## A SEMINAR PAPER ON

# **Structure and Dynamics of Labour Market in Bangladesh**

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#### **ABSTRACT**

Labour force of any developing country like Bangladesh remain in peak of the concern. Generally, the group of population aged above 15 years are considered as lobour force. From 1999-200 to 2015-16 the labour market of Bangladesh increased by 24.25 million with the increase of population. Though the rate of increasing is different. Surprisingly the rate of increasing of female labour force is higher than the male labour. In case of youth labour force male population shows decreasing trend and female labour force shows the opposite. At present female youth labour is 10% more than the male youth. In case of sector-based employment male and female engagement are near to equal in agricultural sector. On the other hand, among three broad categories of employment self-employed and employee shows an increasing trend whereas the unpaid family helper which mostly represent the female labour is decline over the time and stood at 15% in 2015-16. Informal sector of employment is still dominating over formal sector. At national level informal sector hold 86.2% of employment whereas formal sector holds only 13.8%. Again, unemployment shows a reduced rate in 2015-16 than 1999-2000. Finally some allied factors of labour market was being estimated. Here some factor like age, education, collateral of loan and annual interest rate shows a negative coefficient that means they have a negative relation with hours of employment. Remaining factors like experience, skill, amount of loan, source of borrowings etc. have positive effect on hours of employment.

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#### **CHAPTER 1**

## INTRODUCTION

### **Concept and definition:**

Labour force have ben defined in two alternative way in labour force survey (LFS) in Bangladesh and they term these as 'usual' and 'extended' definition. Usual definition is most widely used as it is used 15 years as lower age limit for inclusion in labour force (Rahman, 2005).

In LFS 2016-17 defined labour force as the sum of the person in employment and person in unemployment. These two groups together represent the current supply of labour for the production of goods and service. There is another term in labour force namely 'youth labour force' that cover persons of labour force age 15-29. On the other hand, the proportion of country's working age population that involved actively in the labour market. They may be currently working or may be looking for work both types of groups are considered as labour force participation rate (LFPR) (BBS, 2018).

Another two-crucial terminology used to explain labour market is employment and unemployment. Employed comprise all persons of 15 years or old who during a specified period was actively involved at least for 1 hour, in any form of work for wage or salary, profit or family gain, and including the production of goods for own consumption. Unemployment is just the opposite concept of employment. It indicates the proportion of labour force that are willingly looking for work but still now don't have a job. Underutilization is another terminology that most often making confusion with the term unemployment. Labour underutilization clearly refers to the mismatches between labour supply and demand (BBS, 2018)

### **Literature review**

The contemporary labour market of Bangladesh is characterized by an increasing rate of labour force participation and increases in underemployment (Kundu, 2016). Due to this, creation of employment for the new entrants into the labour force has become one of the principal development challenges for Bangladesh. The labour force is growing at almost twice than the rate of growth in population (Titumir and Hossain, 2003). It has been reported that 67% of total population were aged 15 or older of whom 50.4% were female (BBS, 2017). According to Bangladesh Bureau of Statistics (2010), the labour force increased at 42.6 percent between 1991

and 2005 for the entire population, with an increase of 31.7 percent for male and 126.5 percent for female. Following this increasing trend in 2016 the participation of male and female in labor force is stood at 81.9 and 35.6 percent respectively. Percentage of total population participated in labor force is almost equal in rural and urban area (BBS, 2017).

Labour market in Bangladesh constitutes of three types of market: formal, rural informal and urban informal (Titumir and Hossain, 2003). A small portion of the total labour force, however, works under the formal labour market framework (Basak, 2014). In many countries informal economy plays important role in employment creation and income generation. Country having high population growth like Bangladesh, informal sector tends to absorb most of the growth in labor force (BBS, 2018). So in Bangladesh informal economy has been an important component of the growth dynamics, which has increased and reached 89% of the total number of jobs in the labour market (Danish Trade Union, 2014).

According to the report of World Economic Forum on Gender Gap, Bangladesh ranked 68<sup>th</sup> according to its gender gap index (World Bank, 2007). Women's participation in different productive activities outside of home is rare due to few traditional social barrier (Hossain. Et al 2009). Different studies found that, contribution of women to socioeconomic development were not visible, perhaps due to a set of social norms that enabled men to dominate women (Bose, et. al., 2009). Economic development is expected to be associated with changes in the structure of Employment (Kundu, 2016). On the other hand participation of women's labour force is very much important as it can change the total labor market structure and can play a vital role in the economic growth of Bangladesh (Rahman. et al 2005).

The pattern of changes of labour market across Bangladesh in different (Basak, 2014). For example growth of real income from wage employment is more rapid in Chattogram than Barishal (Basak, 2013). Again there is a number of studies have ben conducted on labor market dynamics and structure (Fahmida and Moazzem, 2007., Asaduzzaman, 2010., and Rahman, 2000) under different aspects. Studies found the composition of labour force and poverty alleviation in rural Bangladesh hold a strong relationship (Mahmud, 2006). Furthermore, the gender differentiation has significant socio-economic impacts in the export-oriented garment industry of Bangladesh (Majumder and Begum, 2006).

In these circumstances the objectives of this review paper are –

- 1. To explore the composition of labour market from different aspect
- 2. To find out the trend in the labour market.
- 3. To know the determinants of estimated labour market.

#### **CHAPTER 2**

## **MATERIALS AND METHODS**

This seminar paper is nothing but a review paper. All data and information are used here to prepare this paper were collected from secondary sources. So, no specific methods are followed here. Just in some case updated data were added with the old one and find out different trend in excel software. By reading different books, articles, journals, proceedings, newsletter and accumulating data and information, this paper has been drawn up.

Finally, this seminar paper was prepared with the consultation of my respective major professor and honorable seminar course instructors.

#### **CHAPTER 3**

#### **REVIEW OF FINDINGS**

## **Population and labour force composition:**

Increased number of population may not be a burden if it can be used efficiently for development. From 1999-2000 to 2015-16 population increased by 34.15 million whereas the working age population increased only by 24.25 million. At the same time the portion of employed population increased by 20.53 million. That means enlarging rate of labour market is much lower than the increasing rate of total population which may be a serious matter of concern in the way of continuous development. Even we failed to use the total portion of labour force effectively. Till 2010 labour force survey, total working age population is male dominance, but table shows that in recent years (2015-16) the female portion of working age population become higher than the male portion. It indicates that more skilled female labour is needed to ensure countries development though still the amount female employed population is still less than half of the total male employed population. Unemployed portion of labour force doesn't show a constant trend but there is a sharp increase till 2015-16 in male and female both.

Table 3.1: Changes in the size of Labour Force and Composition

Year	Populati	Population		Working age		Employed		Unemployed	
	Male	Female	Male	Female	Male	Female	Male	Female	
1999-00	64.09	60.26	38.30	35.90	31.1	7.9	1.1	0.7	
2002-03	68.33	65.08	41.20	39.60	34.5	9.8	1.5	0.5	
2005-06	70.04	67.26	43.01	41.58	36.1	11.3	1.2	0.9	
2010	74.15	73.59	47.85	47.74	37.9	16.2	1.6	1.0	
2015-16	79.6	78.9	48.4	50.3	41.76	17.77	1.3	1.3	

(Source: Basak, 2013 and BBS, 2017)

Fig 1 shows that the percentage changes in labour force based on gender. In all case percentage increases in female labour force is higher than the percentage changes in male labour force. Specially in last 7 years rate of changes of female labour force (5.36%) is almost five times of changes of male labour force (1.15%)

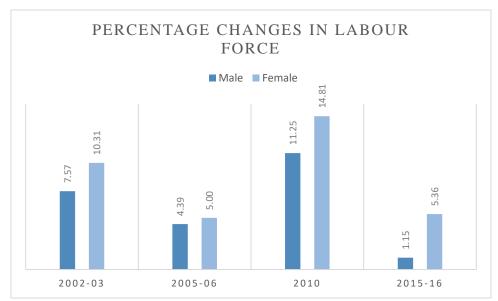


Fig 1: Changes in Labour Force (percentage) in Bangladesh

(Source: Basak, 2013 and BBS, 2017)

### Changes in youth labour force compared to 1999-2000:

As expectedly the total growth rate of youth labour force is higher in urban area than rural. Though the labour force even the youth labour force of Bangladesh is still male dominating but in case of growth rate of the scenario is different. The female population in youth labour force is higher

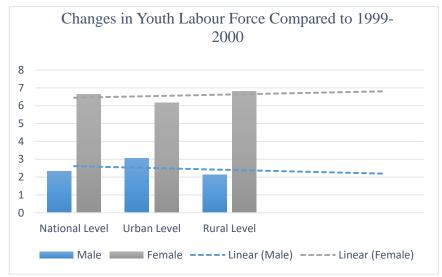


Fig 2: Changes in Youth Labour Force Compared to 1999-2000 (percentage)

(Source: Basak, 2013)

(almost double) than the male in both are (rural and urban). Moreover fig 3 shows that the growth rate in case of male shows a decreasing trend throughout the time period whereas in case of female, it shows an increasing trend.

### **Present status of youth labour force:**

Table 3.1 already showed that the female population is higher than the male in working age group. Just like that the female population in youth labour force (40.9%) is higher than the male (30.6%). All of this three age group showed the similar result.

**Table 3.2: Youth labour force distribution (% in total labour force)** 

Age group	Male	Female	Total
15-19	7.7	7.9	7.8
20-24	9.9	14.1	11.1
25-29	12.9	18.8	14.6
Total	30.6	40.9	33.5

(Source: BBS, 2017)

### **Labour force participation rate:**

The labour force participation rate (LFPR) is defined as the number of persons in the labour force, given as a percentage of the working-age population. The labour force participation rate provides information about the relative size of the labour supply currently available to produce goods and services. It is an important indicator for economic growth and is also used to monitor progress in the labour market (QLFS, 2015-16).

Working age population were divided into three categories here. Among these, highest labour force participation rate found in the second group (age 30-64) in all cases (rural, urban and national level). Participation rate of female is almost half of the male in both area (rural and urban). As a male dominating labour force there is almost no difference between LFPR of male in rural and urban area. On the other hand, due to engagement with agricultural activities the LFPR of female is higher in rural area than urban.

Table 3.3: Labour force participation rate in percentage (aged 15 or older by age group, sex and area)

	Rural		Urban			Bangladesh			
	Male	Female	Total	Male	Female	Total	Male	Female	Total
15-29	69.7	32.8	50.6	69.4	31.1	48.6	69.6	32.3	49.9
30-64	94.8	44.4	69.5	94	32.5	64.4	94.6	41	68
65+	54.6	11.9	35.7	44.1	8.2	28.6	52.3	11.1	34.2

(Source: BBS, 2017)

## **Employment population by Sector and gender:**

Employment population by sector is a complex matter to estimate. Still the latest survey (2015-16) male labor dominant in both agriculture and non-agriculture sector. Though they don't follow any constant trend but among last three LFS the male employment in agriculture is lowest in 2015-16. Beside this female employment in agriculture is highest in that time. On the other hand the male employment in informal sector is showing an increasing trend in the last three survey whereas the female population doesn't show any fixed trend.

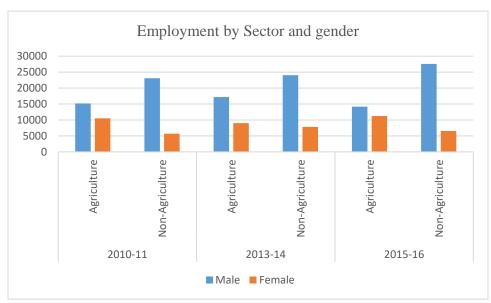


Fig 3: Employment population by sector and gender

(Source: BBS. 2012, BBS, 2013 and BBS, 2017)

## Changes in the structure of the employment:

Fig 4 shows that self-employed as percentage of total employment follows a slightly increasing trend from 1999-2000 to 2015-16. Employee as a percentage of total employment shows a clear increasing trend but surprisingly the unpaid family helper/labour which is mostly involved with female member of households, provide a decreasing trend in the same period. Within total employment self-employed population increased from 351% in 1999-2000 to 43.2% in 2015-16. Employee also increased from 12.6% to 39.2% of total employment within the same period but the unpaid family helper/labour decreased from 33.8% to 14.47% of total employment.

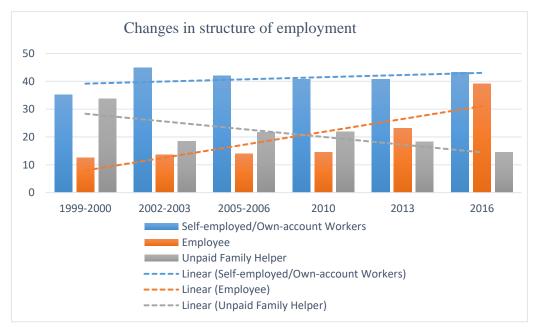
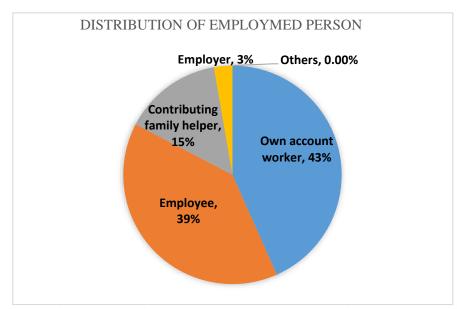


Fig 4: Changes in the Structure of Employment by Status (% of total employment)

(Source: Basak, 2013 and BBS, 2017)

According to LFS 2016-17 the employment status can be distinguish between two main categories of the employed, such as (1) employee and (2) self-employed. Present scenario of distribution of employed person shows that self-employed/own account worker hold the highest rank as 43% and employer hold the lowest as 3%. Beside this there may some other categories which contains an ignorable percentage in total employed person



. Fig 5: Percent distribution of employed persons, by status in employment (2015-16)

(Source: BBS, 2017)

## **Formal and Informal Employment Condition:**

According to QLFS 2015-16, persons can be defined as working in the informal sector in terms of their main activity. For the QLFS 2015-16, the operational (statistical) definition for informal employment in Bangladesh was a combination of both the informal character of the individual job as well as employment in the informal sector:

- All individual job-based informal employment operationally comprises all employed persons in the non-agriculture sector, both wage and salaried workers (employees) with no pension or no contribution to a retirement fund;
- ii. All contributing family workers;
- iii. All employers and own-account workers in the informal sector enterprises (operationally defined in Bangladesh as all private unincorporated enterprises engaged in non-agriculture work that do not have any registration);
- iv. All own-account workers employed in a private household.

Engagement of labour force with formal employment is about one sixth of informal employment at national level. Here male labour involvement in formal sector is higher than female in rural and

urban both area. On the other hand, involvement of male and female with formal employment in urban area is 26.4% and 9.4% respectively which is higher than the rural area as expected.

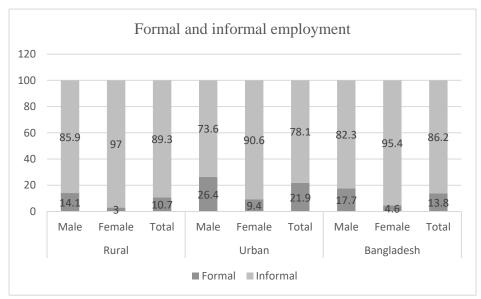


Fig 6: Formal and Informal employment condition (2015-2016)

(Source: BBS, 2017)

#### Changes in the rate of unemployment:

Rate of unemployment at national level followed a decreasing trend till 2010 from 1999-2000. Interesting fact is that female unemployment rate was decreased from 7.8 in 1999-2000 to 5.1 in 2010 whereas male unemployment rate increased from 3.4 to 5.1 at that time span. Later on, totally opposite scenario has been observed in 2015-16. Female unemployment rate shows increasing trend up to 6%, and male unemployment rate shows decreasing up to 3% till 2015-16 though the national level unemployment rate almost remain the same (4.3% in 1999-2000 and 4.1% in 2015-16).

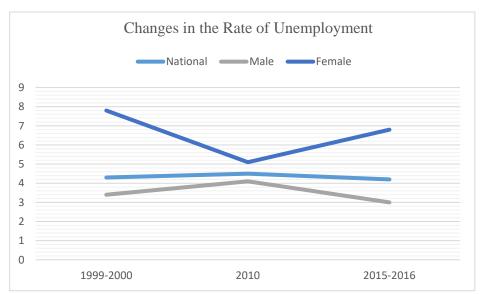


Fig 7: Percentage changes in unemployment

(Source: Basak, 2013)

### Real wages:

Estimated real wage for 2006-2007 to 2011-2012 showed in table 3.4. Though only agriculture followed a continuous increasing throughout the period but construction sector having the highest wage index in 2011-2012. Construction and industry both sector provide a continuous increasing till 20008-2009 and fall in the next year. Surprisingly in both sector the indexes rose again in 2011-2012.

**Table 3.4: Index of real wage, 2006-2012** 

Year	Overall	Industry	Construction	Agriculture
2006-2007	100.68	100.90	101.39	100.53
2007-2008	102.57	103.02	104.54	102.07
2008-2009	114.79	114.33	120.34	115.86
2009-2010	115.40	112.97	119.29	121.65
2010-2011	110.96	106.26	116.08	123.17
2011-2012	114.49	113.20	141.43	128.73

(Source: ADB, 2016)

#### **Determinants of estimated Labour Market:**

Logit model was used to find out the relation of allied factors with estimated labor market. Here the variable education is highly significant and have negative coefficient. That indicates that most of the labours are comparatively low educated. In other word it can be said that with the increase of education there is a possibility of more unemployment. On the other hand result shows a significance of light engineering service, electronic service, construction service and furniture making service. All of these have positive coefficient which indicates relatively higher log of hour employment in Bangladesh. Along with this the positive coefficient of year of experience means the hours of employment will increase with the increase of experience.

The coefficient of skill training provider is positive and highly significant. Vocational training dummy also shows a positive coefficient (2.14) and significant. That indicates with the 1 unit increase of vocational training, on average the hours of employment will increase by 2.14 unit.

On the other hand the collateral of loan, annual rate of interest and age of labour have negative coefficient. Increasing the amount of these variables will lead to an decreasing the hours of employment.

Finally the LR statistic is 109.25 with having a p-value is about 0.00 which ensure that all the considering explanatory variables together have significant impact on the dependent variable.

Dependent variable: Determinants of hours of employment

Table 3.4: Result of regression on allied factors of estimated labour market

Variables	Coefficient	t-statistic	Prob.
Constant	23.02(6.13)	3.76	0.00
Age of labour	-0.68(0.25)	-2.72	0.01
Sex of labour dummy (male=1)	21.46(0.59)	36.56	0.00
Education of labour	-0.62(0.15)	-4.26	0.01
Light engineering, service (yes=1)	2.69(0.87)	3.10	0.00
Electronic service (yes=1)	2.27(0.42)	5.52	0.01
Construction service (yes=1)	3.43(0.77)	4.43	0.00
Furniture making service (yes=1)	2.34(0.49)	4.75	0.01

Years of experience	1.12(0.41)	2.75	0.01
Skill training providers	4.41(0.79)	5.58	0.00
No. of dependent members	0.92(0.48)	1.98	0.04
Sources of borrowing	1.74(0.47)	3.73	0.00
Amount of loan	2.04(0.66)	3.09	0.00
Collateral for loan	-0.88(0.48)	-1.97	0.04
Rate of interest annually	-2.85(1.23)	-2.33	0.02
Vocational training dummy (yes=1)	2.14(0.83)	2.58	0.01
McFadden R-squared	0.77	•	,

(Source: Kundu, 2016)

#### **CHAPTER 4**

#### CONCLUSION

Labour force is one of the main instrument of any over populated country like Bangladesh. By converting the population to skilled labour development can be ensured. Here in this country with the increase of total population, the size of the labour force also increasing in last 18 years (from 1999-2000 to 2015-2-16). Though the labour market of Bangladesh still male dominating but the rate of increasing of labour force is higher in case of female population. According to recent statistics the size of female working age population is higher than the male, followed by the youth labour force. On the other hand, labour force participation rate is much higher in case of male population. That means among the total working force the actively participation rate of male is higher than female.

Agriculture sector comprises with more female than non-agricultural sector. Even participation in agriculture of male and female is nearly equal in recent years though there is a large gap existed in non-agricultural sector. Among the three-different categories of employment (self-employed, employee and unpaid family helper) self-employed and employee showed an increasing trend whereas the portion of unpaid family helper is reducing over time. Present scenario shows that the highest employment percentage in self-employed (43%) followed by employee, unpaid family helper and lowest in case of employer (3%). Beside this, the contribution of informal sector is much higher than formal sector in employment. This gap is comparatively higher in rural area than urban. In the case of unemployment rate, though there's a lot of ups and downs in male and female unemployment but on average at national level there's almost zero change happen in last 18 years. Considering sector base wage rate, though construction sector provides highest wage index but only agriculture sector provides a continuous increase in wage till 2011-12.

Finally, there are some factors that can be influence the labour market of Bangladesh positively or negatively. It's found that all of those explanatory variables together have significant impact on estimated labour market. Among all the variables the age and education of labour, collateral for loan and annual interest rate have negative coefficient which indicates that any increase of these variables will adversely affect the log of hour of employment. Remaining variables such as



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## **ANNEX**

Annex 1: Changes in youth labour force compare to 1999-2000 (in percentage)

Labour force	2002-03	2005-06	2010	Rate of Growth
composition				
National Level	31.03	22.76	44.10	3.72
Male	29.81	26.92	26.00	2.34
Female	34.15	12.20	90.20	6.63
Urban Level	29.41	23.53	50.00	4.14
Male	34.78	30.43	34.80	3.05
Female	18.18	9.09	81.80	6.17
Rural Level	31.53	22.93	42.30	3.57
Male	28.40	25.93	23.50	2.13
Female	40.00	13.33	93.30	6.81

Annex 2: Changes in the Structure of Employment by Status in Employment (% of total employment)

Status	1999-2000	2002-2003	2005-2006	2010	2013	2016
Self-	35.1	44.8	41.9	40.8	40.7	43.2
employed/Own-						
account Workers						
Employee	12.6	13.7	13.9	14.6	23.2	39.12
Unpaid Family	33.8	18.4	21.7	21.8	18.2	14.47
Helper						

[Source: ADB, 2016]

Annex: Formal and informal employment condition (as percentage of total employment):

		Formal	Informal
Rural	Male	14.1	85.9
	Female	3.0	97

	Total	10.7	89.3
Urban	Male	26.4	73.6
	Female	9.4	90.6
	Total	21.9	78.1
Bangladesh	Male	17.7	82.3
	Female	4.6	95.4
	Total	13.8	86.2