



“LABOR MARKET AND THE REAL WAGE IN BANGLADESH”

The research paper looks into Bangladesh’s labor market and the real wage. Real wage reflects the purchasing power of consumers. Hence it is an important tool for policy formulation. A major objective of this study is to see the pattern of the labor market and the real wage in the three major sectors (agriculture, manufacturing, and construction) of Bangladesh, whether real wages increase overtime or not and what implication it does have on poverty.

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Course name: Guided Research (ECO 4395)

Date of submission: 6th August, 2020



UNITED INTERNATIONAL UNIVERSITY

“Guided Research (ECO 4395)”

“Research Report On”

“Labor Market and the Real Wage in Bangladesh”

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Letter of transmittal

6th August, 2020

Dr. Wahida Yasmeen

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Dear Mam,

This is my pleasure to accomplish a research report on the "Labor market and the real wage in Bangladesh." I was asked to prepare this report for guided research course (ECO 4395). I followed your guidance to prepare my research report. I tried my best to complete the report on time and with the quality of your expectation. I enjoyed the experience of making the report, and I hope that my work will meet all your needs and expectations. Besides, I still am a student and in the process of developing my skills. So, I hope that you will be kind enough to consider the limitations of this report.

I would like to express my thankful gratitude to you for your tireless effort for us, which provided the opportunity to complete this research report.

Thank you for your kind consideration.

Sincerely yours,

Afrina Alam Bushra

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Abstract

This paper provides an outline of Bangladesh's labor market and its real-wage patterns. The labor market of any developing country like Bangladesh remains in peak of the concern. Real wage reflects the purchasing power of consumers. Hence it is an essential tool for policy formulation. This paper mainly focusses on the three major sectors of Bangladesh- agriculture, manufacturing, and construction. To observe the trend, the real wages of these three major sectors have been determined. A time-series data was taken from 1995 to 2018 of nominal wage data and was deflated by CPI, retaining a common base year using the backward linking method. It was found that, over time, both real and nominal wages have increased. The real wage data showed an acceleration of manufacturing wage from 1995-1996 to 2009-2010. Later it slowed down, whereas agriculture wages boosted after that period. The reason behind such a pattern was analyzed throughout the paper. Using STATA software, I have examined the trends of real wages and tried to show what implications it does have on poverty. The real wage is a good indicator of poverty. An increase in real wage reduces poverty. The paper also discusses the labor market challenges of underemployment, income inequality, and gender disparity in Bangladesh.

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Chapter 1: Introduction

1.1 Background of the study

Nominal wage is how much money we earn every hour, and it doesn't tell us much about our purchasing power because the nominal wage doesn't take into account the changes in the price level. Whereas in the real wage, inflation rates are adjusted or compared with the number of goods and services one person can get. So, our real wage is our nominal wage adjusted for inflation, and it does reflect the purchasing power of a consumer. For example: suppose in an economy inflation rate is 2% and our wage, i.e., nominal wages are \$100. So, although we are earning \$100, our real wage is \$98. The real wage is a good indicator of poverty. An increase in real wage reduces poverty. From the HIES survey (the household income and expenditure survey), we will collect data and find out the situation. According to (World Bank, 2011), Bangladesh reduced poverty 49% in 2000 to 32% in 2010.

We all know that Bangladesh is one of the densely populated countries with abundant low skilled workers. This supply of workers puts downward pressure on wages. As a labor-abundant country, the prospect of the entire economy of Bangladesh depends on the features of the labor market. According to Hossain, in the early 80s or 90s, Bangladesh depended on agriculture (Hossain, 2018). But later, the development of the garments industry changed the pattern of employment. As a result, women are also joining the labor force. The development of the garments industry is enabling them to enter the labor market easily. So rural wage pattern has also changed. Over the year, the supply of labor was absorbed by the manufacturing sector, which caused a rise in both agriculture and manufacturing real wage rates.

1.2 Objective of the study

- Would like to investigate the pattern of the labor market and the real wage in Bangladesh.
- Aims to analyze the reasons behind such patterns.
- Would like to find the nominal and real wages in different sectors like agriculture, manufacturing, and construction industries of Bangladesh.
- Using data from multiple sources would like to see whether real wages in these sectors increase overtime or not.
- Would like to present the implication of real wage on poverty as the real wage is a good indicator of poverty. An increase in real wage reduces poverty.
- Explore the labor market challenges of underemployment, income inequality, and gender disparity in Bangladesh.

1.3 Significance of the study

From the existing work in this area, I have gathered some significant points about my research:

- To know about the labor market is very important for any country.
- It gives a clear idea about the progress and future directions of any state.
- It will help us to conduct analyses of job trends, wages, unemployment, and changes in the economy of workforce development.
- The research paper will also help us identify careers projected to be in demand within a particular time frame and help us find information about wages by geographic and occupational areas.
- Real wages are taken into account as they give an accurate view of the nation's wealth in any given year.

1.4 Hypothesis Development

A major objective of this study is to see the pattern of the labor market and the real wage in the three major sectors (agriculture, manufacturing, and construction) of Bangladesh, whether real wages increase overtime or not and what implication it does have on poverty.

1.5 Scope & Limitations of the Study

Scope:

This report gives a clear understanding of the Labor Market and the real wage in Bangladesh. Real wage reflects the purchasing power of consumers. Therefore, it is an essential tool to formulate policies. It mainly focusses on three major sectors- agriculture, manufacturing, and construction and calculates their real wages. It covers almost all the aspects of thinking and answers nearly every questions of investigative minds about the labor market and real wages in Bangladesh. The scope of the study is limited up to the availability of information I have gathered from newspapers and the internet.

Limitations:

Besides scope, this report has some limitations as well. Here I have enlisted the limitations of the report:

- There is a lack of credible data on the real wages in Bangladesh. The BBS (Bangladesh Bureau of Statistics) used to publish real wage data annually. But it got discontinued after 2004. So recent data on real wages is virtually unavailable. So, I have used up-to-date data on the real wage from 1985-2018 while preparing this report.
- After independence, many years of real wage data are missing.

- The HIES (Household Income and Expenditure Survey) and LFS (labor force survey) data helped to calculate poverty. Still, they are insufficient to conduct an empirical test to observe the effect of real wages on poverty rates.

Chapter 2: Literature review

Much of the previous literature is focused on agriculture real wages. Taslim presented the productivity and agricultural wage in Bangladesh. In this paper, they took the time period from 1960 to 2012-13. Bangladesh is an agricultural country, and the estimation of the agricultural real wage in Bangladesh has been a controversial issue. In this paper, agricultural real wages calculated from 1959-60 to 2011-12. Labor productivity and real wage compared through production function. In this paper, they found that the real wage influenced by two opposing forces called HYV technology and labor supply. Because of the new technology annual productivity of farm and labor productivity increased. There has been a rapid growth in agricultural labor supply, but in the case of labor productivity, it worked totally opposite, thus raising farm productivity. As a result of this, the real wage stagnation for four decades. When agriculture labor supply become negative around the middle of the first-decade real wage increase at that time. (TASLIM, 2018).

In another paper, the author describes the changes in the work pattern of Bangladesh over time. Until the 1980s, people depended heavily on-farm activities. The labor market was male-dominated. But after the 1980s, the agriculture industry diversified to nonfarm activities. Eventually, females also started joining the labor force. The paper mainly focuses on the trend of real wages in the agriculture sector. Real wages increased over time at a steady rate. The agriculture real wage rate, in the long run, fluctuated at the subsistence level due to labor surplus. The empirical results suggest that agriculture productivity is the forcing variable in agriculture real wages. (Hossain, 2003). The real wages increased in Bangladesh since 2000, particularly women's wages. In line with the Lewis turning point, they found that wages increase due to increasing wages in nonfarm sector, especially in manufacturing. They collect monthly wage data from the Monthly Statistical Bulletin (BBS 2001-2011) and use three different deflators. According to the General

Consumer Price Index (GCPI) base (2010), rural real wages increase more than the urban real wages. Using the food consumer price index (FCPI), they found that rural wages were roughly stable before the mid-2000. Rural wages increased since 2005, and urban wages decreased from 2007. Using purchasing power deflators, they compare with rice purchasing and found that in 2001 workers of rural can afford 6 K.G and workers of cities can afford 10 K.G (Zhang, X., Rashid, S., Ahmad, K., & Ahmed, A., 2014).

In the manufacturing sector, the minimum wages in the RMG sector increased from 1662tk to 3000tk/month of entry-level workers from 2006 to 2010. The real wage increased by 38% in the same time period. The increase in wage rate improved their living standard, but they still feel an increase in wages is not substantial (Ahmed, 2014). Rahman's paper compares nominal wages to real wages in different sectors like manufacturing, industry, and agriculture using data from 1990 to 2006. They collect data from the Statistical yearbook for real wage calculation, HIES (household income and expenditure survey) data of 2000 & 2005 for measuring poverty reduction, LFS (labor force survey) data 2006 & 2006 for wage determination. According to his real wage calculation, there was a small rise in real wages in agriculture and a slight decline in real wages in non-agriculture. But the pattern of poverty shows more considerable poverty reductions in urban areas than in rural (Rahman, 2009).

Chapter 3: Data source and Methodology

The study is mainly based on secondary data from various sources, such as the Bangladesh Bureau of Statistics (BBS) and Bangladesh Economic Review (BER). Descriptions of the study will be organized in the light of existing literature. A time-series data collected from the BBS Statistical Yearbook (SYB) of nominal wage rate from 1985-2014 for manufacturing, agriculture, and construction sectors. Similarly, the CPI (consumer price index) of that time period was also collected. But CPI has a different base year over time. So, we converted the base year to 1995-96 using the backward linking method. Then, the nominal wages were converted to real wages to reflect the purchasing power of the consumers. The trend and implication of real wages will be discussed thoroughly in the paper.

Chapter 4: Data analysis

4.1 Trends in real and nominal wage

The following figure represents the trends in nominal and real wage index in a time series of 1985-2014. It shows the general trend over the years and in the three major sectors- manufacturing, agriculture, and construction.

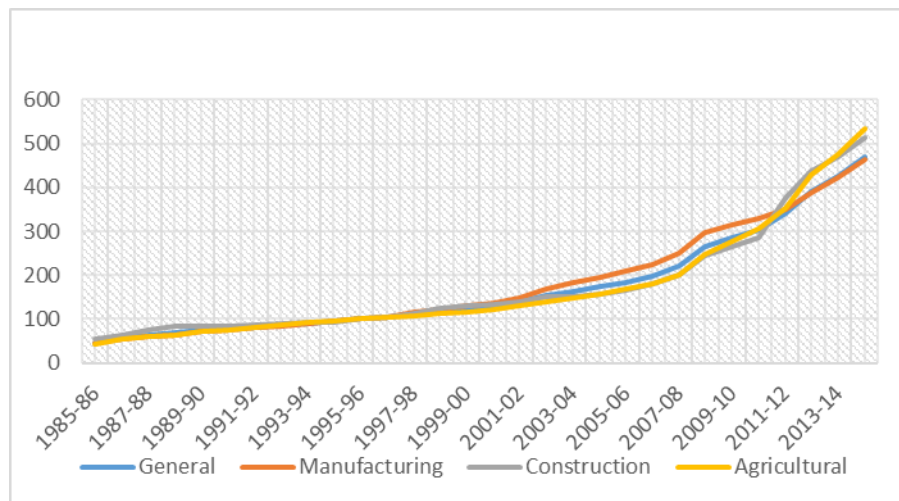


Figure 1: Nominal wage index over the years 1985-2014

Data Source: (Statistical Year Book of Bangladesh 2018)

Beginning with the nominal wage, it shows an increasing trend over the years. Overall, the wages in all the sectors follow the same pattern i.e. increases at an increasing rate. Initially, the growth in nominal wages was very slow for all sectors. The following shows the pattern of nominal wage index in a 10-years interval:

- **From 1985-1994:** the nominal wage rate increased 99.55% in general, 103.23% in manufacturing, 71.96% in construction, and 115.51% in agriculture. In this case, agricultural wage dominates.

- **From 1995-2004:** the nominal wage rate increased 73.31% in general, 94.52% in manufacturing, 57.24% in construction, and 56.44% in agriculture. In this case, manufacturing dominates.
- **From 2005-2013:** the nominal wage rate increased 99.55% in general, 112.52% in manufacturing, 211.66 percent in construction, and 216.37% in agriculture. In this case, agricultural wage dominates.

On the other hand, the trend of real wages over the year is interesting, as shown in figure 1. The real wage index in the sectors tends to flare out then converge together from time to time. The following figure shows the real wage index over the years 1985-2014:

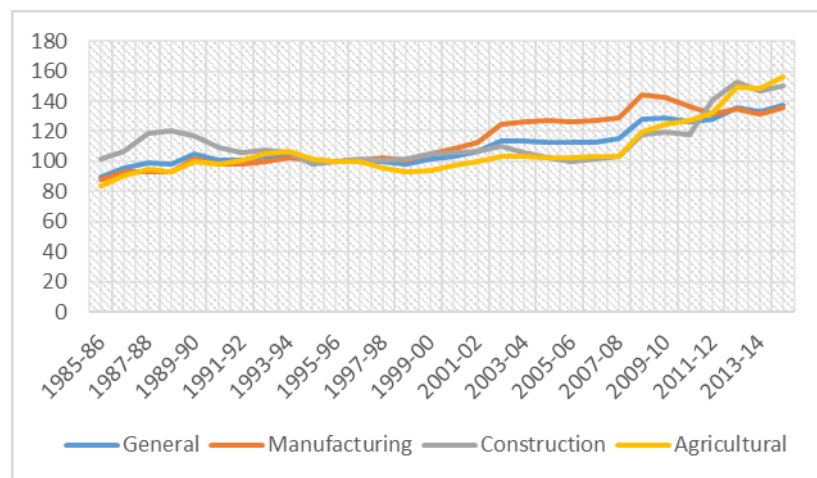


Figure 2: Real wage index over the years 1985-2014

Data Source: (Statistical Year Book of Bangladesh 2018)

The real wage index shows positive growth, but there is a lot of fluctuations. The following shows the pattern of the real wage index in a ten years interval:

- **From 1985-1994:** the real wage rate increased 11.86% growth in general, 13.93% in manufacturing, 20.81% in agriculture, but decreased 3.66% in construction. In this case, agricultural dominates.

- **From 1985-94:** agriculture growth dominants with a 20.81% increase. The percentage point for manufacturing and general was almost equal (13.93% and 11.86%). The lowest growth occurs in constructing -3.60% and only negative value of the real wage.
- **From 2005-2013:** the real wage rate increased 22.31% in general, 7.19% in manufacturing, 50.14% in construction, and 52.41% in agriculture.

The following figure shows the real wage index over the recent years 2014-2018:

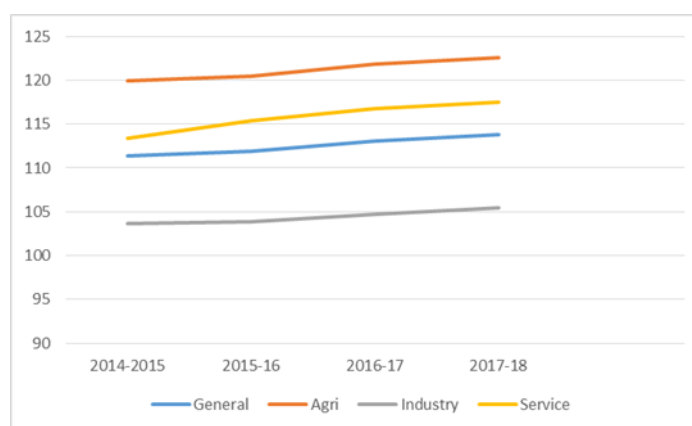


Figure 3: Real wage index over the years 2014-2018

Data Source: (Statistical Year Book of Bangladesh 2018)

After 2014 there was a change in wage rate index data. Because the base year was changed from 1969-1970 to 2010-2011 as the previous base year was very old. Over the year, many new occupations opened up. Now it is comprised of three sectors: agriculture, industry, and services. As a result, the real wage index in recent years from 2014-2018 has been presented again. Figure 3 represents the agriculture real wage dominates. Then comes service, general, and finally, industry.

4.2 The real wages in agriculture and construction sectors of Bangladesh

A vast segment of Bangladesh's agricultural labor-force depends on livelihood wage employment. Most of those individuals are relatively poor. Therefore, agricultural real wages have significant implications for the well-being of a large section of the rural population. Agriculture is the primary

economic sector. It makes two significant contributions: this provides the nation with food (and renewable raw materials), and it provides jobs for a substantial part of the labor force. Most of the labor-power find employment in agricultural and related activities during the early phases of economic development. As other sectors grow with economic development, the share of labor-power engaged in agriculture begins to decline, and the sector of industry and services is increasing. This trend is so common that the country's economic development stage is sometimes expressed in terms of the fraction of the labor force engaged in agriculture or the proportion of national income from it.

From figure 2, initially, both the agriculture and construction real wages remain below manufacturing real wages. We can see that the agriculture and construction real wages boosted over the years 2008-2014. The minimum wage laws attempted to increase the real wages despite surplus labor in the agriculture and construction sector. But the minimum wage legislations do not cover the informal sector. Minimum wages mostly cover the manufacturing sector. So, the rise in agriculture wages cannot be associated with these interventions.

The rise in real wages mainly occurred due to a shortage of labor supply in the peak seasons. In times of harvesting crops, there is a huge labor shortage. The labor shifted from the low productivity agriculture sector to the higher productive non-agriculture sector. Also, there is a massive outflow of labor to a foreign land. Although foreign employment and remittance inflow is a major driving force of economic growth, it creates a shortage of labor.

The following table shows the real scenario over the year 2006-2007 to 2016-2017, where employment abroad has increased from 564,000 to 905,000.

Year	No. of employment abroad 000	Amount of remittance	
		In million US\$	Percentage change
2006-07	564	5978.47	24.50
2007-08	981	7914.78	32.39
2008-09	650	9689.16	22.42
2009-10	427	10987.40	13.40
2010-11	439	11650.32	6.03
2011-12	691	12843.40	10.24
2012-13	441	14461.15	12.60
2013-14	409	14228.30	-1.61
2014-15	461	15316.91	7.65
2015-16	685	14931.14	-2.52
2016-17	905	12769.45	-14.48

Table 1: Number of expatriates and the amount of remittance

Data Source: (Bangladesh Economic Review, Various years)

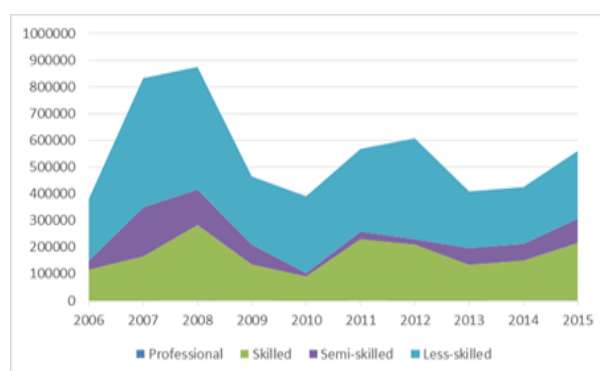


Figure 5: Number of expatriates classified by skill

Data Source: Labor Force Survey, 2016

The above figure shows the number of expatriates classified by skill. It depicts that the number of expatriates is mostly classified as less skilled, which could have been used in these two sectors. Therefore, the shortage occurred to increase the agriculture and construction real wages.

4.3 The real wages in the manufacturing sector of Bangladesh

The Lewis model of the two-sector economy predicts that the new manufacturing sector will absorb the traditional agriculture sector's surplus labor. There is a structural change in the economy as the share of GDP of agriculture fell sharply from 28.7% - 13%, also share of manufacturing to

GDP increased from 12.2% - 21.9% from the year 1990-91 to 2017-18. Bangladesh is a rare developing country that avoided premature deindustrialization (Bhattacharya, 2018). During the period 1999-2009, there has been a steep rise in manufacturing real wages as employers absorbed labor from the lower productive agriculture sector at subsistence wage rate. The subsistence wage rate is broadly defined as a minimum standard of living conditioned by biological needs to maintain the health, social, and cultural situation of the poor and a temporary reduction in the minimum level. So, they enhanced their profits using cheap labor. The benefit was reinvested, and this is how the manufacturing sector grew. The growth of the RMG sub-sector led to the manufacturing industry. It contributes to 40% of total manufacturing employment (Moazzem & Reza, 2018).

However, after 2011-12 the manufacturing real wage showed a decline. At the same time, the agricultural wage rose sharply. The manufacturing sector slowed down due to inadequate infrastructure, corruption, lack of FDI, poor technological advancement.

The primary cause of concern is underemployment and youth unemployment. Underemployment reflects low income and productivity. It is a measure of excess capacity of labor. The scenario has been shown in the following table:

Underemployment rate (%)	2000	2005	2010
Bangladesh: Total	16.6	24.5	20.31
Rural	17.8	27.8	22.67
Urban	12.2	13.9	12.4

Table 2: Time-related underemployment rate (%): 2000 to 2010

Data Sources: (LFS, 2010)

Underemployment rates have been rising from 16.6% to 24.5% from 2000 to 2005. Both rural and urban underemployment has also increased in that period. This was when economic growth escalated compared to earlier years, which implies that all the excess labor has not been absorbed into the more productive non-agriculture sector. Although the underemployment has reduced from 24.5% to 20.31% from 2005 to 2010, it remains above that of 2000.

Education level	Rural			Urban			Bangladesh		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
None	3.3	6.7	4.9	1	3.1	2.1	2.6	5.5	4
Primary	12.1	12.9	12.5	10.4	9.6	10	11.6	11.8	11.7
Secondary	27	32	29.4	22.5	27.4	25	25.6	30.4	28
Higher Secondary	23.7	16.7	20.3	26	26.9	26.4	24.4	20.1	22.3
Tertiary	13.1	8.4	10.8	20.8	16.9	18.7	15.5	11.2	13.4
Others	0.7	0	0.3	0.3	0	0.1	0.6	0	0.3
Total youth unemployed	79.8	76.6	78.3	80.9	83.8	32.4	80.2	79	79.6

Table 3: Youth unemployment as % of total unemployed by education level, sex, and area in 2016-2017

Data Source: (Labor Force Survey, 2016)

Besides, youth unemployment is staggering as they get more educated. Table 3 shows that when youth (aged between 15-29 years) do not obtain any education, the unemployment rate is 4% in Bangladesh. But unemployment is more pronounced in the higher secondary level of education- 22.3%. Youth unemployment is higher in the rural female youth population of Bangladesh.

4.4 Poverty and Real wages

During the initial years of Bangladesh, the poverty rates were as high as 82% in 1972, as stated by the World Bank of Bangladesh. Since then, poverty alleviation has been a major goal of the Bangladesh government. The poverty scenario has improved drastically in Bangladesh. Bangladesh achieved the goal of halving the population living below the poverty line from 56.7% to 29%, according to the 2015 MDG Bangladesh Progress Report. In this section, we aim to see the movements in real wages with changes in poverty rates.

Year	Upper poverty line	Lower poverty line
1995-96	50.1	35.2
2000	48.9	34.3
% change (1995-2000)	1.2	0.9
2005	40	25.1
% change (2000-2005)	8.9	9.2
2010	31.5	17.6
% change (2005-2010)	8.5	7.5
2016	24.3	12.6
% change (2010-2016)	7.2	5

Table 4: Poverty incidence by HCR and changes: 1995-2016

Data Source: (HIES, various years)

Year	Elasticity of Upper poverty	Elasticity of Lower poverty
1995-2000	0.35	0.26
2000-2005	1.03	1.06
2005-2010	0.68	0.61
2010-2016	0.63	0.48

Table 5: Elasticity of poverty to real wage in upper and lower poverty lines: 1995-2016

Table 5 shows that from 2000-2005 onwards, the elasticity of poverty to real wage reduces, which implies that between these years, it was elastic. That means that a smaller change in real wage leads to a more significant change in poverty reduction. On the other hand, after 2005, the elasticity of poverty to real wages became inelastic. It means that a more substantial change is required in real wages to reduce poverty rates. The elasticity is lower in the lower poverty line than the upper poverty line. So it is harder to reduce poverty on a lower poverty line despite large increase in real wage.

4.5 Regional imbalance in poverty reduction

Even though the incidence of poverty reduced significantly, there is a regional imbalance in poverty reduction. From table 6, we see that as the real wages increased, the poverty rates reduced. It presents a regional picture of poverty incidence. The poverty was measured by the headcount ratio (HCR) using the cost of basic need (CBN) method. Poverty is divided into two categories- upper and lower poverty lines. The upper poverty line measures moderate poverty, while the lower poverty line measures extreme poverty. We can see that the process of poverty reduction was not distributed uniformly. The rural poverty rates are significantly higher than the urban poverty rates in Bangladesh, which is visible in both upper and lower poverty lines. Dhaka experienced the largest decline in poverty compared to other divisions. In 2016, the extreme poverty rates in Urban Dhaka were 3.3%, while the moderate poverty rates were 12.5%. The overall poverty rates in Dhaka, Chattogram, and Sylhet were lower compared to Barisal, Khulna, Rangpur, and Mymensingh. Poverty rates in all the divisions reduced significantly in 2016 compared to 2010, except in Rangpur. The upper poverty rates have increased from 47.2% to 44.5% in that time period. That is an alarming concern for the Bangladesh government. All do not savor the reaping benefits of poverty reduction.

National/Division	2016			2010		
Using the Lower Poverty Line						
	National	Rural	Urban	National	Rural	Urban
National	12.9	14.9	7.6	17.6	21.1	7.7
Barishal	14.5	14.9	12.2	26.7	27.3	24.2
Chattogram	8.7	9.6	6.5	13.1	16.2	4.0
Dhaka	7.2	10.7	3.3	15.6	23.5	3.8
Khulna	12.4	13.1	10.0	15.4	15.2	16.4
Mymensing	17.6	18.3	13.8	-	-	-
Rajshahi	14.2	15.2	10.7	21.6	22.7	15.6
Rangpur	30.5	31.3	26.3	27.7	29.4	17.2
Sylhet	11.5	11.8	9.5	20.7	23.5	5.5
Using the Upper Poverty Line						
National	24.3	26.4	18.9	31.5	35.2	21.3
Barishal	26.5	25.7	30.4	39.4	39.2	39.9
Chattogram	18.4	19.4	15.9	26.2	31.0	11.8
Dhaka	16.0	19.2	12.5	30.5	38.8	18.0
Khulna	27.5	27.3	28.3	32.1	31.0	35.8
Mymensing	32.8	32.9	32.0	-	-	-
Rajshahi	28.9	30.6	22.5	29.8	30.0	29.0
Rangpur	47.2	48.2	41.5	42.3	44.5	27.9
Sylhet	16.2	15.6	19.5	28.1	30.5	15.0

Table 6: Incidence of Poverty (head count rate) by CBN method in Bangladesh by divisions

Data Source: (HIES, 2016)

Chapter 5: Discussions

5.1 Gender Disparity in earnings

Gender disparity in earnings is an important topic to discuss in the labor market. Bangladesh being a patriarchal society, males receive a higher wage compared to females for the same work. In the manufacturing sector, female workers worked 3.04 days more but received 133.31TK less than their men counterparts for equivalent labor (Rahman, 2012). Table 6 presents the wage of daily laborers in the country as well as urban and rural areas. During 1996, the male worker received 46TK/day while the female counterpart only received 26TK/day. The situation improved as in 2010, men received 184.35TK/day while women received 169.91TK/day. The male/female ratio of wages was higher in rural areas than in urban areas, which indicated that the disparity of wages is more severe in rural areas.

The following considerations can describe this wage variance:

- Females in rural areas start their employment with lower human capital endowment compared to men. They have lower educational attainment, so women's employment is concentrated on low paying non-productive jobs. Since the last decade, this inequality in human capital reduced as the school enrollment level of girls increased.
- Although the school enrollment level of girls has increased, girls tend to drop out of school. The school completion rates are not satisfactory. For which wages are low.
- The employers in Bangladesh tend to have a distaste towards females. Hence the higher paid jobs are often offered to men.
- Society's belief dictates that women are secondary earners of the family. Therefore, they end up accepting the low pay.

Area	Gender	Year			
		1996	2000	2006	2010
Urban	Male	60	85	111	200.05
	Female	36	59	69	198.14
	Male/Female	1.67	1.44	1.61	1.01
Rural	Male	44	63	93	180.24
	Female	25	35	61	161.1
	Male/Female	1.76	1.8	1.52	1.12
National	Male	46	65	95	184.35
	Female	26	38	63	169.91
	Male/Female	1.77	1.71	1.51	1.08

Table 7: Wage of daily laborer's by gender from 1996-2010

Data Source: LFS (various years)

5.2 Income inequality

Income inequality in Bangladesh seems to be a perennial problem. According to Simon Kuznets's inverted-U analysis, initial stages of economic growth shows high inequality. But as the country progresses, the inequality reduces. But the problem of inequality remains persistent. During the period of rapid economic growth since the 1990s, the rise in real wage was far below the growth of labor low labor cost. (Osmani, 2014). In Fig.2, the income of households in Bangladesh is divided into deciles. It shows that a lower 5% (the poorest of the poor) accrues to only 0.78% of income in 2010 and 0.23% in 2016. On the contrary, the top 5% (the richest of the rich) enjoys 24.61% of income in 2010, which increased to 27.89% in 2016. The same is true for productivity. This resulted in a gap of in personal income distribution, as the capital owners gained from the first five deciles comprise an income similar to income in 2010, which includes the bottom half of the population. In 2016 this value was 20.33%. As a result, we can observe that redistribution efforts favor only the middle-income population. The poor keep getting poorer while the wealthy continue to get wealthier.

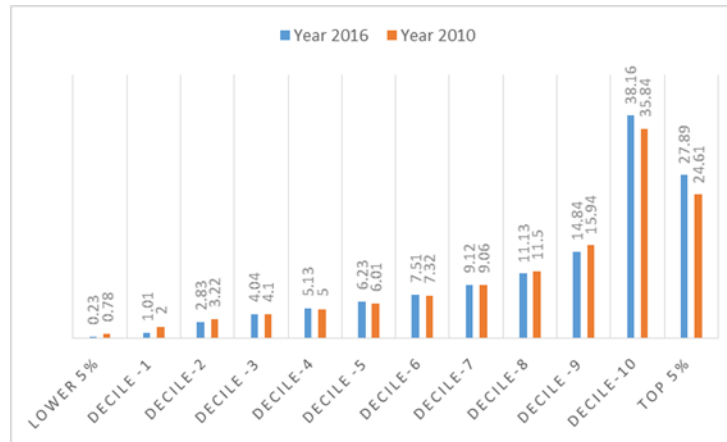


Figure 6: Income distributions of household in deciles

Data Source: Comparative Matrix of Household Income and Expenditure Survey HIES (2005-2016)

5.3 Challenges in the labor market

Along with the problems of underemployment, the incidence of poverty, income inequality, and wage disparities, the labor market of Bangladesh faces other issues as well. The challenges faced by the labor market is enormous.

- As Bangladesh is transitioning into a modern economy, it fails to absorb all the labor in the economy. The youth aged between 16-30 years, mainly, entails two problems. Firstly, one segment of them is highly skilled and educated. They fail to match their skills with jobs. Thus the underemployment rates keep staggering. Another segment fails to attain education due to severe poverty. Therefore they are left unemployed.
- The education system of Bangladesh fails to provide practical knowledge and functional skills in employment. It remains backward.
- Due to rapid technological change and automation, the aged workers are unable to adopt new skills. They are laid off, and they fail to re-enter the market.

Chapter 6: Conclusion

To know about the labor market is very important for any country. It gives a clear idea also provides the future direction of any state. From the existing literature review, it isn't easy to come on a single decision because different researchers find in different ways. According to the paper, the real wage in the manufacturing sector is dominating, but after 2011-12 the real manufacturing wage slowed down. It is a cause of concern for the economy as it is the driving force of GDP growth. The manufacturing sector became stagnant due to inadequate infrastructure, corruption, lack of FDI, poor technological advancement. Underemployment increased in both urban and rural areas, but the rate is higher in rural areas, which indicates low income and productivity. It is a matter of great disappointment that the unemployment rate is rising as people get more educated. The rural poverty rates are significantly higher than the urban poverty rates in Bangladesh, both in upper and lower poverty lines. Also, income inequality is a significant problem. The overall labor market shows an imbalance in rising underemployment, gender bias, and climbing inequality. Even though the economy is growing rapidly, the necessary steps should be taken to achieve inclusive growth.

References

- Bhattacharya, D. (2018, November 4). The Uncomfortable Truth Recent Economic Growth Performance of Bangladesh.
- Consumer Price Index(CPI), Inflation Rate and Wage Rate Index(WRI) in Bangladesh. (2016).
- Moazzem, G. K., & Reza, M. M. (2018). Growth of Employment in the Manufacturing Sector Impact of Trade and Trade-related Policies.
- Bangladesh Economic Review. (Various years).
- HIES (2016).
- Labour Force Survey. (2016).
- Comparative Matrix of Household Income and Expenditure Survey HIES (2005-2016). (n.d.).
- Osmani, S. (2014). 'Growth and Inequality', a paper prepared for the Seventh Five-Year Plan, Planning Commission, Government of Bangladesh.
- Rahman, M. A. (2012). Gender Disparity in Earnings: Some Evidence from Bangladesh. *Journal of society, Economy and Development*, 1(1), 53-65.
- World Bank. (2008). Poverty Assessment for Bangladesh:Creating Opportunities and Bridging the East-West Divide.
- Hossain, M. (2003). *Poverty alleviation through agriculture and rural development in Bangladesh*. Center for Policy Dialogue.
- Rahman, R. I. (2009, March). An Analysis of Real Wage in Bangladesh and Its Implications for Underemployment and Poverty. In *Festschrift Conference in Honor of Professor Azizur Khan*.
- Zhang, X., Rashid, S., Ahmad, K., & Ahmed, A. (2014). Escalation of real wages in Bangladesh: Is it the beginning of structural transformation? *World Development*, 64, 273-285.

- TASLIM, M., & TASLIM, Q. (2018). Productivity and Agricultural Real Wage in Bangladesh: 1959-60 to 2012-13. *Bangladesh Development Studies*, 41(1).

Appendix

➤ **CPI (base 1995-1996):**

Year	CPI
1985-1986	52.56
1986-1987	59.85
1987-1988	63.66
1988-1989	69
1989-1990	71.67
1990-1991	77.63
1991-1992	81.17
1992-1993	83.39
1993-1994	86.12
1994-1995	93.76
1995-1996	100
1996-1997	103.96
1997-1998	112.96
1998-1999	120.94
1999-2000	124.31
2000-2001	126.72
2001-2002	130.26
2002-2003	135.97
2003-2004	143.9
2004-2005	153.23
2005-2006	164.21
2006-2007	176.06
2007-2008	193.54
2008-2009	206.43
2009-2010	221.53
2010-2011	241.02
2011-2012	266.61
2012-2013	287.14
2013-2014	320.3409
2014-2015	340.8671

➤ **Converted Nominal Wage:**

General	Manufacturing	Construction	Agriculture
47.10526	46.41473	53.47777	44.13119
57.10526	55.91085	63.96807	54.14269
63.21053	59.10853	75.59863	60.35673
67.78947	64.19574	82.78221	64.1542
75.05263	72.77132	84.0935	71.63406
78	76.30814	84.77765	76.0069
81.73684	79.50581	86.20296	81.99079
86.21053	83.52713	90.02281	87.62946
89.94737	88.56589	91.10604	91.65708
94	94.3314	91.96123	95.10932
100	100	100	100
104.6842	104.6996	105.3592	103.7975
112.6842	116.0368	113.455	107.5949
118.8947	122.1899	123.3181	112.1979
125.7895	130.8624	130.3307	117.2037
131	137.2093	134.3216	123.1876
138.7895	147.0446	139.3387	130.1496
154	169.6221	149.6009	140.5639
163.7368	182.4128	152.1665	148.5616
173.3158	194.5252	157.2406	156.4442
184.4737	207.9942	164.7092	168.2969
198.8947	224.6124	178.7343	181.588
222.4737	249.2248	199.829	200.6904
264.4737	296.8992	242.9875	245.9724
286.3684	315.8915	264.1391	276.4097
304.3158	328.3915	284.0935	306.3867
340.4737	349.8547	375.3136	352.9344
390.6316	386.531	438.0844	428.5386
426.1579	421.5116	469.6693	476.5823
468.3684	462.8391	513.3409	532.4511

➤ **Converted Real Wage:**

General	Manufacturing	Construction	Agriculture
89.62189	88.30808	101.7461	83.96344
95.41397	93.4183	106.8807	90.46398
99.29395	92.85034	118.7537	94.81108
98.24561	93.0373	119.9742	92.9771
104.7197	101.5367	117.3343	99.94986
100.4766	98.29723	109.2073	97.90919
100.6983	97.94975	106.2005	101.0112
103.3823	100.1644	107.954	105.0839
104.4442	102.8401	105.7896	106.4295
100.256	100.6094	98.08152	101.4391
100	100	100	100
100.6966	100.7114	101.3459	99.84366
99.75585	102.7238	100.4382	95.25048
98.30886	101.0335	101.9664	92.77156
101.1901	105.271	104.8433	94.28339
103.3775	108.2775	105.9987	97.21241
106.548	112.8854	106.9696	99.91524
113.2603	124.7496	110.0249	103.3786
113.7852	126.7636	105.7446	103.2394
113.1083	126.9498	102.6174	102.0976
112.3401	126.6635	100.304	102.4888
112.9699	127.5772	101.519	103.1399
114.9497	128.7717	103.2494	103.6946
128.1179	143.8256	117.7094	119.1553
129.2685	142.5953	119.234	124.773
126.2616	136.2507	117.8713	127.1208
127.7048	131.2234	140.7725	132.3785
136.0422	134.6141	152.5682	149.2438
133.0326	131.5822	146.6155	148.7735
137.405	135.7829	150.5986	156.2049