

Employment and Unemployment Scenario of Bangladesh: A Trends Analysis

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Abstract

Economic growth is necessary for poverty reduction, but not sufficient. Bangladesh has experienced rapid economic growth, structural shifts in the economy, increase in educational attainment levels, and rapid urbanization since gaining its independence in 1971. Empirical evidences showed that, productive employment plays a key role in transmitting the benefits of economic growth into poverty reduction. As a labor abundant country, the prospect of the entire economy of Bangladesh depends on the features of the labor market. The changing features of the composition of labor force, employment, unemployment scenario depends on various factors such as demography, structural change, change of social attitude. In Bangladesh, labor force participation is growing at a faster pace than the current employment generating capacity of the economy making it difficult for the country to absorb the incremental labor force in productive and remunerative employment. In this paper we have seen that labor force participation increasing in a steady way, female participation on labor force are increasing rapidly, labor participation on others sectors are more than agricultural sector. Labor are migrating rural to urban due to industrialization and development of infrastructure. As such, the country needs higher and more employment intensive economic growth for which adoption of several complementary approaches could be useful, such as giving priority to more employment friendly growth policies, widening micro credit based and targeted employment generating programs and special schemes for new job creation especially in rural areas, and increasingly tapping overseas employment opportunities focusing on skill intensive jobs in the global market.

Keywords: Labor force, Employment, Unemployment.

1. Introduction:

Economic growth is necessary for poverty reduction, but not sufficient. Empirical evidences showed that, productive employment plays a key role in transmitting the benefits of economic growth into poverty reduction. Although labor is an important factor of production, it is not homogeneous; gender, residence and skill differences constitute important aspects of the heterogeneity of labor. For instance it is found that least developing countries have considerable sex discrimination (Ashenfelter and Oaxaca, 1991). Factors influencing demand for and supply of labor can be different from that relevant heterogeneity.

The changing features of the composition of labor force, employment, unemployment scenario depends on various factors such as demography, structural change, change of social attitude, trends of economic activities, the macroeconomic policies initiated by private and public sectors as well as multilateral organizations such as World Bank, IMF, United Nation etc. In various cases, the factors are interrelated with various aspects. As a labor abundant country, the prospect of the entire economy of Bangladesh depends on the features of the labor market. For instance, Skill labor force is one of the important factors that contribute most to affect FDI in Bangladesh (Sadekin, Muzib and Abbasi, 2015).

Bangladesh has experienced rapid economic growth, structural shifts in the economy, increase in educational attainment levels, and rapid urbanization since gaining its independence in 1971. Women are increasingly becoming visible in the productive labor force in Bangladesh. Unemployment is considered as major problem in Least Developing Countries (LDCs) like Bangladesh. The surplus labor is expected to take in the family farms in the rural areas and in other informal enterprise. For instance, a study on rickshaw pullers in Comilla city, Bangladesh by Sadekin et al. (2014) finds that rickshaw pulling is an easy way of earning more money and employment but the social status of the rickshaw pullers are not satisfactory and it is not an economically sufficient way to earn the livelihood in the long run. During the last two decades, rapid changes had taken place in this scenario. Women's employment in garment factories is one of these changes. There has been an increase in female labor force participation alongside the acceleration in economic growth since the 1990s. In contrast to India, there has also been no decline in female labor force participation in agriculture. In line with the experience of countries achieving export-oriented industrialization through trade liberalization, Bangladesh has witnessed a substantial increase in female employment in labor-intensive export-oriented industries in urban areas.

A study by the Asian Development Bank (ADB) and ILO (2011) looked at the labor market situation in Asian countries and especially highlighted the impact of the global financial crisis, which overwhelmed the industrial economies since 2008. Although it does not analyze the Bangladesh situation separately, some of the

policy conclusions for South Asia region can be very relevant for this country. The study observes that LFPR in South Asia is much lower than East and South-East Asia. The study highlighted that gender inequalities are rooted not only in social and cultural norms but are also deeply entrenched in the policy focus and institutional environment.

The remainder of the paper is structured as follows. Section 1 presents the objectives of the study. Section 2 renders the methodology of the study. Section 3 provides data on the labor force participation rate (LFPR) in Bangladesh and its changes during the last two decades (for which comparable data are available). This section also discusses some of the important aspects of labor market trends. Specifically, the changes in sector, type and status of employment differentials receives attention. Section 3 provides an analysis of the policy environment for employment and makes some suggestions for improvement in that regard. It also provides a summary of findings and concluding observations.

2. Objectives of the Study:

1. Analyze the employment and unemployment scenario in major sectors of Bangladesh.
2. To examine the significant difference between male female participants on labor force.
3. To examine the number of employee engaged in different non agricultural sectors are significantly different.

3. Methodology:

Given the above objectives of the study, a major part of the present study is based on secondary data provided by National Sample Surveys, in particular by Bangladesh Labor Force Survey (LFS) Reports of various rounds. Other secondary sources used in the study include various publications of the Bangladesh Bureau of Statistics (BBS), Planning Commission and various government ministries. To analyze the data we use STATA for doing Independent T-test and One way ANOVA.

4. Overall scenario of Civilian Labor Force Participation in Bangladesh:

Civilian Labor Force is the sum of civilian employment and civilian unemployment. These individuals are civilians (not members of the Armed Services) who are age 16 years or older, and are not in institutions such as prisons, mental hospitals, or nursing homes. In Bangladesh civilian labor force was 56 million in 1995-96 (Figure: 1). It decreased to 40.7 million in 1999-2000 (Figure: 2). Main reason behind that female labor force significantly decreased to 8.5 million which was 21.3 million in 1995-96. After the labor force survey in 1995 definition of labor force participation was restructured and female education enrollment increased. From 2002-03 to 2010 labor force participation was increasing. Total labor force participation increased to 16 million from 2000 to 2010 because Female labor force participation increased 102% in these 10 years.

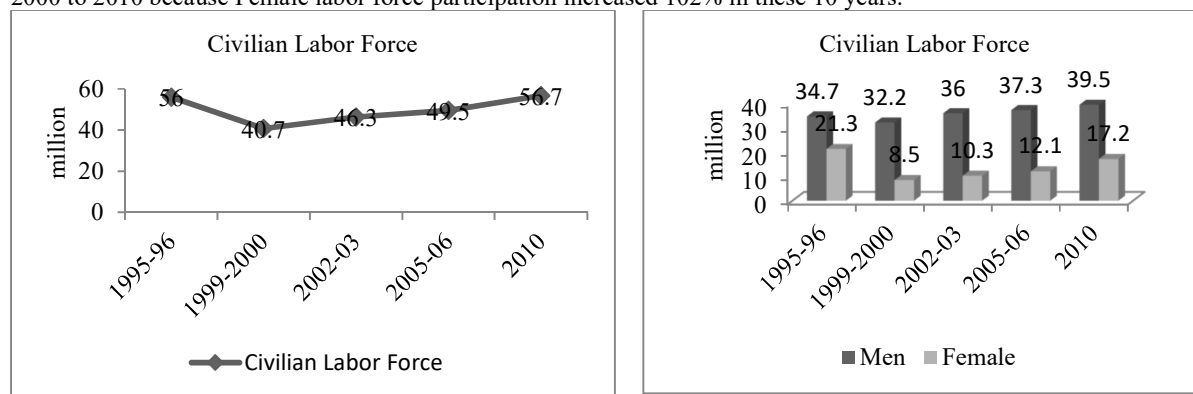


Figure: 1. And Figure 2 Overall scenario of Civilian Labor Force Participation in Bangladesh
 Source: Statistical Year Book, 2012, BBS

4.1 Employment Status:

In terms of employment status, total number of employed population was 54.6 million in 1995-96 in Bangladesh (Figure: 3). It was drastically decreased to 39 million in 1999-00 (Figure: 3). After 2000 it start to increase and at the end of 2010 it reached to 54.1 million which was 0.5 million less than 1995-96. If we consider gender based employed population we see female employed population significantly decrease to 7.9 in 1999-00 where it was 20.8 million in the year of 1995-96 (Figure: 4). Male employed population was almost steady between the period of 1995 and 2000. As a result total numbers of employed population significantly decrease in 1999-00. After the year 2000 both male and female employed population start to increase but female employed population increase

more rapidly compare to male population. In 2010 male employed was 37.9 million which was 4.1 million higher than the year of 1995. But female employed population was 16.2 million which was 4.6 million less compare to 1995. Most important is from 2000 to 2010 male employed population increase 21.86% on the other hand female employed population increase 105%.

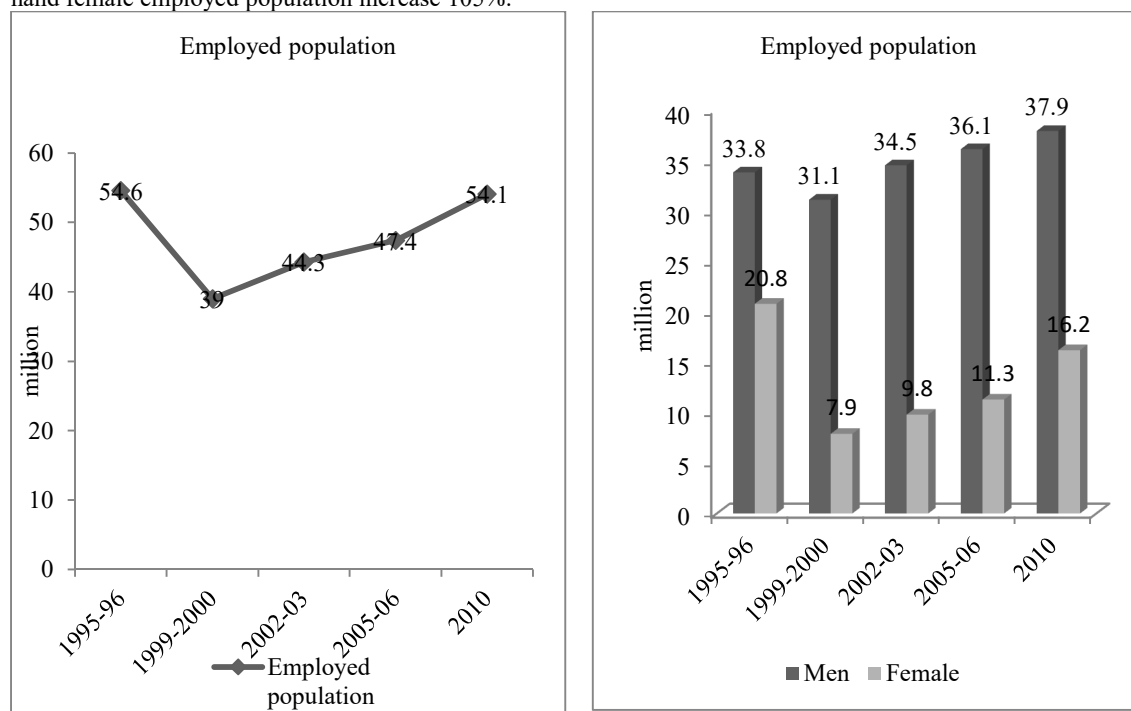


Figure:3 and Figure 4. Employment Status

Source: Statistical Year Book, 2012, BBS

4.2 Unemployment Status:

Now we consider unemployment status, we see total number of unemployed population was 1.4 million in 1995-96. Among the unemployed population 0.9 million was male and 0.5 million was female. The unemployment trend of male and female was increasing. But in 2002-03 we see the gap between male and female unemployed population was very high compare to other years. From this figure we may say that in 2002-03 female participation increased more rapidly than the male participation in labor force. Another observation also is found that there have ups and downs of male and female unemployed population from the year 1995 to 2010. In figure 5, the lines are going to upward but not in steady manner.

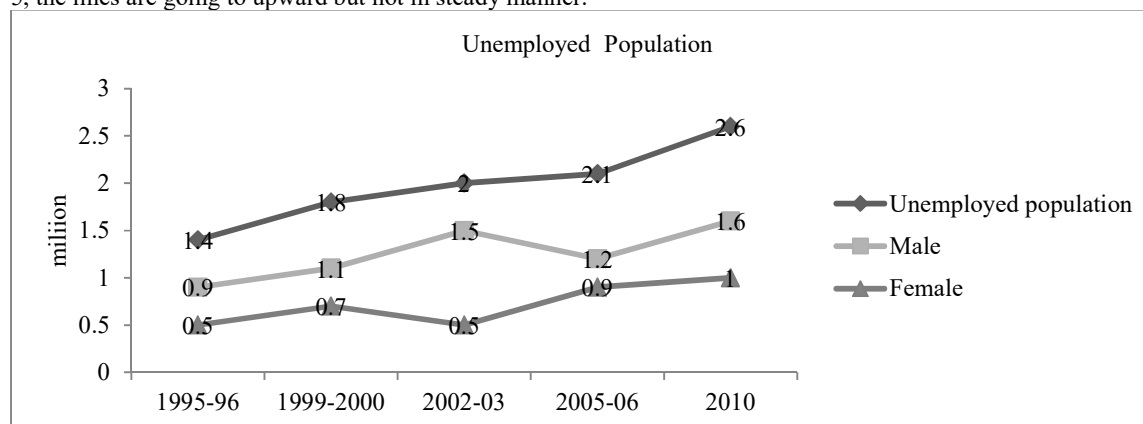


Figure: 5. Unemployment Status

Source: Statistical Year Book, 2012, BBS

In 2010 we see male unemployed population increased 1.4 million to 2.6 and female unemployed increased 0.5 million to 1 million. Male unemployed population increased more rapidly than female unemployed

population. In percentage male unemployed population increased 86% and female unemployed population increased 50% in these ten years.

4.3 Employment in major industry:

In Bangladesh most of the population of labor force is engaged in Agriculture sector. Total number of employed population in 1995-96 in agriculture sector was 34.5 million and 20.12 million of population was employed in all other sectors. In 1999-00 labor force participation in decreased to 19.8 million where total number of employment decreased 29% but in agricultural sector it decreased to 42%. The reason behind this is labor force participation increase in other sectors particularly in manufacturing, trade and restaurant, finance, business service and construction sector. In figure 6 we see that 63.16% population were engaged in agriculture sector in 1995-96 and 47.33% in 2010. In 2010, 15.47% population of total employment engaged in trade and restaurant sector, 12.34% engaged in the manufacturing sector and 6.26% engaged in public administration & defense sector which is higher than it was in 1995-96. So it is very clear that labor force participation in the agricultural sector decreasing over time, but still this sector consume the big portion of the labor force.

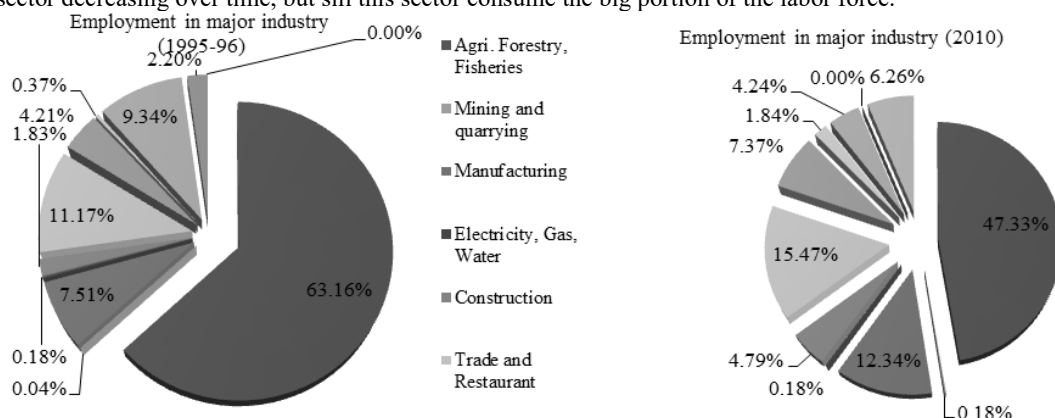


Figure: 6. Employment in major industry

Source: Statistical Year Book, 2012, BBS

Table 1: Civilian Labor Force by Sex and Residence (in Millions)

Civilian Labor Force by Sex and Residence (in Millions)

Year	Urban			Rural		
	Both sex	Male	Female	Both sex	Male	Female
1990-91 ^a	8.7	6.6	2.1	42.2	24.4	18.1
1995-96 ^b	10.2	7.4	2.8	45.8	27.3	18.5
1999-2000 ^c	9.2	7.1	2.1	31.5	25.1	6.4
2002-2003 ^d	11.3	8.6	2.7	35	27.4	7.6
2005-06 ^e	11.7	8.9	2.8	37.7	28.4	9.3
2010 ^f	13.3	9.3	4	43.4	30.2	13.2

Source: ^a Labor Force Survey (LFS), 1990-91; ^b Labor Force Survey (LFS), 1995-96; ^c Labor Force Survey (LFS), 1999-2000; ^d Bangladesh Bureau of Statistics (BBS), 2002-03; ^e Bangladesh Bureau of Statistics (BBS), 2005-06; ^f Bangladesh Bureau of Statistics (BBS), 2010.

4. 4 Civilian Labor Force by Sex and Residence:

Now we consider civilian labor force by sex and residence. Labor force census in 1990-91 shows in table 2, 6.6 million are male and 2.1 million are female out of 8.7 million in the urban area. In the rural area, 24.4 million are male and 18.1 million are female out of 42.2 million. 76% are male and only 24% are female of total labor force in urban area. On the other hand 58% are male and 42% are female of total labor force in rural area which shows that female labor force of rural area is higher than urban area. In 2002-03, we see that both male and female labor force decrease to 31.5 million in rural area and increase to 9.2 in urban area. Female labor force tremendously decreases to 22% of total labor force in rural area. The reason of total labor force increase in urban area and decrease in rural area may be labor force migrate rural to urban area. They migrate for searching job in urban area because manufacturing sector, particularly the garments sector widely expands in urban area. The rural female labor force has an opportunity to work on that sector.

5. Statistical Analysis:

We have already done the descriptive analysis on previous sections. In this section we will do statistical test, Independent T-test and One way ANOVA to fulfill objective two and four.

5.1 Independent T-test:

Though in Bangladesh male and female participation on labor force are increasing over the year but it is observed that the female labor force participation is more rapid than the male labor force participation. So we want to compare the average value of male and female. We have categorical variables male and female and continuous variable labor force participants. Now we will examine is there any significant difference in the mean value of labor force participation between male and female. In statistics If we want to see the outcome we will do independent T-test.

Let the mean value male labor force participation is L_m and the mean value of the female labor force participation is L_f

Null Hypothesis (H_0): The mean value of labor force participation between male and female are equal. That is $L_m - L_f = 0$.

Alternate Hypothesis (H_A): The mean value of labor force participation between male and female are not equal. That is $L_m - L_f \neq 0$

Table 2: Independent T-test

Output Index	Mean
male	35.94 (1.22)
female	13.88 (2.35)
combined	24.91 (3.88)
t test	8.3065***

Note: Standard errors in the parenthesis; Statistical significance: ***<0.01, **< 0.05, *< 0.10

Here, t statistics is highly significant because $p < 0.001$. On the basis of t statistics null hypothesis is rejected. So, the mean value of labor force participation between male and female are not equal. We can also get that the mean value of male labor force participation is higher than that of female labor force participation. The reason behind this are the number of male participants are larger than female. Female participant have also faced social barriers like education, physical strength and traditional social views etc.

5.2 One Way Anova:

In this study we have seen that large numbers of people are employed in agricultural sector but it has been decreasing over years. As the number of employee are increasing on other sectors particularly on manufacturing, trade and restaurant, Transport, Storage, Communication sector and construction sector we want to compare the average value of number of employee on those sectors. We have categorized the sectors as four categories:

1. Manufacturing
2. Trade and restaurant
3. Transport, Storage, Communication
4. Construction

The above four sectors are categorical variable and number of employee is continuous variable. As we have more than two categorical variables and one continuous variable we will do one way ANOVA to see the mean value of employee on different sectors are equal or not.

Bartlett's test for equal variances: $\chi^2(3) = 1.5953$ Prob> $\chi^2 = 0.660$

In bartlett,s test of equal variance, there is $P > .05$, so we are unable to reject null hypothesis. We may conclude that observations have equal variance. This met the key assumption of one way ANOVA test.

One way ANOVA

Null Hypothesis (H_0): mean value of employee among four sectors are equal

Alternate hypothesis (H_1): At least three groups are not equal.

Table 3: One Way ANOVA Table

Source of variation	Sum of Square (SS)	Degrees of freedom	Mean of Square
Between groups	82.24	3	27.41
Within groups	14.25	16	.89
Total	96.50	19	5.07
F test	30.78***		

Note: Statistical significance: *** < 0.01, ** < 0.05, * < 0.10

In ANOVA test F statistics is highly significant because value of P < 0.001 we are unable to accept null hypothesis. So mean value of employee among all four sectors are not equal. we may draw the conclusion that average participation of employee among the rising four sector are significantly different. We may conclude that mean value is different due to urbanization and industrialization, education, market structure, low price of agricultural product, social security, personal preference etc.

6. Conclusion:

Employment provides the key link between economic growth and poverty making it the major tool for poverty reduction in Bangladesh. The country's poverty reduction strategy would be sustainable if it is consistent with a well-articulated employment strategy that creates productive and decent employment opportunities so that workers of every level of skill, education, and training can get remunerative employment. For this, along with economic growth driven by sectors that are labor-intensive in nature and have greater potential of job creation, the policy framework needs to promote an employment-friendly environment, encourage labor-intensive restructuring in both formal and informal sectors, facilitate the skill development of the labor force, and bring about appropriate changes in labor market policies. In addition, the policies must seek to fulfill the aspirations of the people in their working lives including opportunities, incomes, rights, voices, and recognition

The poverty characteristics in the country show that agricultural labor households have a high incidence of poverty as do non-agricultural casual and unskilled workers. These characteristics indicate that labor is the main asset and the income source of the poor households in Bangladesh. For reducing poverty, policies therefore need to increase the returns to labor in both agriculture and non-agricultural activities and enable the poor to get more remunerative jobs in other sectors.

In Bangladesh, labor force participation is growing at a faster pace than the current employment generating capacity of the economy making it difficult for the country to absorb the incremental labor force in productive and remunerative employment. As such, the country needs higher and more employment intensive economic growth for which adoption of several complementary approaches could be useful, such as giving priority to more employment friendly growth policies, widening micro credit based and targeted employment generating programs and special schemes for new job creation especially in rural areas, and increasingly tapping overseas employment opportunities focusing on skill intensive jobs in the global market.

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