. The domestic prices of most agricultural commodities, by keeping near border prices, has also resulted in overall efficiency gains in the agricultural sector.

Reducing the remaining disincentives for agricultural production will be a necessary part of any future strategy for agricultural growth and rural poverty reduction. Even a liberalized trade policy of Bangladesh would not automatically guarantee increasing incomes for farmers. The policies aimed at increasing production and stabilizing prices should not necessarily rely mainly on price subsidies or large increases in public stocks. Instead, investments in agricultural research and extension service that increase agricultural productivity and efficiency, improvements in post-harvest management and agro-processing, and investments in market infrastructure can complement agricultural price and trade policies and support rapid agricultural growth and increasing farmer earnings in Bangladesh, even in the environment of shifting world prices.

Reference

- Ahmed et al. (2007) “Distortion to Agricultural Incentives in Bangladesh”, Agricultural Distortions Working Paper 32
- Ahmed, Raisuddin (1995), “Liberalization of agricultural input markets in Bangladesh: process, impact, and lessons”, *Agricultural Economics*, 12 (2) 115–128
- Ahmed, Raisuddin (1996) “Agricultural Market Reforms in South Asia”, *American Journal of Agricultural Economics*, 78 (3), 815–819
- Bakht, Z. (2001b), “Trade Liberalization, Exports and Growth of Manufacturing Industries in Bangladesh” in M.M. Huq and J. Love (eds.), *Strategies for Industrialization: The Case of Bangladesh*, Dhaka: University Press Ltd.
- Dorosh, P. and A. Valdès (1990), “Effects of Exchange Rate and Trade Policies on Agriculture in Pakistan”, Research Report 84, Washington DC: International Food Policy Research Institute.
- Hossain, Mahabub (1988), “Credit for alleviation of rural poverty: the Grameen Bank in Bangladesh”, IFPRI Research Report No 65, Washington DC
- Lewis, S., and S.E. Guisinger (1971), “The Structure of Protection in Pakistan in the Structure of Protection in developing countries”, Bela Balassa ed. Baltimore (Johns Hopkins Press)
- Rahman, S.H. (1994), “The Impact of Trade and Exchange Rate Policies on Economic Incentives in Bangladesh Agriculture”, Working Paper No. 8, International Food Policy Research Institute, Washington DC, July.
- World Bank (1963), “The Economic Development Program of Pakistan”, Report No AS-96a, Washington DC: World Bank.
- World Bank (1975), “Bangladesh: Survey of the Jute and Cotton Textile Industries”; Report No. 883-BD, Washington DC: World Bank.
- World Bank (1994), *Bangladesh: From Stabilization to Growth*, Washington DC: World Bank.
- World Bank (2004), *Trade Policies in South Asia: An Overview (Volume II: An Overview)*, Washington DC: World Bank.

Table 4: Distribution of Weights of Value Added of Different Crops at Current Prices (million Taka)

Name of crops	2004-05		2005-06		2006-07		2007-08		2008-09		2009-10		
	Value added	Weights (%)	Value added	Weights (%)	Value added	Weights (%)	Value added	Weights (%)	Value added	Weights (%)	Value added	Weights (%)	
A	Major Crops	210964	65.86	223351	66.39	230025	65.7	239183	66.06	239834	66.74	258437	69.16
1	Cereals	208345	65.04	219665	65.29	223794	63.92	231004	63.8	230967	64.27	250560	67.05
	i) Aus	14242	4.45	16427	4.88	14113	4.03	14066	3.88	231004	3.92	17069	4.57
	ii) Aman	95810	29.91	105300	31.3	105036	30	95297	26.32	14071	26.55	111711	29.9
	iii) Boro	93075	29.06	94005	27.94	100705	28.76	117284	32.39	95410	32.57	117322	31.4
	iv) Total Paddy	203127	63.41	215733	64.12	219854	62.79	226647	62.6	117050	63.03	246101	65.86
	v) Wheat	5218	1.63	3932	1.17	3940	1.13	4357	1.2	226531	1.23	4459	1.19
	Other cereals	2619	0.82	3686	1.1	6231	1.78	8179	2.26	4436	2.47	7876	2.111
B	Minor Crops	109374	34.14	113088	33.1	120097	34.3	122890	33.94	8867	33.26	115232	30.84
2	Beberages	9009	2.81	9825	2.92	9972	2.85	8822	2.44	119543	2.79	10250	2.74
	i) Tea	2040	0.64	2055	0.61	2072	0.59	2072	0.57	10024	0.58	2090	0.56
	ii) Other beverages	6969	2.18	7771	2.31	7900	2.26	6750	1.86	2090	2.21	8160	2.18
3	Fibres	8328	2.6	9394	2.79	9907	2.83	9504	2.62	7934	2.62	9454	2.53
	i) Jute	7815	2.44	9846	2.66	9459	2.7	9056	2.5	9417	2.52	9142	2.45
	ii) Other Fibres	513	0.16	448	0.13	448	0.13	448	0.12	9056	0.1	312	0.08
4	Fruits	17630	5.5	19908	5.92	21559	6.16	19695	5.44	361	5.71	21911	5.86
5	Oliseeds	5884	1.84	6192	1.84	6707	1.92	6407	1.77	20528	1.77	6637	1.78
6	Pulses	6251	1.95	5828	1.73	5604	1.6	5427	1.5	6366	1.38	4745	1.27
7	Spoces	17539	5.48	18401	5.47	19716	5.63	19016	5.25	4975	5	17732	4.75
8	Sugarcane	6813	2.13	5845	1.74	6120	1.75	6120	1.69	17955	1.53	5634	1.52
9	Vegetables	36247	11.32	35961	10.69	39918	11.4	47305	13.07	5482	12.3	38225	10.23
	i) Potato	16881	5.27	15534	4.62	19290	5.51	28000	7.73	44201	6.91	19667	5.26
	ii) Other Vegetables	19366	6.05	20426	6.07	20628	5.89	19305	5.33	24819	5.39	18557	4.97
10	Other Crops	1675	0.52	1733	0.52	594	0.17	594	0.16	19382	0.17	594	0.16
	Total (A+B)	320339	100	336439	100	350122	100	362073	100	359377	100	373668	100

Source: National Accounting Wing, Bangladesh Bureau of Statistics (BBS)

Table 5: Nominal rates of assistance to agricultural relative to non-agricultural industries, Bangladesh, 1974 to 2004 (%)

	1974	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04
NRA, covered agric products ^a	-20.8	2.8	-3.8	16.8	-2.2	-7.6	3.9
NRA, non-covered agric products	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NRA, all agricultural products ^a	-16.0	1.4	-3.3	11.7	-1.5	-5.2	2.7
NRA, non-product-specific (NPS)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total agricultural NRA (incl. NPS)^b	-16.0	1.4	-3.3	11.7	-1.5	-5.2	2.7
Trade bias index ^c	-0.10	-0.30	-0.23	-0.45	-0.33	0.00	-0.37
<i>Assistance to just tradables:</i>							
All agricultural tradable	-21.6	3.1	-3.9	17.5	-2.4	-8.0	4.0
All non-agricultural tradable	45.9	28.4	22.4	28.5	33.3	29.0	23.4
Relative rate of assistance, RRA^d	-46.3	-19.7	-21.5	-8.6	-26.7	-28.6	-15.8

Source: Ahmed et al. (2007)

a NRAs including product-specific input subsidies.

b NRAs including product-specific input subsidies and non-product-specific (NPS) assistance. Total of assistance to primary factors and intermediate inputs divided by the total value of primary agriculture production at undistorted prices (%).

c Trade bias index is $TBI = (1+NRA_{agx}/100)/(1+NRA_{agm}/100) - 1$, where NRA_{agm} and NRA_{agx} are the average percentage NRAs for the import-competing and exportable parts of the agricultural sector.

d The RRA is defined as $100 * [(100+NRA_{agt})/(100+NRA_{nonagt}) - 1]$, where NRA_{agt} and NRA_{nonagt} are the percentage NRAs for the tradables parts of the agricultural and non-agricultural sectors, respectively.