

Trade Liberalization and Gender Gap: Bangladesh Experience

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This paper explores the gender differentiated effects of trade liberalisation in Bangladesh. It is found that trade liberalisation has created more than 5 times higher job for women than men in the Ready Made Garments (RMG) sector. However, female workers are more discriminated than the male counterparts in terms working condition. Nationwide, women's wage is much lower than men's wage for all kinds of labour. However, income gap between male and female workers seems lower in the RMG sector. The low level of education and skill of female workers, male's longer working time, etc. are the main factors for this gender differentiated income.

INTRODUCTION

Trade liberalisation means removal or reduction of restrictions or barriers on the free exchange of goods between nations. It includes the removal or reduction of both tariff (e.g. duties, surcharges, and export subsidies) and non-tariff barriers (e.g. licensing regulations, quotas, and arbitrary standards). The main aim of trade liberalization is to facilitate trade between the trade participating nations.

The effects of trade liberalisation on society and economy are not straight forward. Though it is widely believed that trade liberalisation is contributory to poverty reduction, its real effects are actually complex, as many factors of trade participating countries and international bodies are related to these effects. The well-being of producers, workers as well as consumers may be different based on the policy makers' decisions with regard to sectors that will be protected or opened. Trade liberalisation yields multiple effects simultaneously: some effects are beneficial, while other effects are harmful even for the same group of people.

Trade liberalisation and/or trade policies have gender differentiated effects (Aguayo-Tellez, 2011; USAID, 2007; Korinek, 2005). This is because access to and control over resources for men and women vary, and the roles of gender for both the market economy and the household activities are different.

The distribution of income between men and women, like other social groups, is changed as a result of trade liberalisation. Trade liberalisation changes relative price of goods, and a change in the price of goods alters incentives and encourages reallocation of factors of production among sectors. These result in a change in employment and earnings. Real income of various groups differs which affect groups differently due to divergences in their consumption patterns.

It is argued that trade liberalisation may increase the risk encountered by the poor and their vulnerability to external shocks. Men and women are likely to experience these effects differently (USAID, 2006).

The importance of this study is that gender equality is essential in a country for the long-term growth. If women are educated and have more control over household resources through wage employment, it is

observed that they spend more on children's education, health and nutrition, thereby investing in future generations and the future labour force. Moreover, women constitute half of the population whose potential are currently unused or underused in developing countries like Bangladesh. Trade can facilitate to use this potential effectively by creating more employment for women, and thus ensuring the access to all productive resources.

In this paper, we concentrate on the various effects of trade liberalisation on gender discrimination in Bangladesh. We particularly focus on nature and extent of gender-differentiated consequences in terms of employment, working condition, working hours and wages. The factors that work behind the wage differential between man and women will also be explored. Since most of the Bangladeshi working women in urban area are associated with the ready-made garments (RMG) industry, our main analysis will be based on this industry.

LITERATURE REVIEW

It is widely argued that trade liberalization has a positive impact on aggregate economic performance, though benefits are not experienced equally by trade participating countries. Trade liberalization can create opportunities for producers and consumers irrespective of gender. It has created additional/new jobs both for men and women. Women have benefited from trade liberalization as workers and consumers though their benefits may not be equal of men (USAID, 2007). However, the state's intervention with regard to controlling of physical and financial capital flows and setting of agricultural and industrial policy are imperative for reducing gender inequality (Seguino and Grown, 2006).

Theoretically women are benefited from trade liberalisation both in terms of increased number of jobs and increased wages. Thus gender wage gap should reduce. The main theoretical underpinnings come from the Hecksher-Ohlin and Stolper-Samuelson trade theories. According to Hecksher-Ohlin theory, in opening up trade, production will relocate to those sectors that intensively use the relatively abundant factor of production, and labour abundant countries will experience job creation in their export-oriented industries. Since semi-skilled and unskilled labour are abundant in a country like Bangladesh compared to skilled labour, the demand for relatively abundant factor (semi-skilled and unskilled labour) should increase. According to the Stolper-Samuelson theory, overtime the relative wages of semi-skilled and unskilled labour will increase. This may tend to decrease the gender wage gap since women are likely to have fewer observable job skills than men in general (Artecona and Cunningham, 2002).

Furthermore, it is argued that trade liberalisation may also create higher value-added jobs that provide an opportunity for women to enter into higher income jobs and improve their social status. This higher wage jobs provided by increased trade and investment would reduce the gender wage gap (USAID, 2007). Rodgers (1996), ILO (2002) and Cunningham 2001 note that women dominate in many labour-intensive industries, and as a result, job creation due to trade liberalisation and industrialisation, will mainly benefit women. Citing from Fontana and Wood (2000) and Wood (1991), USAID (2007) notes that the largest positive gender effect is observed in low-income countries and among unskilled female workers.

Becker (1971) and Ashenfelter and Hannan (1986) argue that firms in non-competitive markets have excess profits and hence they can discriminate in wage payment, i.e. pay more wage to men compared to women because they prefer men. On the other hand, the scope of discriminatory wage payment is limited for firms in competitive markets as they have zero profit. An empirical work in the United States supports this theory where smaller wage differentials between men and women was found in more competitive industries compared to industries where market concentration is higher (Hellerstein et. al., 1997 and Black and Strahan, 1999).

Artecona and Cunningham (2002) argue that trade liberalisation increases competition which in turn should reduce excess profits of firms and eliminate those resources that may be used for wage discrimination between men and women. Trade liberalisation enables foreign producers to enter profitable national markets. Hence domestic producers in the trade impacted industries must lower their production

costs and increase productivity to keep business operational. As a result, wage discrimination by these firms will not be affordable. So gender wage discrimination should shrink in those industries.

The positive effect of trade liberalisation on women employment is not universal; some negative effects are also observed. A study conducted by Kucera and Milberg (2000) on 22 Organisation for Economic Cooperation and Development (OECD) countries revealed the negative effect of trade with developing countries. They used data for 1978-95 and concluded that women's job loss in the OECD countries had been mainly in the textiles, apparels, and leather industries. Fofana et. al. (2005) documented that trade liberalisation had a distinct positive effect on male employment and a negative effect on female employment in South Africa. Furthermore, in a competitive market, employer may pressure women workers to accept reduced wages to minimise costs. The other negative effect of trade liberalisation on women is that they get very little time for leisure and domestic work, as they are involved longer time with market activities (USAID, 2007). This may adversely affect their health and well-being of children.

Hossain (2011) conducted a research, covering the data period 1973-1994, in Bangladesh manufacturing sector, and found that trade liberalisation contributed to the widening of wage inequality between skilled and unskilled workers. He, however, did not explore the gender differentiated effects of trade liberalisation. Aguayo-Tellez, (2012) also reports that trade liberalisation increased the wage gap between skilled and unskilled workers, and thus affects unskilled women.

The above discussion suggests that a clear cut conclusion about the relation between trade liberalisation and gender in developing countries cannot be drawn. The gender effects depend on many other country specific factors such as labour market institutions, resource endowments, system of property rights and other socio-economic characteristics. Hence country specific case study is imperative.

Overall, it appears that female participation in the labour force increases with an increase in income. Gladwin and Thompson (1995) show that women's quality of life has increased in developing regions. Economic freedom has enabled women to have a broader access to education, health services and political parties.

BANGLADESH TRADE AND TRADE LIBERALISATION

The economy of Bangladesh has undergone rapid structural transformation from an agrarian base towards manufacturing and services. The contribution of the agriculture sector to GDP has decreased from 49 percent in 1973-74 to around 18 percent in 2009-10. Over the same period, the contribution of services to GDP has increased from 40 percent to 53 percent. The industry share to GDP has also increased from 11 percent in 1973-74 to 29 percent in 2009-10 (BBS, 1978; CIA, 2010).

The growth of industrial production has averaged more than 6% over the last 5 years. The export sector has been the main contributor of industrial growth, where ready-made garments played a leading role experiencing an average growth of 30 percent over the last 5 years. The bulk of exports are manufactured/processed products, ready-made garments and knit wears (Bangladesh Bank 2011).

Due to worldwide recession and weak demand, Bangladesh export of most items except textile and apparels decreased in fiscal year 2009. RMG products fetch about 77.1 percent of total export earnings, and this sector suffered some growth slowdown. Export earnings of the country have increased only 4.2 percent in fiscal year (FY) 2010 compared to 10.1 percent increase in fiscal year 2009 due to slower growth of main export items. On the other hand, import growth has increased by 5.4 percent in FY2010 compared to 4.2 percent in FY2009. As a result, trade deficit has increased by 9.4 percent in FY2010 compared to 11.6 percent decrease in FY2009 (Bangladesh Bank, 2009-10).

Since 1992, Bangladesh has implemented a series of trade liberalisation measures. The governments in 1990s really wanted to promote rapid export growth by reducing and eliminating the anti-export bias prevalent in the economy. The governments have been adopting more liberal import and export policies and programmes including reduction and harmonization in tariff rates, and elimination of many quantitative restrictions on imports (GOB, 2002; CSB 2003).

The trade regime has been rationalized and simplified through lowering the tariff rates, phasing out the quantitative restrictions, streamlining import procedures and introducing tax reforms. The overall tariff structure has been changed by these reforms. In 1995, Bangladesh joined the World Trade Organisation (WTO), and involved in a number of multilateral, regional, and bilateral trade agreements in order to lower tariff and non-tariff barriers.

In FY1991-92, the unweighted average rate of import protection was 57.22 percent; this has been brought down to 17.20 percent in FY2000-01. Moreover, licence fee, regulatory duty and infrastructure development surcharge have been withdrawn since FY 2002-03, FY2003-04 and FY2007-08. In FY2000-0, the unweighted average of the impact of Tariff Reforms on Average rate of Customs Duty was 17.20 percent. In FY 2006-07, this decreased to 12.21 percent. Trade openness measured as trade-GDP ratio was 33.63 percent in FY2000-01; this increased to 41.02 percent in FY 2008-09. The increased external trade of Bangladesh in recent years compared to last few years is due to liberalisation of import policy and export promotion strategy (GOB, 2010).

Bangladesh exports are concentrated to a few items. About 80 percent of total exports belong to textile, clothing and footwear. It is argued that further liberalisation and changes in global agreement on quota may affect Bangladesh economy and workers differently in short to medium runs. Changes in the price of goods as a result of trade liberalisation might change employment and wages of both male and female workers, which may affect them differently (USAID, 2006).

READYMADE GARMENTS SECTOR IN BANGLADESH AND ITS CONTRIBUTION

The country's export-oriented RMG sector has been making significant contributions to the economic development of Bangladesh since 1980 through earning of foreign exchange, improving the balance of payments situation, employment creation particularly for women and thus poverty alleviation. Besides, this sector is also creating different forward and backward linkages to the economic activities of Bangladesh. The closely related sectors with the RMG sector are cloth, yarn, professional services, bank and insurance services, housing services, real estate, storage, machinery, and cotton cultivation (USAID, 2007; Razzaque, 2005).

During the last two and half decades, there has been a steady growth in the field of RMG. The RMG industry enjoyed a tremendous rise from 30 enterprises in 1980 to 4825 in FY2007-08. Table 1 depicts the growth of the industry in terms of number of units and employment generation.

TABLE 1
GROWTH OF THE INDUSTRY AND EMPLOYMENT (SELECTED YEARS)

Year	Number of Garment Factories	Employment in Million Workers
1983-84	134	0.040
1987-88	685	0.306
1991-92	1163	0.582
1995-95	2353	1.290
1999-2000	3200	1.600
2003-2004	3957	2.000
2007-2008	4743	2.800
2008-2009	4825	3.100

Source: BGMEA website: <http://www.bgmea.com.bd/home/pages/aboutus> (accessed in February 2011).

Out of 3.1 million manpower employed in Bangladesh Garment Manufacturers and Exporters Association (BGMEA) member factories, 2.38 million (85%) are women, majority of them are disadvantaged and economically poverty stricken women folk. These are women who would otherwise be

unemployed and working without pay to carry out their household usual duties. The RMG sector has relieved Bangladesh from over populous unemployment burden through providing a huge employment. This sector has uplifted the neglected section of the population, thus radically improving the socio-economic condition of the country. Such wage employment and empowerment have raised awareness regarding economic freedom, greater autonomy, children education, health safety, population control and disaster management (<http://www.bgmea.com.bd/home/pages/aboutus>; USAID 2007; Kabeer 2000).

Overtime gross foreign exchange earnings from RMG exports and their contribution to total export earnings have increased significantly. In FY 1983-84, the sector's earnings were US\$ 31.57 million (3.89% of total export earnings). This has increased to US\$10699.80 million (75.83% of total export earnings in FY2007-2008). Even during the global financial crisis in FY2008-2009 and FY2009-2010, this sector's export earnings were increasing: US\$ 12347.77 million (79.33% of total exports earnings) and US\$ 12496.72 million (77.12% of total exports earnings) respectively (see Table 2 below).

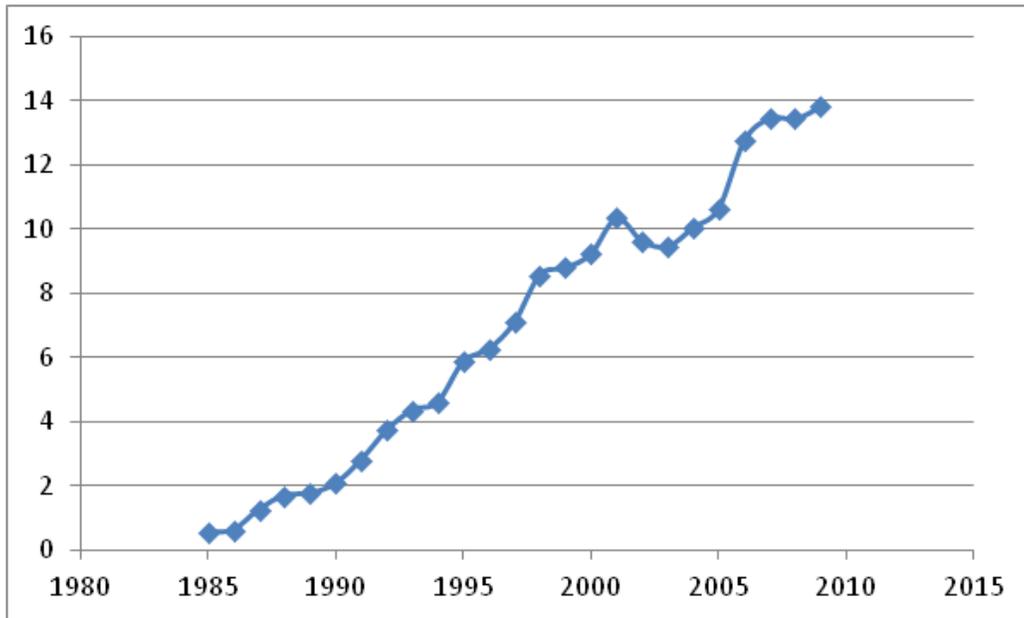
TABLE 2
COMPARATIVE STATEMENT ON EXPORT OF RMG AND TOTAL EXPORT OF
BANGLADESH (SELECTED YEARS)

Year	Export of RMG (in million US\$)	Total export of Bangladesh (in million US\$)	% of RMG to total exports
1983-84	31.57	811.00	3.89
1987-88	433.92	1231.2	35.24
1991-92	1182.57	1993.90	59.31
1995-95	2547.13	3882.42	65.61
1999-2000	4349.41	5752.20	75.61
2003-2004	5686.09	7602.99	74.79
2007-2008	10699.80	14110.80	75.83
2008-2009	12347.77	15565.19	79.33
2009-10	12496.72	16204.65	77.12

Source: BGMEA website: <http://www.bgmea.com.bd/home/pages/TradeInformation> (accessed in February 2011).

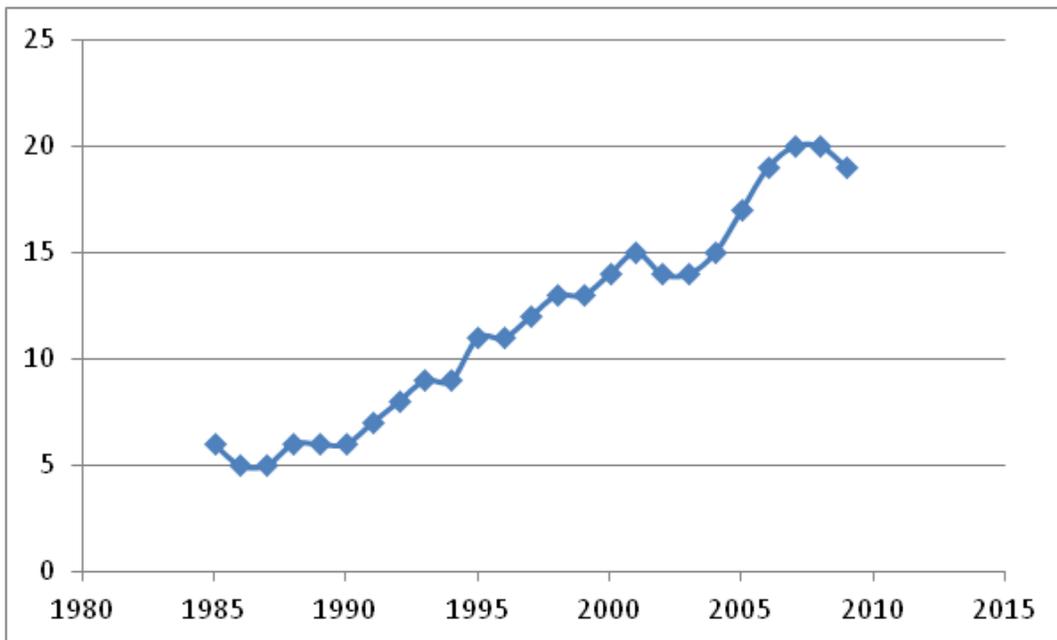
Figure 1 and 2 show the share of RMG exports and total exports as percentage of GDP, respectively. The share of RMG exports in total GDP increased to almost 14 percent in 2009 compared with 0.54 percent in 1985. The export share in GDP is also showing positive trend over the years, and this is mainly due to rapid growth of RMG sector. The export share in GDP was 6% in 1985; this has increased to 20 percent in 2007 and 2008 though there is a slight decline (still 19%) in 2009 due to global financial crisis.

FIGURE 1
SHARE OF RMG AS PERCENTAGE OF GDP



Source: WDI 2010 online database, and BGMEA website: <http://www.bgmea.com.bd/home/pages/TradeInformation> (accessed in February 2011).

FIGURE 2
SHARE OF EXPORTS AS PERCENTAGE OF GDP



Source: WDI 2010 online database.

POPULATION, LABOUR FORCE AND EMPLOYMENT

Before discussing the gender differentiated effects, it is important to have a general overview of the population size, labour force, labour force participation rate and employment by gender in Bangladesh. These gender statistics will help us to understand the gender effects of trade from various perspectives.

Population Size by Gender

In spite of declining annual growth rate of population, the population size has been increasing continuously in Bangladesh. Statistics show that women are fewer in number than men, and this gender gap has still persisted. For example, in 2001, total number of men and women were 67.1 million and 62.9 million, respectively. In 2007, these figures have increased to 73.1 million for men and 69.5 million for women. In terms of percentage, male and female population are 51.2% and 48.8%, respectively, in 2007 (BBS 2009).

Labour Force Size by Gender

Labour force in Bangladesh aged 15 years and over is pictured in Table 3 below. It is observed that both male and female labour force at national, rural and urban levels have increased over the years. Particularly women labour force participation has increased significantly both in urban and rural areas.

TABLE 3
LABOUR FORCE AGED 15 YEARS AND OVER BY SEX AND LOCALITY, 1995-2006 (IN MILLION)

Period and Source	National		Rural		Urban	
	Women	Men	Women	Men	Women	Men
1995-96 LFS	5.4	30.6	3.8	23.9	1.6	6.7
1999-2000 LFS	8.6	32.2	6.4	25.1	2.2	7.1
2002-03 LFS	10.3	35.0	7.7	27.3	2.7	8.6
2005-06 LFS	12.1	37.3	9.3	28.4	2.8	8.9

Source: BBS, 2009.

LFS: Labour Force Survey

Labour Force Participation Rate by Gender

There is a gender differential participation rate by age in Bangladesh. In 2005-06, the highest participation rate for women was 35.1% for the age group of 40-44, whereas the highest participation rate for the men was 98.7% in the age group of 30-34. Participation rate for men ranges from as high as 98.7% to a low 59.2% compared to women as high as 35.1% to a low 13.8% (BBS, 2009).

Employment by Gender

Table 4 below presents the employed persons 15 years and over by formal and informal sectors, sex and locality. It is observed from the table that at all levels the percentage of women labour force at informal sector is higher than their male counterparts. In other words, the percentage of male employment is higher in formal sector. At national level, the percentage of women labour force at informal sector was 85.69% and at formal sector it was 14.31%. On the other hand, these figures are 76.18% and 23.82%, respectively, for men. The pattern is the same for urban and rural areas also.

TABLE 4
EMPLOYED PERSONS 15 YEARS AND OVER BY SECTOR OF EMPLOYMENT,
SEX AND LOCALITY 2005-06

Sector	National (%)		Urban (%)		Rural (%)	
	Women	Men	Women	Men	Women	Men
Total	100.00	100.00	100.00	100.00	100.00	100.00
Formal sector	14.31	23.82	31.08	33.64	9.15	20.76
Informal sector	85.69	76.18	68.92	66.35	90.85	79.24

Source: BBS, 2009.

Unemployment by Gender

There exists a sex differential in the unemployment rate in Bangladesh. In 2005-06, the rate of unemployment for men at national level was 3.4%; for women it was 7.0%. At urban area, the rate of unemployment for men was 3.6% against the 6.7% for women. In rural area, the unemployment rates for women and men were 7.2% and 3.3%, respectively (BBS, 2009).

GENDER DIFFERENTIATED EFFECTS OF TRADE LIBERALISATION

Employment

Trade liberalisation has created a golden opportunity for women employment in Bangladesh. A large number of young women are currently working in the RMG industries. Without this wage employment opportunity, these women would be unemployed and working without pay to carry out other household works such as cooking and serving the meals, raising the children, attending the aged family members, and washing and drying clothes. However, one drawback of the RMG industry is that female workers are concentrated mainly in the low-skill and low-wage segment of production. It is argued that female industrial employment in Bangladesh can effectively be increased through training and skill development (USAID, 2007).

The rapid expansion of RMG industry in Bangladesh is a significant contribution of domestic trade liberalisation. The expansion of this industry results in an increase of the share of the market labour supply of unskilled female labour, and a decrease of the share of the domestic labour supply and leisure of unskilled female members in the households both in the short and long runs (Raihan et al., 2006).

The recent trend of gender differentiated employment in RMG industry is presented in Table 5. It is observed from the table that women employee in garment industry was three times higher than men employee in 2001-02 and 2002-03. In 2003-04 and 2004-05, the proportion of women participation was increased, and it was about four times higher than men employee. In 2005-06 and 2006-07, the proportion of women employee increased further, and it was more than five times higher than men employee. It is noteworthy that women employment in the RMG sector is significantly increasing over the years.

TABLE 5
EMPLOYMENT IN GARMENT INDUSTRY BY SEX, 2001-2007

Year	Total (Million)	Women (Million)	Men (Million)	Women % of total
2001-02	1.80	1.35	0.45	75
2002-03	2.00	1.50	0.50	75
2003-04	2.00	1.56	0.44	78
2004-05	2.00	1.60	0.40	80
2005-06	2.20	1.87	0.33	85
2006-07	2.40	2.04	0.36	85

Source: BBS, 2009.

It may be argued that for increasing productivity and diversification of products, an introduction of new technology is required, and new technology may adversely affect the employment of unskilled workers and displace the women workers. However, USAID (2007) notes that new machinery did not have significant effect on employment in terms of job loss in the RMG sector in Bangladesh. About 90 percent of surveyed knit factories was experienced no job loss. Only 30.7 percent surveyed woven factories reported having some job loss while 69.3 percent reported no job loss. No job loss is also reported by 83.3 percent of surveyed sweater factories. Overall, 75.6 percent of all types of factories reported no job loss as a result of introduction of new machinery in both Export Processing Zone (EPZ) and non-EPZ areas.

In fact, the use of new and imported machinery will increase the production capacity of the current and newly established garment factories. Thus it will create more employment, mostly for women, in the RMG sector. Since every sewing machine requires two female workers (one operator for the machine and one helper to support sewing-related activities), the more import will be for machinery, the more should be employment creation for female workers.

Working Conditions

Though, in 1980s and 1990s, there was a great concern about the workers' safety in the RMG sector, the safety in the workplace now- a- days has much improved as the awareness about and the demand for it has increased. Particularly, increasing pressure from major global buyers about the enforcement of compliance with regulations is coming to Bangladesh government, and the BGMEA has also undertaken some initiatives to address this concern.

USAID (2007) survey reports that the working condition differs among EPZ, non-EPZ, and subcontracting factories. The survey found that, in general, the working environment in EPZ factories is better compared to non-EPZ and sub-contracting factories. Working environment is very poor in sub-contracting factories. As an example, the survey mentioned that all workers interviewed in the EPZ factories reported no incidents due to a poor electricity system since their joining. Whereas 4.6 percent and 16.7 percent of workers in the non-EPZ and sub-contracting factories, respectively, reported such accidents. Though the lack of exits in the EPZ and non-EPZ factories appears to be low, emergency exits are lacking in all sub-contracting factories.

Gender discrimination also exists in granting leave in the RMG sector. Paul-Majumder and Begum (2000) reports that only thirty five percent of female workers, compared to 60 percent of male workers, were granted paid leave.

The incident of illness during work in the factories is also different for men and women workers. The percentages of sick female workers are 21.8 percent as opposed to 9.4 percent for male workers. This reflects women's overall poor health condition compared to men in Bangladesh. Women's intake of healthy and nutritious food is lower than men's intake (USAID, 2007).

UNFPA (2009) reports that gender inequalities exist in women's and men's health status and access to and utilisation of health facilities in Bangladesh. Women has the less bargaining power in the household, low expenditure on health, and men get priority over women when it comes to the division of food. Among the many constraints in accessing health care in Bangladesh, the report particularly mentions two often cited problems; these are lack of money for treatment and the distance to facilities. Even an earning women in Bangladesh does not enjoy 100% right on their income very often; and women face restrictions in travelling unaccompanied.

Working Hours and Overtime

Normal working hours are supposed to be about 8 hours for both male and female workers in Bangladesh including the RMG industry. However, both workers are generally required to work longer hours, which is called overtime, in the RMG sector. In the case of overtime, a difference is visible. In all factories, total working hours, including overtime, for female workers is lower than for male workers. On average, a male worker works 11.5 hours per day compared to 10.6 hours for a female worker. Overtime, the total working hours for both male and female workers in all factories have decreased, and the total

working hours for female workers have decreased from 12 hours in 1997 to 10.6 hours in 2005. The working hours of the RMG sector's workers are longer (about 12 hours) compared to those working in the non-export industry (8 hours), and they are required to work on weekly holidays which is not the case for the non-export industry workers (USAID, 2007).

With regard to overtime, it may be noted that entrepreneurs are required to deliver their products in time according to the demand of foreign buyers. However, some problems such as power shortages, transport-communications snags, inefficient infrastructure and ports, and political unrest disrupt the timely delivery of the product, as normal work schedule is interrupted. So for ensuring the timely delivery, workers are needed to work for longer hours (overtime); entrepreneurs want workers to work for overtime to meet the deadline of delivery, and workers are also very keen to work for extra hours as they earn some extra money.

Wage Rate and Income Differential

There is a wage gap between men and women in all industries in Bangladesh. It is observed from the Table 6 below. Wage of women is lower than men for all sorts of labour. At national and rural levels, the wage gap slightly improved in 2002-03 compared to 1999-2000, but at urban level, this gap deteriorated for the same periods, and wage rate for both groups decreased. Women's wage ranges from 55% to 67% of men's wage across levels. Nationally, women's wage is around 60 percent of men's wage.

TABLE 6
AVERAGE WAGE RATE (TAKA) OF DAY LABOUR (15 YEARS AND ABOVE) BY SEX AND RESIDENCE, 1999-2000 AND 2002-2003

Year	Residence	Women	Men	Women's wage as % of men's wage
1999-2000	National	38	65	58.46
	Rural	35	63	55.55
	Urban	59	88	67.04
2002-2003	National	39	64	60.93
	Rural	37	62	59.67
	Urban	42	75	56.00

Source: BBS, 2009

USAID (2007) study reports that the income gap between male and female workers in the RMG sector appears mostly at higher wage level. Average monthly income of a male worker was found Taka 4,658.8 against Taka 3,535.5 for a female worker. In the higher income group, the share of women workers is lower and vice versa. Only 3.7 percent of female workers, compared to 25 percent of male workers, earn more than Taka 5,000 per month.

In the RMG sector, a female operator's earnings are 71.3 percent of a male operator's earnings and a female helper's earnings are only 52.7 percent of a male helper's earnings. These male female earning differentials in the RMG sector are observed in both EPZ and non-EPZ industries, across all size and types of factories. The income gap is larger in the sweater factories, where women's earnings are 62.05 percent of men's earnings. The income gap is also larger in small factories compared to large and medium-sized factories (USAID, 2007).

Factors that Affect Income Differential

It is widely believed that education, experience, efficiency and the attitude of employers towards women employment are the major factors for men-women income differential in Bangladesh. Female workers in the RMG sector are normally engaged in low-income jobs which need little or no skill. The minimum wage for low-skilled workers was unchanged during 1994-2006. As a result, the wage gap still exists, and did not improve the income distribution of women workers (USAID, 2007).

It is claimed that female workers are less educated, less skilled, and less experienced, and thus less productive than the male counterparts in Bangladesh (USAID, 2007). That is why, they receive lower income compared to men. However, two surveys (BIDS and CPD/GATE¹ surveys) in Bangladesh confirmed that the discriminatory wage still exists for men and women workers even though both have the same level of education. A female worker with an equivalent level of education up to a grade 10 earns only 87.1 percent of male worker's income (USAID, 2007).

As mentioned earlier, men's total hour of working including overtime is longer than that of women, which has also contributed for higher income of men compared to women. In addition, the monthly income of male workers has increased at a higher rate compared with female workers overtime. The CPD/GATE survey notes that male worker monthly salaries increased by 8.8 percent during 1991-2005, against the female workers' salaries increase of 7.2 percent during the same period (USAID, 2007). This discriminatory action has also widened the male female income gap.

The regression results of USAID (2007) also confirm that there is a sizeable gender wage differential/gender biased wage in the RMG sector in Bangladesh. With identical characteristics, the monthly wage of a male worker is 26.2 percent more than that of a female worker. Gender biased wage rate prevails in many developing countries like Bangladesh because of employers' poor attitude towards women's ability and skills.

CONCLUSION AND POLICY RECOMMENDATIONS

The effects of trade liberalisation on society and economy are multi dimensional: some effects are beneficial, and some effects may be considered as harmful. The real effects depend on the respective country's preparedness for trade liberalisation and policy makers' decisions with regard to sectors that will be protected or opened.

Trade liberalisation has also gender differentiated effects as access to and control over resources for men and women vary, and the roles of gender are different for both the market economy and the household activities. This paper has attempted to explore the nature and extent of gender differentiated effects on employment, working condition, working hours and incomes in Bangladesh. The factors behind the income differentials are also explored. Since most of the Bangladeshi female industrial workers are employed in the RMG sector, our analysis is mainly based on this sector.

Bangladesh has implemented a series of trade liberalisation measures since 1992. Though the effects of trade liberalisation prevail in all sectors of the economy, the most effected sector is the RMG sector, as the sector contributes 77.12 percent of total export earnings and 14 percent of GDP. The gender differentiated effects are also very much visible in the RMG sector as this sector employs about 2 million women out of 2.8 million urban women labour force.

Trade liberalisation provided a huge opportunity for Bangladeshi women to be employed in income earning activities. This has been a positive development for many women, allowing them financial independence and a wider variety of social choices. The RMG sector, where most of the working forces are women, developed tremendously as a result of trade liberalisation. Overtime women employment in the RMG sector, compared to men employment, is increasing. In 2005-06 and 2006-07, the proportion of women employee was more than five times higher than men employee. It was observed that introduction of new technology did not significantly affect employment in terms of job loss in the RMG sector.

Gender discrimination is found in granting leave in the RMG sector: only thirty five percent of female workers, as opposed to 60 percent of male workers, were granted paid leave. The sickness incidents for female workers are more than double than male workers in the workplace.

Gender differential is also observed in working hours. Male working hours in the RMG sector are longer by 1 hour than female working hours. Overall working hours in the RMG sector are longer (about 12 hours) than non-export industry (8 hours).

The wage gap between male and female workers is notable in all industries in Bangladesh. Women's wage is much lower than men's wage for all kinds of labour. Women's wage rate is around 60 percent of men's wage rate nationally. In the RMG sector, a female operator receives only 71.3 percent of a male

operator's earnings, and a female helper receives only 52.7 percent of a male helper's earnings. The low level of education and skills of female workers compared to male counterparts, male's longer working time, poor attitude and belief of employers about women's ability and skills as reflected by BIDS and CPD/Gate surveys mentioned earlier are the main factors for this gender differentiated income.

The following policy recommendations may be suggested based on the above analysis to close the gender gap and to improve the well-being of workers.

- a) Income gap between male and female workers for the highly educated group is smaller compared to low educated group (USAID, 2006). So education and skill levels of female workers must be increased. General education as well as specialised training should be provided to women to increase their productivity. Women need on-the job training which will help them to be promoted to the higher positions. The government, non-government organisations (NGOs) and BGMEA should take appropriate steps in this regard. Women should also be enthusiastic to take various types of training to meet the job requirements.
- b) Working conditions for the female workers should be improved. They should be given paid maternity leave, weekly holidays, transportation facilities, medical facilities and child care facilities. More treatment at the workplace must be ensured for the sick workers. This will increase their productivity as well. Factory owners must create a clean and hygienic working environment.
- c) Though overtime work gives some extra earnings to the workers, it has adverse effects on workers' health. Long working hours reduces workers' leisure time which, in turn, reduces long term productivity. Long working hours are essential for timely delivery of the products due to unavoidable circumstances in Bangladesh. To mitigate this problem, two shifting duties in the factories may be considered. This will create more employment for women.
- d) The gender bias wage, at least to some extent, still exists in Bangladesh like other developing countries. Employers must show their fair attitude towards women's ability, employment, due payment and other entitlements.

ENDNOTE

1. BIDS: Bangladesh Institute of Development Studies; CPD: Centre for Policy Dialogue; GATE: Greater Access to Trade Expansion.

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