

ASIAN  
DECENT WORK  
DECADE 2006  
2015



International  
Labour  
Organization

## ILO Asia-Pacific Working Paper Series

# Female labour force participation in Bangladesh: trends, drivers and barriers

Rushidan I. Rahman and Rizwanul Islam  
October 2013



DWT for South Asia and Country Office for India



**ILO Asia-Pacific Working Paper Series**

Female labour force participation in Bangladesh:  
trends, drivers and barriers

---

Rushidan I. Rahman and Rizwanul Islam  
October 2013

DWT for South Asia and Country Office for India

Copyright © International Labour Organization 2013  
First published 2013

Publications of the International Labour Office enjoy copyright under Protocol 2 of the Universal Copyright Convention. Nevertheless, short excerpts from them may be reproduced without authorization, on condition that the source is indicated. For rights of reproduction or translation, application should be made to ILO Publications (Rights and Permissions), International Labour Office, CH-1211 Geneva 22, Switzerland, or by email: [pubdroit@ilo.org](mailto:pubdroit@ilo.org). The International Labour Office welcomes such applications.

Libraries, institutions and other users registered with reproduction rights organizations may make copies in accordance with the licences issued to them for this purpose. Visit [www.ifrro.org](http://www.ifrro.org) to find the reproduction rights organization in your country.

---

Rahman, Rushidan I; Islam, Rizwanul

Female labour force participation in Bangladesh: trends, drivers and barriers / Rushidan I. Rahman and Rizwanul Islam; International Labour Organization, ILO DWT for South Asia and Country Office for India. - New Delhi: ILO, 2013  
(ILO Asia-Pacific working paper series, ISSN: 2227-4391; 2227-4405 (web pdf))

ILO DWT for South Asia and Country Office for India

women workers / labour force participation / employment / Bangladesh

14.04.2

*ILO Cataloguing in Publication Data*

---

The designations employed in ILO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the International Labour Office concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers.

The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them.

Reference to names of firms and commercial products and processes does not imply their endorsement by the International Labour Office, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

ILO publications and electronic products can be obtained through major booksellers or ILO local offices in many countries, or direct from ILO Publications, International Labour Office, CH-1211 Geneva 22, Switzerland, or ILO DWT for South Asia and Country Office for India, Core 4B, 3<sup>rd</sup> Floor, India Habitat Centre, Lodhi Road, New Delhi 110003, India, or by email: [delhi@ilo.org](mailto:delhi@ilo.org). Catalogues or lists of new publications are available free of charge from the above address, or by email: [pubvente@ilo.org](mailto:pubvente@ilo.org).

Visit our website: [www.ilo.org/publns](http://www.ilo.org/publns) or [www.ilo.org/india](http://www.ilo.org/india).

---

Printed in India

# Preface

The International Labour Organization (ILO) is devoted to advancing opportunities for women and men to obtain decent and productive work. It aims to promote rights at work, encourage decent employment opportunities, enhance social protection and strengthen dialogue in handling work-related issues. In the wake of the global financial crisis, the ILO's Decent Work Agenda and the Global Jobs Pact provide critical policy frameworks to strengthen the foundations for a more inclusive and sustainable future.

As part of an ILO project on "Female Employment Trends in South Asia", this paper by Rushidan Rahman and Rizwanul Islam examines recent trends in women's labour force participation in Bangladesh. In contrast to India, the study shows that there has been an increase in female labour force participation in Bangladesh, alongside the acceleration in economic growth since the 1990s. In line with the experience of countries achieving export-oriented industrialization, Bangladesh has witnessed a substantial increase in female employment in labour-intensive export-oriented industries, namely the readymade garment sector. The study also finds that the rapid expansion of micro-finance in rural areas has supported women's employment in poultry and livestock. However, the economy of Bangladesh as a whole and women's employment in urban areas in particular seem to be too dependent on a single industry. Moreover, challenges relating to the level of and gender differential in wages, and other aspects of compliance with labour standards, e.g., working hours, safety and health in the work place, freedom of association and collective bargaining remain.

This paper is part of the ILO Asia-Pacific Working Paper Series, which is intended to enhance the body of knowledge, stimulate discussion and encourage knowledge sharing and further research for the promotion of decent work in Asia and the Pacific.

Tine Staermose  
Director, ILO DWT for South Asia and  
Country Office for India



# Table of contents

Preface .....	iii
Table of contents.....	v
List of tables.....	vii
List of figures.....	vii
Acknowledgements.....	ix
Abstract.....	xi
1. Introduction.....	1
2. Literature Review.....	4
3. Macroeconomic factors influencing employment of women.....	8
3.1 Economic growth and female employment.....	8
3.2 Employment of women in rural areas .....	10
3.3 Growth of women’s employment in urban areas: the readymade garment industry.....	11
4. Female labour force participation in Bangladesh and structure of female employment.....	16
4.1 Problems of defining FLFPR .....	16
4.2 Changes in female labour force participation rates (LFPR).....	18
4.3 Female LFPR and hours of work .....	20
4.4 Sector of employment .....	20
4.5 Status of employment .....	23
4.6 Formal versus informal employment .....	25
4.7 Wage differentials.....	26
5. Drivers of and barriers to female employment .....	26
5.1 Determinants of female labour supply: an analytical background.....	26
5.2 Major factors on the demand and supply side in female labour market in Bangladesh.....	27
5.3 Female labour force participation (LFP) and poverty.....	30
5.4 Education and Female LFP.....	32
6. Determinants of female labour force participation rates in Bangladesh .....	34
6.1 Individual, household and location characteristics .....	35
6.2 Results of the logit regression analysis .....	36
7. Factors behind female labour force participation: qualitative findings.....	41
7.1 Why young women participate in the labour force: Comments of RMG workers .....	41
7.2 Views of trade union leaders.....	42
7.3 Scope of women’s employment: employers’ views.....	42
8. The policy perspective .....	43
8.1 Policies and strategies being pursued.....	43
8.2 Accelerating the growth of women’s employment: the way forward.....	45
8.3 Summary and conclusions .....	47
References.....	51





## List of tables

	Page
Table 2.1	Summary of findings on determinants of female labour force participation in Bangladesh..... 8
Table 3.1	Elasticity of employment with respect to economic growth, 1999-2000 to 2010 ..... 10
Table 3.2	Growth of employment in the readymade garment industry (1990-2010) ..... 12
Table 3.3	Index of production of selected manufacturing industries, 1999-2000 and 2009-10 (Base: 1988-89 = 100)..... 13
Table 4.1	Changes of female and male LFPR in Bangladesh, 1991 to 2010..... 18
Table 4.2	Age-specific labour force participation rates by sex..... 18
Table 4.3	LFPR of men and women in urban and rural locations ..... 19
Table 4.4	Male and female employment and unemployment rates ..... 19
Table 4.5	Underemployment rates among employed male and female labour force (per cent) ..20
Table 4.6	Average hours worked per week by employed male and female labour force .....20
Table 4.7	Distribution of male and female labour force by broad economic sectors, 1996-2010.....21
Table 4.8	Number and share of male and female labour force in livestock and poultry-raising .21
Table 4.9	Distribution of employed persons by industry and sex, 1996-2010 (per cent) ..... 22
Table 4.10	Number of women employed in major sectors and average annual growth rate of sectoral employment ..... 23
Table 4.11	Status of employment by sex by location, 2010 (per cent)..... 24
Table 4.12	Distribution of status of employment by sex, 1996 to 2010 (per cent)..... 24
Table 4.13	Number of male and female labour force by status of employment, 2006-2010..... 25
Table 4.14	Distribution of employed labour force by sex and sector (formal versus informal).... 25
Table 4.15	Female and male wage by location, 2006..... 26
Table 4.16	Wage and salary for men and women, 2010..... 26
Table 5.1	Female participation rate in paid employment..... 32
Table 5.2	Female participation rate in self or family employment ..... 32
Table 5.3	Educational attainment of female labour force, 1996 to 2010 (per cent)..... 33
Table 5.4	Female participation in paid employment by education level (per cent) ..... 33
Table 5.5	Female participation in family employment by education (per cent) ..... 34
Table 6.1	Male and female LFPR by division, 2010 ..... 36
Table 6.2	List of dependent variables in logit equations ..... 37
Table 6.3	Determinants of probability of female labour force participation (FP) and male labour force participation (MLP) in Bangladesh: Results of logit regression ..... 38
Table 6.4	Determinants of probability of female participation in casual (CP), salaried (SP) and self/family employment (SFP): Results of logit regression ..... 40
Table 8.1	Food allocation and number of persons covered by VGD and VGF programmes ..... 45

## List of figures

Figure 3.1	Annual GDP growth rate in Bangladesh, 1990-91 to 2010-11.....9
Figure 3.2	Annual growth rate of sectoral output, 1990-91 to 2010-11.....11
Figure 3.3	Employment in the readymade garment industry of Bangladesh, 1990-2010.....12
Figure 5.1	Supply-side factors behind female LFPR .....28
Figure 5.2	Demand-side factors influencing female LFPR.....29
Figure 5.3	Household poverty and female labour force participation.....31



# Acknowledgements

ILO's Decent Work Team of South Asia deserve to be commended for taking the initiative of undertaking studies on female labour force participation in the countries of South Asia and for giving us an opportunity to participate in this important project. Thanks are due, in particular, to Sher Verick for coordinating and guiding the studies and for providing detailed comments on an earlier version of the present study. The authors are grateful to the Bangladesh Employers' Federation and representatives of the National Coordination Committee for Workers' Education (NCCWE) and a number of employers of the RMG sector for providing useful information and views on the subject. Thanks are also due to the workers who participated in the focus group discussion sessions.

Earlier drafts of the present paper were presented at a national seminar on female labour force participation in Bangladesh in November 2012 and at a South Asia sub-regional seminar on understanding women's labour force participation held in Delhi in February 2013 (both organized by the ILO). Useful comments were made on earlier drafts by a number of participants at both seminars. The responsibility for any remaining errors and inadequacies, of course, lies with the authors.



# Abstract

Although the received literature hypothesizes a U-shaped relationship between economic growth and women's employment, implying a decline in female labour force participation rate during the early stage of growth, the evidence from Bangladesh does not support this hypothesis. In fact, there has been an increase in female labour force participation alongside the acceleration in economic growth since the 1990s. In contrast to India, there has also been no decline in female labour 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 labour-intensive export-oriented industries in urban areas. An analysis of the relationship between economic growth and employment indicates that while the elasticity of overall employment growth with respect to output growth has declined somewhat during the second half of the 2000s (compared to the first half of the decade), it rose substantially for women. The study also finds that the rapid expansion of micro finance in rural areas has supported women's employment in poultry and livestock. However, the economy of Bangladesh as a whole and women's employment in urban areas seem to be too dependent on a single industry as other sectors are growing are either too small or are not employing women in large numbers. Moreover, challenges relating to the level of and gender differential in wages, and other aspects of compliance with labour standards, e.g., working hours, safety and health in the work place, freedom of association and collective bargaining remain. Empirical analysis carried out in the present study indicate that further progress is needed in women's access to education and skill training, productive assets like land and credit beyond microcredit, and services of various government institutions. Improvement is also needed in the social norms and environment that often act as barriers to women's employment.

## About the authors

Dr Rushidan Islam Rahman is the Research Director of the Bangladesh Institute of Development Studies (BIDS), Dhaka, Bangladesh

Dr Rizwanul Islam, an economist, is former Special Adviser, Employment Sector, International Labour Office (ILO), Geneva

*The responsibility for opinions expressed in articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them, or of any products, processes or geographical designations mentioned.*



# 1. Introduction

Economic growth is necessary for poverty reduction, but not sufficient. There is empirical evidence to show that productive employment plays a key role in transmitting the benefits of economic growth into poverty reduction.<sup>1</sup> In that regard, women's employment, by reducing the dependency ratio and harnessing the potential labour force, can play an important role. While labour is an important factor of production, it is not homogeneous; gender and skill differences constitute important aspects of the heterogeneity of labour. Factors influencing demand for and supply of female labour can be different from those relevant for males, and hence it is important to devote specific attention to gender differences in this respect. Employment of women is important in developed economies, particularly for those facing a labour supply constraint. In developing economies, women play an important role by contributing to household income, adding to the supply of labour for economic activities, and above all by empowering women.

The received literature on the trend in women's employment hypothesizes a U-shaped relationship between economic growth and women's employment – the rate of participation declining in the early stage of development and rising later (Bosereup, 1970, 1990; Psacharopoulos and Tzannatos, 1989, 1991; Schultz, 1990, for example). Several factors are cited in explaining this behaviour. Variables influencing the supply of labour are usually referred to as those producing income effect and substitution effect. In the early stage of development, a rise in household income may lead to women withdrawing from the labour market, thus causing female labour supply to decrease (the so-called income effect). On the other hand, a rise in wage rates may persuade women to substitute leisure with work; thus producing the so-called substitution effect. The hypothesis of U-shaped supply response postulates that during the early stage of economic growth, the income effect tends to outweigh the substitution effect; thus resulting in the supply curve of labour to slope downwards. Other factors that are cited to explain this tendency include a decline in employment in agriculture, stigma associated with factory jobs and the reluctance of women to accept such jobs, increasing enrolment in education, etc. In contrast, during the advanced stage of growth, substitution effect from a rise in wages (and other factors) may outweigh the income effect produced by a rise in household income, producing an upward sloping supply curve. Moreover, growth of modern service sectors like education, finance, etc. creates opportunities for employment that are likely to fit women's education, skills and preferences; thus contributing to increases in their participation in the labour market.

As for developing countries, dual economy models (e.g., those of Lewis and Fei-Ranis) and their extensions that incorporate rural-urban migration (e.g., Todaro, and Harris and Todaro) have been utilized to analyze the process of development and absorption of surplus labour. But these models do not take into account gender differences in labour and the possibility of surplus labour to continue when women enter the labour force. The experience of developing countries, especially of those that attained high rate of growth in the early stage of economic growth (for example, countries of East and South East Asia; ESEA, for short) shows that female labour can contribute significantly towards fuelling such growth and female participation can increase even during the early stages of growth. Factors operating from both demand and supply sides can explain the rise in women's employment during the early stages of economic growth.

In countries that pursued labour intensive export-oriented industrialization, demand for female labour was created by a rapid growth of labour intensive export-oriented industries like garments,

---

<sup>1</sup> See, for example, Islam (2006a, 2006b).

electronics, toys, leather products, etc. (Lee, 1981). On the supply side, there was hardly any stigma associated with employment in such industries. On the contrary, such employment was seen in a positive light contributing to household income as well as empowering women. Another important factor was education – a large proportion of women having basic education that was needed to make them amenable to training on the job. Apart from manufacturing industries in the organized sector, growth of non-farm activities in rural areas created opportunities for women to work outside their homestead without having to migrate (Choe and Lo, 1986; Islam, 1987; Shand, 1986). An important supply side factor (especially in low income countries) was poverty and low incomes pushing women to work in sectors (like construction) that are not usually considered to be suitable for women.<sup>2</sup>

Gender difference in employment growth can be found not only during periods of economic growth but also during downturns with women often being retrenched first. This may happen especially if economic downturn is caused by slowdown in export and women are over-represented in export-oriented industries. In such cases, their employment should recover more quickly when the economy recovers and export growth resumes as happened during the global economic crisis of 2008-09<sup>3</sup> and the subsequent recovery (Islam, 2011), although recovery turned out to be rather weak. But if economic downturns are caused more by structural factors, women's employment may recover with a longer lag.<sup>4</sup> Sharp economic downturns may also lead to an increase in women's participation in economic activities through the so-called "added workers" effect when women participate in larger numbers to compensate for the loss of income caused by retrenchment of male workers. This happened in countries like Indonesia and Thailand during the Asian economic crisis.<sup>5</sup>

Within Asia, female labour force participation rates are generally lower in countries of South Asia compared to those in ESEA countries. The performance of the former has been generally less impressive in terms of economic growth as well. However, since the 1990s, some countries of South Asia (especially India and Bangladesh) have been able to attain fairly high rates of economic growth. Although the rate of employment growth did not match that of output growth, it would be interesting to see how female employment fared during the period of their growth and what factors influence the participation of women in the labour force.

The economy of Bangladesh has witnessed an acceleration of economic growth since the early 1990s, and the average annual GDP growth has been over 6 per cent since 2004.<sup>6</sup> The incidence of absolute poverty (based on the national poverty line) declined from 59 per cent in 1991-92 to 31.5 per cent in 2010. However, despite the impressive performance in the areas of growth and poverty reduction, concerns remain about the quality of growth. First, the degree of inequality in the distribution has worsened over time as is indicated by a rise in the Gini coefficient from 0.39 in 1991-92 to 0.46 in 2010. Moreover, the share of income of the bottom 20 per cent of the population declined from 6.52 per cent in 1991-92 to 5.22 per cent in 2010. In contrast, the share of the top 10 per cent increased from 29.23 per cent in 1991-92 to 35.84 per cent in 2010.

---

2 In countries like Bangladesh and India, large numbers of women are found to work in construction.

3 During the global economic crisis of 2008-09, male employment was affected more than female employment. This was probably due to sharper declines in output in male dominated sectors like construction and manufacturing.

4 The Asian economic crisis of 1997-98 provides an example of this kind of situation when women were the first ones to be retrenched but were not the first ones to be re-hired when economic recovery started. See, for example, the country case studies in Betcherman and Islam (2001).

5 See the country studies in Betcherman and Islam (2001).

6 Data presented in this paragraph are from various government sources.



Second, the performance on the employment front has been less impressive in that large proportions of the employed labour force remain in the category of “vulnerable employment”, and are still found in sectors and activities characterized by low productivity and returns.<sup>7</sup> One bright spot on this otherwise lacklustre employment performance has been a high growth of female employment. That in turn has been due mainly to a rapid growth of one export-oriented labour intensive industry, viz., readymade garments. Of course, women’s participation has also increased in poultry and livestock and a variety of rural non-farm activities, thanks mainly to the spread of microcredit. However, despite such growth, the rate of female labour force participation in Bangladesh (36 per cent during 2006-10) has remained much lower than in countries of East Asia (67 per cent in 2010).

While promotion of productive employment should be amongst the major goals of policy in its own right, it assumes particular significance in the context of the persistence of poverty at a high level and the observed increase in income inequality. As labour is the only income generating asset that many of the poor possess, productive employment and a rise in the returns to employment can play a major role in achieving a faster rate of poverty reduction and arresting the rise in inequality. Female employment, by adding to the incomes of low income households, could play a particularly important role in that respect. It is, therefore, not surprising that raising female participation in the labour force is a declared policy goal in Bangladesh.<sup>8</sup>

Given the background and context mentioned above, it would be useful to examine the factors that influence female labour force participation and employment and analyze policies that are being employed to pursue the goal of raising it. The purpose of the present study is to enhance the understanding of female labour force participation in Bangladesh in terms of trends, drivers and barriers for women’s entry into the labour force in order to develop a set of recommendations that would be relevant for policy makers and other constituents in the country.

The remainder of the paper is structured as follows. Chapter 1 presents the background and motivation for the study and provides notes on data. Chapter 2 reviews the existing studies on female labour force participation (LFP) in Bangladesh. Chapter 3 presents the macroeconomic background and demand side factors influencing female employment and female LFPR. Specifically, it focuses on the linkage between economic growth, growth of some specific industries like the readymade garments industry and women’s employment. Chapter 4 provides data on the labour force participation rate (LFPR) in Bangladesh and its changes during the last two decades (for which comparable data are available). This Chapter also discusses some of the important aspects of female labour market trends. Specifically, the changes in sector, type and status of employment and wage differentials receives attention. Chapter 5 presents a discussion of the analytical background, which is followed by (Chapter 6) an econometric analysis of data to identify the factors driving female labour force participation. To supplement the findings from the quantitative analysis, Chapter 7 presents qualitative data based on discussions with stakeholders. Chapter 8 provides an analysis of the policy environment for women’s employment and makes some suggestions for improvement in that regard. It also provides a summary of findings and concluding observations.

---

7 More detailed analysis of the performance in the area of employment can be found in Islam (2009, 2012) and Rahman et al. (2011).

8 For example, the Government of Bangladesh, in its Sixth Five Year Plan (2011-15) document, expressed the desire to promote girls’ education at secondary and tertiary levels as a means of increasing female participation in the labour force. “To increase women’s participation in the labour force, further efforts will be made in SFYP for social mobilization to facilitate women’s access to employment and computer literacy which enable them to enter into the IT sector and utilize ICT” (SFYP document, part 1, p.48).

A major part of the present study is based on secondary data provided by National Sample Surveys, in particular by Bangladesh Labour Force Survey (LFS) Reports of various rounds. Other secondary sources used in the study include various publications of the Bangladesh Bureau of Statistics, Planning Commission and various government ministries. For a more in-depth analysis of the determinants of female LFPR, unit record data from the latest round of the Labour Force Survey (conducted in 2010) have been re-analyzed. Within the short duration of the study, primary data generation has not been possible. Nonetheless, the views of some female employees of the RMG sector have been sought through focus group discussions (FGDs). In addition, discussion sessions with private employers have been held. These sessions provide an understanding of the employers' attitude and the demand side. The views of stakeholders were also obtained through meetings with trade union leaders.

## 2. Literature Review

Female labour market in Bangladesh and other dimensions of gender and development received attention of researchers especially during last two decades. This section presents a review of two types of studies related to the labour force participation rate (LFPR) of women in Bangladesh: first, recent studies focusing on female LFPR; and second, various studies indirectly related to LFPR and covering general aspects of the female labour market in Bangladesh.

Factors influencing female labour force participation have been usually conceptualized as supply side determinants. In the context of Bangladesh where the underemployment rate is high and social and attitudinal factors play important roles, female employment is expected to be linked to both push and pull factors.<sup>9</sup> Kabeer (2012) highlights the role of such social factors in the female labour market. Although the paper does not directly deal with factors affecting female employment, it states that women's participation in the labour market is often not her own decision. As a result of strong patriarchy in Bangladesh society, male members of the family usually dictate or guide such a decision. Society's attitude and established norms also set constraints to such decision.

Mahmud et al. (2011) examine why official statistics in Bangladesh fail to properly enumerate women's economic activities. In addition, the authors have conducted a sample survey in eight districts to estimate female LFPR, which is based on the same definition as used by the Bangladesh Bureau of Statistics (BBS) (and also on the basis of alternative definitions). Use of the same definition yields LFPR of 67 per cent, whereas in the Bangladesh Labour Force Survey (LFS) of 2010 it was only 36 per cent. The authors argue that the prevailing social attitude does not recognize women's home-based economic activity as work. According to the authors, social attitude leads to under-enumeration of economic activity although LFS definition does not bar from counting it. The paper shows that the time provided for conducting the interviews in the BBS survey is inadequate and, therefore, the interviewers avoid including women's labour force participation data. However, the authors ignored the fact that this constraint is likely to affect data on the male labour force as well.

The paper also argues that the recent rise of female LFPR is not due to better enumeration but is an actual increase. The basis for this argument is that the share of not only women but also men in

---

<sup>9</sup> The existing studies on Bangladesh, however, did not distinguish between the two types of factors in the analysis of determinants of female employment and the following review, therefore, does not try to draw such distinction. Chapter 5 discusses the demand and supply side factors.

'unpaid family labour category' has increased. This argument is not correct since the LFS 2010 data shows that 'unpaid family workers' among employed men has decreased from 3488 thousand in 2006 to 2677 thousand in 2010. In contrast, during 2006 to 2010, the number of women in the unpaid family employment category has increased by a large percentage.

Bridges et al. (2011) examines the factors influencing female LFPR, highlighting the positive link between severity of poverty and the probability of women's LFP. In addition it has looked at the influence of poverty and other factors on type/sector of employment. The above study has arrived at conclusions (listed below), which have important policy implications:

- (a) Women from extreme poor households have a significantly higher probability of participation compared to non-poor. The difference between moderate poor and non-poor are insignificant.
- (b) Poorer women are more likely to participate in low paid wage employment whereas the non-poor participate in self-employment.
- (c) Presence of young children has a positive effect on self-employment and a negative effect on wage employment.
- (d) Being married has a negative effect. This result may have been influenced by the fact that paid employment dominated by the RMG sector requires long hours of work. The study finds that there is a growing acceptance of outside employment among young unmarried workers.

The above findings are in line with those of Klasen and Pieters (2012) who found that in India urban women with lower education are usually engaged in low paid wage employment. The conclusions of Bridges et al. (2011), however, should be used cautiously because of some shortcomings of the Household Income and Expenditure Survey (HIES) data and also because of the analytical problems related to the methods of analysis and interpretation of data. First, HIES data possibly underestimates female employment and female LFPR. The study estimates FLFPR as 12 per cent, while LFS based estimates provide a much higher figure (36 per cent). It may have resulted from underestimation of self/family employment of women. The study gives a very low rate of self/family employment that is much lower than the rate of paid employment. The high rate of self-employment in the LFS follows from the fact that in most households with a family farm/livestock unit, women are important contributors of labour, at least in rural areas. The LFS data of higher female LFPR may have resulted from better enumeration of such activity. The correct picture may lie between the two estimates (LFS & HIES) or may even be higher than the LFS estimates.

This may be viewed as a minor problem if one considers that each of these groups (self or paid employed) have sufficiently large number of observations. But underestimation of one component may affect the relationship between LFPR (based on total of paid and self-employment) and poverty (or other independent variables) if the relationship of these two components with the independent variables are in reverse directions. For example, the positive relationship between poverty and LFPR may be reversed if self-employment in the family farm is adequately accounted. The second problem is related to the definition of LFPR. Those in employment plus the 'unemployed' constitute the labour force. The study has considered 'those participating in employment' and has excluded the unemployed from the labour force. However, LFS data gives low unemployment rate and thus this may not affect the analysis.

The multinomial logit models in the above paper uses dummy variables for poverty groups as independent variables and various types (sector) of employment as the dependent variables. This is likely to result in endogeneity since the participation in casual employment actually results in poverty

(through low wage). Still, the study is useful as it highlights the positive association between participation in wage employment and poverty, whichever way the causality may run.

Amin (2005) has argued that increasing female labour force participation in Bangladesh has been due to better enumeration of women's home based economic activities. The major focus of the paper is on the factors associated with women's participation in paid employment. The study obtained the results that women who are heads of households, have a smaller family and less education, live in urban areas and have less wealth are more likely to engage in paid work. The number of children below age five has an insignificant impact while microcredit borrowing has a positive impact. The results are in conformity with a priori hypotheses. The only problem is related to the interpretation of the impact of education, which actually is similar to the wealth impact. Both may, again, be due to the fact that paid work is actually a combination of regular salaried employment and casual/daily employment. The first one is likely to be positively related to education and the reverse for the second. Thus the equation fails to distinguish the two effects. Moreover, the data set does not have information on self/family employment, which is a larger component of female employment and the study cannot provide insights into its determinants.

A study by the Asian Development Bank (ADB) and ILO (2011) looked at the labour market situation in Asian countries and especially highlighted the impact of the global financial crisis, which engulfed 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 study has specifically emphasized that labour force participation or unemployment rates do not fully reveal the disadvantages faced by Asian women. Poorer quality of employment of women and their vulnerability remains a major concern. The presence of a wage differential between men and women and the higher extent of informality add to the disadvantages. Flexible female labour market participation and 'secondary earner' status within the household are at the root of low quality jobs accessed by women. In Bangladesh, women's informal employment as a percentage of their non-agricultural employment was 91.3 as compared to 88, 68 and 57 in India, Indonesia and Philippines.

A paper by Kapsos (2008) uses the Bangladesh Occupational Wage Dataset to investigate determinants of wage differential and provides estimates of the gender related differential. The study finds that women's earnings are 21 per cent lower than men's of which the pure gender wage gap was 15.9 per cent. The study observes that education reduces the wage gap. An obvious policy implication is, therefore, to improve women's education and encourage educated women's participation in the labour force. Ahmed and Pushkar (2008) also reports the presence of gender related wage discrimination. Such discrimination is considerably higher in urban areas compared to rural. However, the urban wage is usually much higher than the rural wage and, therefore, women can benefit from expansion of urban employment despite higher discrimination.

Khandker (1987) observes that the higher the education of a woman, the higher is the opportunity cost of not producing cash income and the higher is the probability that she participates in market work. Husband's education has a negative effect. Similarly, increase in female wage reduces the probability of women's home production. The study suggests that policy interventions to raise women's wages will have a large positive effect on women's LFP. The study, however, interprets all variables from

the demand side. Khandker (1988) reports results for women's home production labour input. Women's education, land holding, and husband's assets have negative effects. Predicted female wage has a positive effect, which is difficult to explain.

Rahman's (2003, 2004, 2005a and 2006) papers have discussed the gender dimensions of labour market characteristics. These studies highlight the large differences in the male and female labour force participation rate. These papers also discuss the large differentials between the male and female wage rate. One of these studies analyzes the reasons behind low female labour force participation. Rahman (2006) examined the changes of female LFPR during 1991 to 2003. The study examined the determinants of LFPR on the basis of 2003 LFS data. The study focused on labour force participation as an aggregate of paid, self and family employment. It obtained the negative impact of primary and secondary education, the head's education and being married. The results should be used with caution because it is based on 2003 LFS, which has various deficiencies.

The factors influencing women's employment and gender composition of employment in the formal manufacturing sector has been analyzed by Rahman (1996). The study is based on data from 100 manufacturing enterprises in Dhaka city. It concludes that the characteristics of enterprises and the attitude of employers towards women's employment are significant determinants of female employment in these units. Among the characteristics of enterprises, the export orientation of industries has the largest positive impact on the number of women employed in a unit. Experience of the entrepreneurs with female employees did not provide an evidence of higher non-wage and/or non-financial costs of having female employees. They did not show a greater absenteeism or higher turnover rate compared to male employees. The non-wage costs may sometimes be counterbalanced through adjustment of cash remunerations.

A number of studies focused on women's employment in the readymade garment (RMG) sector. For example, two studies by Majumdar and Begum (2002, 2005) draw on a combination of survey data and published studies on the RMG sector employment. The two studies overlap to a large extent. They provide background information on women's employment, workers' characteristics, and monthly earnings. The papers provide information on work environment and the extent of gender differences in the terms of employment. The studies report that women employed in the RMG sector have a lower mean average age compared to their male counterpart. The average age of women in the latest survey was 20.4 years compared to 25 years for male workers in the sample. Female employees' average age was higher in other export industries. A larger share of workers in the RMG sector is unmarried compared to women employed in other manufacturing sub-sectors. Employers of RMG units prefer younger and unmarried women because they are more docile and averse to joining trade unions. The average schooling of these workers in 1993 was 4.1 years, which has risen to 6.3 years in 1997. Monthly pay has risen in garment work. During 1990 to 1997 the nominal rate of increase in female workers' pay was estimated at only 5 per cent. During the same period, an average male worker's pay rise was higher (about eight per cent). It has been reported that most of the garment factory buildings were overcrowded, congested and poorly ventilated with insufficient staff amenities and thus the work environment was not satisfactory.

Another study on RMG employment by Kabeer (2001) has been based on in-depth case studies and interviews of 12 entrepreneurs of garments factories of Dhaka, 60 women workers in Dhaka and 53 in London. Employers' preference for women employees were rooted in their docility, which is considered an advantage. The lack of alternative opportunities of women implied that they do not bargain for higher wages, which male workers usually do. Women's decision to join RMG employment includes both indirect and direct forces. In the case of the loss of a husband or other male

earning members, women accept such employment in distress (i.e. the added-worker effect). Women in RMG employment accept this as an improvement in their opportunities and it involved a better option to some extent.

Impact of globalization on gender has been the focus in Khandker's study (2001). It observes that industrialization has led to the feminization of labour in developing countries both in special export-processing zones, and in the normal tariff zones. It reports that at the end of 2001, 1094 factories out of a total number of 3,506 registered factories were closed and, as a result, 270,154 workers were laid off, 80 per cent of who were female workers. The women faced downward mobility and were forced to return to their village homes. Her case studies illustrate the fact that workers with some schooling are better equipped for alternative job opportunities in the formal sector. The study suggests policies to help workers maintain their living standards during periods of low export demand result in falling labour demand.

Table 2.1 presents the findings of the main studies on factors influencing female LFPR in Bangladesh.

**Table 2.1. Summary of findings on determinants of female labour force participation in Bangladesh**

Source	Major findings
Bridges et al. (2011)	<b>Participation in paid employment:</b> Extreme poor, those with smaller number of young children, unmarried are more likely to participate  <b>Participation in self-employment (agriculture):</b> Non-poor and young child has a positive impact. Education has no impact.
Amin (2005)	<b>Participation in paid employment:</b> Female-headed households, smaller family size, lower educational attainment, living in urban areas, lower levels of household wealth and microcredit have a positive impact on participation.
Rahman (2006)	<b>Participation in labour force (all types of employment):</b> Women as head, education SSC+, urban, unmarried have a positive impact. Land ownership, education lower than SSC, young children, and education of household head have a negative impact.
Khandker (1988)	<b>Women's home production labour input:</b> Women's education, husband's assets and landholding have negative effects; female wage has a positive effect.
Khandker (1987)	<b>Participation in cash income earning:</b> Education and female wage have a positive impact; husband's education has a negative impact

## 3. Macroeconomic factors influencing employment of women

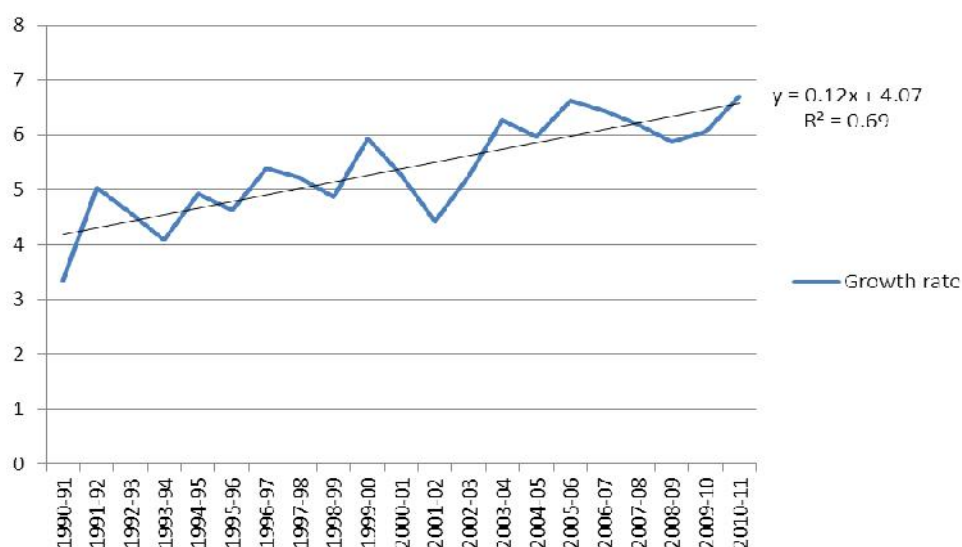
### 3.1 Economic growth and female employment

The most important factor that can influence the participation and employment of women (or for that matter, men) is economic growth and its nature. Growth of output should generally lead to increase in the demand for labour, and the pattern of growth can be important from the point of view of employment of women. Development literature suggests, for example, that economic growth is associated with a decline in the proportion of women in agriculture and an increase in non-agricultural activities (World Bank, 2012). Likewise, growth should be associated with a decline in the proportion of women in self-employment and an increase in wage employment. Development experience also

shows that trade liberalization and the pursuit of an export-oriented industrialization strategy, by promoting the growth of labour intensive industries, should result in the employment of women in larger numbers in such industries.

In the case of Bangladesh, data on the female labour force participation rate and employment of women are available only for years in which labour force surveys were carried out. Thus there is no time series of such data that would be needed to statistically examine the relationships of the kind mentioned above. However, an attempt may be made to piece together a story based on available data. Before turning to these labour indicators, it is important to review macroeconomic trends over the last two decades.

**Figure 3.1. Annual GDP growth rate in Bangladesh, 1990-91 to 2010-11**



Source : Constructed by the author on the basis of data available in Government of Bangladesh, Ministry of Finance, *Bangladesh Economic Review*, various years.

Data presented in Figure 3.1 show that the rate of economic growth witnessed some acceleration since the mid-1990s and GDP growth crossed the six per cent mark in 2003-04. Data on the female labour participation rate (to be presented in chapter 4) show that there was a sharp rise in labour force growth during the second half of the 1990s. The subsequent decline in female labour force growth during 2000-03 seems to reflect well the fall in GDP growth rate during the same period. However, the recovery in GDP growth after 2003 was not associated with a commensurate increase in female labour force growth. But the positive relationship can be seen again for the period after 2006. On the whole, there seems to be a positive relationship between economic growth and the growth of female labour force. In this context, it would be useful see if growth had a differential impact on employment of men and women. Table 3.1 provides estimates of the elasticity of employment with respect to economic growth for men and women together as well as separately. These figures bring out a few interesting points about employment intensity of economic growth in the country.

First, there has been a slight decline in the overall elasticity of employment between the two sub-periods mentioned in the table. Although the observed decline is small in magnitude, it indicates that the employment generating capacity of the economy as a whole has declined during the second half of the 2000s compared to the first half. But this decline is not alarming and can be taken to be an

indication of the rise in labour productivity, which is also important. Second, elasticity of employment for males has declined sharply between the two sub-periods, thus indicating that output growth has not been very conducive to the growth of male employment. Third, the elasticity of employment for women, which was already high during the first half of the 2000s, increased sharply during the second half of the decade. While this may be good news for employment in quantitative terms, the news is not so good when labour productivity is taken into account. The elasticity of women's employment was already above one during the first sub-period, indicating a decline in labour productivity associated with the increase in employment that took place. A further and sharp rise in employment elasticity during the second sub-period indicates that productivity of women's employment not only declined but the rate of decline increased during the latter period. Indeed, in order to allow for a rise in labour productivity, which is essential from the point of view of increasing earnings and the quality of jobs as a whole, the elasticity of employment has to be less than one. In the case of women's employment, this has been the opposite, thus implying a decline in productivity of such labour.

**Table 3.1. Elasticity of employment with respect to economic growth, 1999-2000 to 2010**

	1999-2000 to 2005-06			2005-06 to 2010		
	Total	Male	Female	Total	Male	Female
GDP	0.59	0.45	1.09	0.55	0.20	1.54
Agriculture	0.82	Neg.	4.56	0.71	0.42	1.96
Manufacturing	0.78	1.22	Neg.	0.87	0.68	1.28
Construction	0.63	0.72	0.16	2.42	2.13	3.20
Services	0.69	0.92	Neg.	0.27	0.30	1.98

Note: Neg. = negligible.

Source: Author's estimates based on output data from the Ministry of Finance: *Bangladesh Economic Review* (various years) and employment data from labour force surveys

The elasticity of employment for broad sectors shows that there has been an increase in women's employment with respect to output growth in manufacturing, construction and services. This implies that women have been able to access jobs during the process of economic diversification.

### 3.2 Employment of women in rural areas

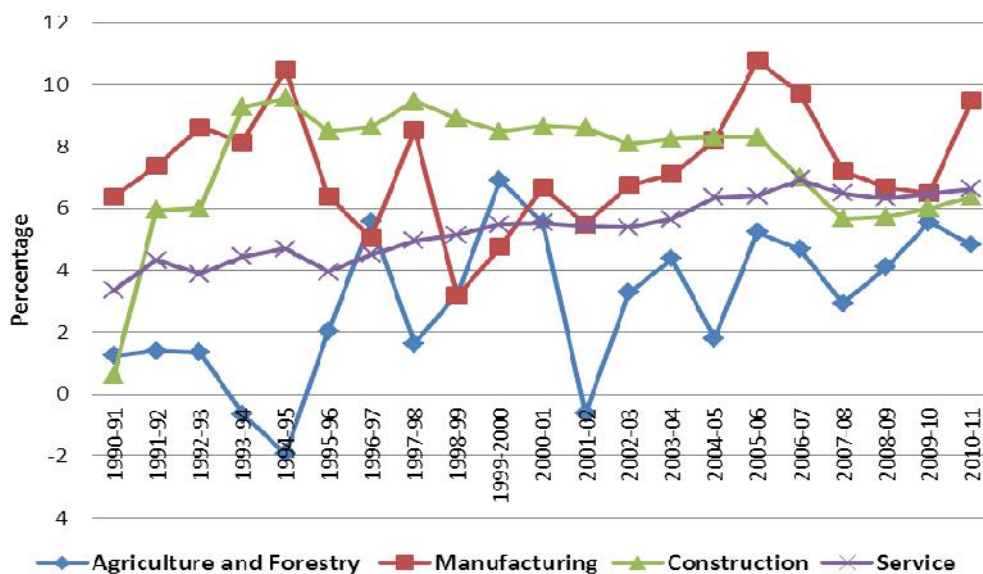
Beyond the impact of overall economic growth on overall female participation rate, the predicted decline in the proportion of women in agriculture to be associated with economic growth is not borne out by the sector composition and changes therein of female participation (data presented in Chapter 4 below). It will be seen that the proportion of women engaged in agriculture actually increased over time. One possible factor may be that the sharp increase in female participation since the mid-1990s was associated with a rise in the growth of output in agriculture (see Figure 3.2). Data presented in Figure 3.2 also shows that there was acceleration in the growth of agriculture during the second half of the 1990s, the period of sharp increase in female labour force growth. And decline in the growth of agriculture in the early 2000s was associated with a lower growth of the female labour force. Thus, the early rise in female labour force growth in Bangladesh appears to have been triggered by a rise in the growth of agriculture and increasing participation of women in that sector.

How could women's participation in agricultural activities increase? In order to understand this, it is necessary to note that agriculture consists of crop production, forestry, fishery and livestock and then to consider in which sub-sectors employment of women might have grown. Participation in crop



production depends on access to land; and there has not been any major change in women's access to land or participation as wage workers. Fishery and forestry are also activities that are dominated by men. It is only livestock (including poultry) where women had a possibility of getting in, and that was facilitated by their access to an important input, namely, credit.

**Figure 3.2. Annual growth rate of sectoral output, 1990-91 to 2010-11**



Source: Constructed by the author on the basis of data available in Government of Bangladesh, Ministry of Finance, *Bangladesh Economic Review*, various years.

During the past three decades, there has been a rapid expansion in the coverage of microcredit programmes run by various NGOs as well as government agencies. The total number of borrowers currently (in 2012) being covered by various programmes is 35 million compared to 11.14 million in 2004.<sup>10</sup> The providers of microcredit include NGOs, state-owned and commercial banks, and specialized programmes of various government ministries. Over 90 per cent of the borrowers are women. Apart from borrowers, the organizations providing microcredit are an important source of employment for women (20 per cent of their employees being women). Much of the microcredit is used for economic activities in poultry and livestock and in rudimentary non-farm activities. Hence, it is not surprising to see a sharp rise in women's participation in the labour force as well as an increase in their share in agriculture.

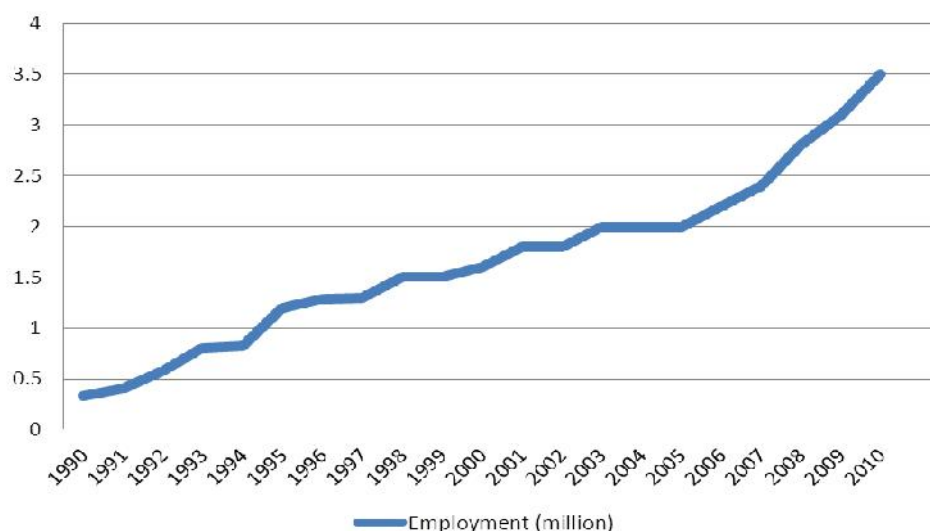
### 3.3 Growth of women's employment in urban areas: the readymade garment industry

As already mentioned earlier, export-oriented industrialization in developing countries that promote the growth of labour intensive industries typically create employment suitable for women. That has happened in the more successful countries of ESEA. To some extent, at least, this has happened in Bangladesh where one labour intensive industry, viz., readymade garments (RMG), grew rapidly

<sup>10</sup> These figures are from Microcredit Regulatory Authority (2012) and Rahman (2011).

since the mid-1980s. The RMG industry is relatively new (as opposed to traditional industries like jute textiles, cement, fertilizers, paper and paper products, etc.) in Bangladesh, which started in the second half of the 1980s and grew rapidly since then – of course, with variation in growth rate in different periods (Figure 3.3 and Table 3.2).

**Figure 3.3. Employment in the readymade garment industry of Bangladesh, 1990-2010**



Source: Constructed by using data from BBS: *Statistical Pocketbook*, various years.

**Table 3.2. Growth of employment in the readymade garment industry, 1990-2010**

Periods	Annual rate of growth of employment (%)
1990-95	29.07
1995-00	5.92
2000-05	4.56
2005-10	11.50

Source: Calculated from data available in BBS: *Statistical Pocketbook of Bangladesh* (various years)

A few observations may be made from the data presented in Table 3.2 and Figure 3.3. First, in the course of a couple of decades, total employment in the industry expanded from less than half a million to about 3.5 million.<sup>11</sup> However, the rate of growth has not been uniform during this period. While growth was robust during the first half of the 1990s, it slowed down during the subsequent decade (i.e., during 1995-2005). However, the growth rate picked up again in 2005-10 and was more than double compared to that attained during the previous ten years. The observed variation in growth during different sub-periods is quite interesting. While the decline after the initial period of high growth is understandable – perhaps the industry was going through a period of stabilization and consolidation – the pick-up and high growth after 2005 is quite remarkable. The latter is particularly notable in the context of predictions made by many studies of an adverse effect of the withdrawal of

<sup>11</sup> There is a body of literature on the history of the growth of the RMG industry in Bangladesh and the factors contributing to that growth. One recent example is Lopez-Acevedo and Robertson, (2012). See, also, Yunus and Yamagata (2012), McKinsey (2011).

the quota system in the post-MFA regime. It is quite clear that the RMG industry in Bangladesh has not only survived but has grown in health.

In order to put the growth of the RMG industry in a perspective, it may be useful to look at its growth alongside the growth of the major manufacturing industries of Bangladesh. Some relevant data are presented in Table 3.3. A few points come out quite clearly from this data. First, some of the traditional industries, e.g., jute textiles, paper, sugar, fertilizers, leather and leather products, have performed very poorly as shown by the declines in their production indices. Second, the traditional industries that have performed well include food products, tobacco products, cotton textile (after a decline in the 1980s and 1990s), cement, pharmaceuticals, and metal products. Third, only one new industry that has emerged during the entire period is garments. As for employment of women, amongst the traditional industries that have performed well, it is only the tobacco industry (the segment that produces beedi, which is an indigenous form of cigarette) that is known to be a significant employer of women. Thus, the garment industry is the only major employer of women in the manufacturing sector.

**Table 3.3. Index of production of selected manufacturing industries, 1999-2000 and 2009-10 (Base: 1988-89 = 100)**

Industry	1999-2000	2009-10
Manufacture of food, beverages and tobacco (22.14)	180.60	314.40
Sugar	112.50	56.69
Tobacco manufacturing	304.78	642.57
Cotton textiles (7.83)	98.07	308.33
Jute textile (14.07)	66.42	59.61
Garments (9.13)	766.32	1643.19
Leather and leather products (2.49)	154.41	88.14
Paper and paper products (2.26)	64.16	21.80
Chemicals and rubber (24.04)	148.81	400.91
Pharmaceuticals	318.00	1075.30
Fertilizer	199.11	72.89
Ceramic (0.55)	67.35	227.70
Cement (1.17)	399.39	836.42
Metal products (5.94)	97.96	190.23

Source: BBS, Statistical Yearbook of Bangladesh, various years

The more pertinent question relevant for the present study is the share of women in the total employment in the RMG industry. The conventional perception in this respect is that the industry is run almost entirely by female labour. This was nearly the case in the early period of the industry when women constituted 90 per cent of the total employment. That situation continued till the end of the 1990s (Kabeer and Mahmud, 2004).<sup>12</sup> But there has been a significant change since then, and the share in 2009 stood at 62 per cent (Lopez-Acevedo and Robertson, 2012). This decline reflects a

<sup>12</sup> Based on a small sample survey, Mazumdar and Begum (2000) reported that the share of women in total employment in the industry was 66 per cent already in 1993. On the other hand, Rahman (undated), quoting data from the BBS, mentioned the share as 85 per cent in as recently as 2006-07.

significant change that has taken place in the composition of the industry. While in the early years, the industry consisted almost entirely of woven garments, the composition has changed substantially, with production of knit items growing rapidly, and now the industry is evenly balanced between the two components. This has an important implication for the share of women in total employment in the industry because factories producing knit items employ mostly men. One study, Lopez-Acevedo and Robertson (2012), mentions that women account for 46 per cent of total employment in knitting factories, and as low as 42 per cent in sweater factories. Hence, even if there is uncertainty about the precise share of women in total employment in the RMG industry at present (see footnote 12), it is clear that the share of women in the total employment in the industry is going to depend on the composition of the industry (i.e. the relative weight of the woven and knit components).

By creating jobs for women, the RMG industry is playing an important role in reducing poverty in rural areas because many of the women are migrants from poor rural households. One study (Kabeer and Mahmud, 2004) finds that they are mostly from poor rural households in areas suffering from food shortage. During the early years of the growth of the industry, women usually migrated along with male family members, but increasingly they are migrating on their own. It thus seems that the industry is contributing to the creation of a class of female labour force. Employment in the industry is contributing to their empowerment because earnings from the job raise their value within the family and strengthen their capacity to negotiate with members of their families.

While women still account for nearly two-thirds of total employment in the garment industry, and employment in this industry has played an important role in changing the urban employment scenario for women with little education and initial skill in improving their own lives and those of their families, the numbers do not tell the entire story. It would be important to go beyond numbers in order to understand the real impact of the RMG industry on the lives and livelihoods of poor women.

The first issue on the qualitative side of employment is the wage rate and earnings of workers in the industry. It is quite well-known that the major factor on which the competitive edge of Bangladesh in the RMG industry is based is low wages.<sup>13</sup> This has remained one of the most contentious issues (although not the only one) in the labour-management conflict that has persisted in the industry in Bangladesh for some time. Although there were wage revisions in 2006 and 2010, the issue was not satisfactorily resolved, and the industry has been plagued by periodic unrest and violence over the wage issue. While the overall levels of wages and earnings are low (especially in relation to the cost of living in the country), what is more relevant in the context of the present study is the gender differential in wages and earnings. There are a number of studies on the topic pointing out the continuation of gender discrimination.

Although it may be argued that gender differential in wages in the RMG industry (or for that matter, in any sector) reflects differences in occupation and education between men and women in the industry, there is evidence of differentials even when comparisons are made for the same occupation and similar levels of education. Rahman (undated), for example, reports that earnings of female “operators” and “helpers” are respectively 71.3 and 52.7 per cent of those of male operators in

---

<sup>13</sup> According to one estimate (Yunus and Yamagata, 2012), labour cost in the industry in Bangladesh is USD 0.22 per hour, which is lower than even in Cambodia (USD 0.33 per hour) and Vietnam (0.38). It is of course pointed out that low wages reflect low productivity of the workers. But the industry in Bangladesh is regarded as holding competitive advantage even after taking into account the productivity differential (Lopez-Acevedo and Robertson, 2012).

weaving. The income gap in sweater factories is mentioned to be higher.<sup>14</sup> The above study quotes surveys by BIDS and CPD to show that gender discrimination in wages exists even when education levels are the same. For example, females with education up to 10 years earn only 87.1 per cent of what male workers with similar education earn. Moreover, there has been no move towards convergence because the rate of increase in earnings during 1991-2005 has been higher for males (8.8 per cent) than females (7.2 per cent).<sup>15</sup>

The factors that are usually cited to explain gender differences in wages and earnings include differences in worker characteristics (e.g., education), and types of work they are engaged in (World Bank, 2012, for example). However, as mentioned above, differences in earnings were found even for the same level of education and for the same type of work. Although there is no rigorous analysis of this phenomenon, there are a number of hypotheses that can be put forward to explain the observed differences. In a dual economy with surplus labour, the opportunity cost of labour is low anyway. And given the limited opportunities available for women from poor households with low education, the opportunity cost of female labour is likely to be even lower for them. As a result, their bargaining power is also likely to be limited and less than men (Rahman, 2005). They are also less likely to be covered by workers' organizations. Such factors may create a situation in which entrepreneurs could manage easily by paying them lower wages.

Apart from low wages and gender based wage differences, there are other issues relating to compliance with labour standards in the RMG industry of Bangladesh that apply to both male and female workers. They include working hours, overtime payment, safety and health in places of work, timeliness of the payment of wages and bonuses, and freedom of association and collective bargaining. While the level of compliance has improved in recent years (McKinsey, 2011), some 30 per cent of the factories is regarded by the government as non-compliant and 90 per cent of those identified as compliant still has at least one unresolved issue (Lopez-Acevedo and Robertson, 2012).

Despite the issues mentioned above, the RMG industry of Bangladesh has been doing very well and appears to have a bright prospect. The strength and resilience of the industry is demonstrated by the manner in which it has come out of two periods of difficulties. The first was the post-MFA global situation and the second was the period of the global economic crisis of 2008-09. Indeed, a report by McKinsey & Company (2011) makes very upbeat assessment of the industry and concludes that the medium and long term prospect of the industry is bright. Based on a consideration of the changing scenario in China (that includes creeping labour shortages, wage increases and capacity pressures), the capacity and competitiveness in other supplying countries like Cambodia, Indonesia, Vietnam, etc., and views of purchasing officers in major importing countries, the above report predicts an annual growth of 13 per cent for the industry up to 2020. Of course, the report mentions challenges that the industry faces in terms of infrastructure, compliance of labour and social standards, supply of skilled labour, and political stability. But these are challenges that can be addressed as long as demand for the products is there. Hence, with appropriate policies and needed entrepreneurial response, the industry should be able to continue its growth although there may be periodic difficulties.

---

<sup>14</sup> Data on gender difference in wages have been presented in other studies also, e.g., Mazumdar and Begum (2000, 2006), and Kabeer and Mahmud (2004).

<sup>15</sup> Kabeer and Mahmud (2004) points out that female wage rates in the garment industry are higher than in other urban activities.

As for the future prospect of the employment of women in the RMG industry, it may be noted that although there has been a decline in their share over time, it remains quite high. If there is no major decline in the share of the woven component, this industry should remain a major source of demand for female labour. If, as forecast by the McKinsey report mentioned above, the industry needs another six million workers up to 2020, and if 60 per cent of them are women, the industry should be able to absorb another 3.6 million female workers in the industry. Given the existence of surplus labour in Bangladesh, and the importance of transferring workers from sectors characterized by low labour productivity and returns to sectors with higher productivity and incomes, the numbers are not crucial. What would be important is to address issues like productivity, level of education and skills, wages, other conditions at work, problems associated with rural-urban migration of potential workers, etc.

## **4. Female labour force participation in Bangladesh and structure of female employment**

This section presents an analysis of the changes in the female labour force participation rate (LFPR) in Bangladesh over the last one and half decades.<sup>16</sup> Gender-disaggregated data on LFPR and structure of employment in terms of sector and status of employment have been presented. In this context the definition of LFPR used in the Labour Force Survey (LFS) of Bangladesh deserves attention. The implications of changes in definition and better enumeration have been discussed.

### **4.1 Problems of defining FLFPR**

The interpretation of data on female LFPR to some extent depends on definition and data quality. The labour force participation rate of women will depend on the criterion for being counted as being part of the labour force. The LFS of Bangladesh is beset with problems of choice of criterion for inclusion in the labour force and these issues should be taken into account while making cross country comparison.

The surveys from 1999-2000 to 2010 use the following definition of a labour force member: economically active population or labour force is defined as persons aged 15 years and above, who are either employed or unemployed during the reference period of the survey (preceding week of the day of enumeration). It excludes disabled and retired persons, income recipients, full-time housewives and students, beggars and other persons who did not work for pay or profit at least one hour during the reference week (LFS 2010). The inclusion of a person in labour force, therefore, depends on what is 'work for pay or profit'. Lists of categories of production for own consumption to be included as economic activities have been provided in the LFS report.<sup>17</sup>

---

<sup>16</sup> In the interpretation of data on female LFPR, it should be mentioned that the workers who migrated for overseas employment have been kept out of the set of both male and female labour force. The number of female migrants is, however, small and until year 2000 less than one per cent of migrants were women. Therefore, the scope of the present study excludes female workers engaged in overseas jobs. During 1991 to 2003 laws restricting female migration was in force. Since 2003, the restrictions have been lifted in phases.

<sup>17</sup> Production for own consumption and fixed capital formation for own use which are economic activities include:

The problem arising from definition of economic activity can be more easily captured through comparison of the concepts of male and female self-employment, which contributes to production of items for family consumption. Employment in the family farm for producing paddy is considered as an economic activity. This is usually performed by men. In contrast, processing of paddy into rice or puffed rice at home for family consumption, which is usually performed by women, is not an economic activity. In recent rounds of the survey (2006 and 2010), livestock and poultry rearing has, in fact, been included as economic activities. In 1996 survey, the usual definition 'excluded household economic activities such as, care of poultry and livestock, threshing, boiling, drying (paddy), etc.' Therefore, it is no wonder that the value of LFPR has been low in this round and shows a large increase during 1996 to 2006.

The current definition has a bias in favour of inclusion of hired employment in comparison to self/family employment. Women engaged in hired work in the same activity will be included in the labour force (e.g. those working in rice mills) but those who undertake similar work for family are not in the labour force. However, remedy of problems related to definition may be difficult. For example, if paddy processing at home is included as an economic activity, then there may be arguments for inclusion of 'cooking at home' as economic activity and the line, even if somewhat artificial, has to be drawn.

In the recent LFS rounds, the motivation for better enumeration of women's productive activity may have resulted in labelling of more women engaged in livestock/poultry-raising as being part of the labour force. However, some studies (Mahmud 2011) have pointed out that the female participation rate may still have been under-enumerated because the prevailing social attitude is against recognition of women's role in economic activities, and also because of problems related to women's own recognition of their role in economic activities. Whether a better enumeration has contributed to the recent rise of female LFPR can be judged from the changes in sector and status of employment. This discussion has been presented in the next section.

In this context, estimates of LFPR based on an alternative definition can be useful. For example, only those engaged in paid employment can be counted as labour force members and the changes in LFPR based on this definition can be highlighted. From the two LFS rounds, the female labour force participation rate based on this 'paid employment' criterion is 5.3 and 5.8 per cent in 2006 and 2010 respectively.

- 
- (a) All production of primary products for own consumption covering the characteristics products of agriculture, hunting, forestry and logging and mining and quarrying;
  - (b) The processing of primary commodities by the producers of these items in order to make goods such as butter, cheese, flour, oil, cloth or furniture for their own use whether or not they sell any of these products in the market;
  - (c) Production for own consumption of other commodities only if they are also produced for the market by the same households; and
  - (d) All production of fixed assets for own use that is own-account construction of building, roads and similar works as well as fabrication of tools, instruments containers and similar items which have an expected life or use of one year or more, (LFS 2010).

## 4.2 Changes in female labour force participation rates (LFPR)

This section examines male and female LFPR in aggregative terms as well as for rural-urban and age group disaggregation.<sup>18</sup> Data on female and male LFPR (Table 4.1) show that female LFPR went through a continuous rise during 1991 to 2010 while male LFPR has decreased from 87.4 per cent to 82.5 per cent. During the latest sub-period, that is 2006 to 2010, female LFPR increased by 10 percentage points, from 26.1 to 36.0 per cent. The recent rise in the female LFPR (2006 to 2010) stands in contrast to the Indian labour market scenario. Rise of female LFPR to some extent has been due to the initial low value of FLFPR. It was 16 per cent in 1996 when many of the developing countries of Asia had FLFPR above 40 per cent.

**Table 4.1. Changes of female and male LFPR in Bangladesh, 1991 to 2010**

Year	LFPR (per cent) for age 15 & above population		
	Female	Male	All
1990-1991	14.0	86.2	51.2
1995-1996	15.8	87.0	52.0
1999-2000	23.9	84.0	54.9
2002-2003	26.1	87.4	57.3
2006	29.2	86.8	58.5
2010	36.0	82.5	59.3

Source: BBS, LFS (various years).

The disaggregated picture of rural and urban LFPR can help understand linkages between LFPR and growth of urbanization. Table 4.2 presents the values of rural and urban LFPR. Female LFPR in both rural and urban areas have risen during 1996 to 2010. Female LFPR in urban areas were 20.5 and 34.5 per cent in 1996 and 2010 respectively. In these years, female LFPR in rural areas has risen from 17.4 to 36.4 per cent. Urban and rural FLFPR are, thus, quite close and both have risen over the last 15 years. Therefore, the pace of urbanization or growth of either the rural or the urban economy cannot be singled out as the reason behind changes of LFPR of women. During the recent years female LFPR is higher in rural areas than in urban areas. During the earlier years the pattern was the reverse.

**Table 4.2. Age-specific labour force participation rates by sex**

Age group	2010		2006		2000		1995-1996	
	Male	Female	Male	Female	Male	Female	Male	Female
15-19	48.44	29.40	62.88	13.76	55.85	23.35	61.3	18.0
20-24	75.93	40.98	80.41	29.00	74.01	26.30	78.8	15.8
25-29	92.10	44.71	95.28	33.67	91.30	27.08	93.5	16.0
30-34	97.29	46.62	98.68	34.88	95.65	26.51	98.3	15.8
35-39	98.34	47.67	98.81	34.82	98.23	25.66	98.4	18.2

<sup>18</sup> Disaggregated data on LFPR for urban-rural and age groups and employment data on sector, status etc. are comparable for LFS rounds of 1996 and later years. Comparable data only for LFPR is available from 1991. As discussed in the previous section, definition of female LFPR and employment in 1996 are somewhat more restrictive than later rounds of LFS.



40-44	98.05	46.24	97.72	35.15	97.78	26.57	99.0	17.0
45-49	97.37	47.58	97.75	32.63	97.63	23.42	98.8	14.3
50-54	94.11	10.25	95.35	31.12	95.76	18.28	98.0	14.3
55-59	88.52	11.18	92.36	27.72	93.50	18.85	96.1	14.4
60-64	77.20	6.63	82.70	22.62	81.39	11.11	88.6	11.4
65 +	57.93	8.32	59.25	14.83	56.56	8.99	70.2	8.4

Source: BBS, LFS, various years.

Table 4.3 shows changes of age specific LFPR. Women's LFPR has increased in all age groups, and the rise has been higher among younger age groups (20 to 34 years). In contrast, during the recent period, LFPR declined among young men of age 15 to 30 years. The changes of LFPR, especially among the younger age groups are likely to be influenced by school enrolment rates. Information on school enrolment, however, shows that it has increased both among boys and girls and by similar magnitude (HIES 2000, 2010). Therefore, school enrolment alone cannot explain the differences in youth LFPR of male and female LFPR and the implications of such change.

**Table 4.3. LFPR of men and women in urban and rural locations**

Year	Location	Male	Female
1995-1996	Urban	71.1	20.5
	Rural	78.8	17.4
1999-2000	Urban	83.7	26.5
	Rural	84.0	23.1
2002-2003	Urban	85.1	27.4
	Rural	88.1	25.6
2005-2006	Urban	83.2	27.4
	Rural	88.0	29.8
2010	Urban	80.2	34.5
	Rural	83.3	36.4

Source: BBS, LFS (various years).

**Table 4.4. Male and female employment and unemployment rates**

Year	Sex	Employment- population ratio (15+)	Unemployment rate (%)	Share of women in total employment	Employment rate (% of labour force)
2010	Female	36.1	5.8	29.9	94.3
	Male	79.1	4.1	70.1	95.9
2006	Female	27.2	7.0	23.8	92.9
	Male	86.7	3.4	76.2	96.6

Source: BBS, LFS, various years.

Since labour force participants include both employed and unemployed persons, LFPR and its changes over time will depend on both components. Data on employment rates and unemployment rates in Bangladesh have been presented in Table 4.4. Data shows that female LFPR has increased

through increase of employment rate and despite a decline of unemployment rate. As a result the share of women in total employment has risen from 23.8 per cent to 29.9 per cent.

### 4.3 Female LFPR and hours of work

The recent rise in the participation rate of women in the labour force in Bangladesh brings another question to the forefront: the increasing participation of women through the route of families' farm activities is likely to be associated with low working hours per week. This would mean that their average contribution to production would be on the decline. For an assessment of the changes on this front, it is important to examine the data on underemployment, which is published in LFS report.

Underemployment can be defined in terms of either willingness to work more hours compared to the actual hours or in terms of work input lower than a standard hour. Bangladesh LFS defines underemployment as persons who work less than 35 hours a week. Data presented in Table 4.5 shows that during 2000 to 2006 and during 2006 to 2010 the underemployment rate declined. Thus, the recent rise in the LFPR was not associated with a rise in underemployment. In addition, average hours worked has been examined (shown in Table 4.6). Data on average hours worked shows results similar to that based on the underemployment rate. Hours of work increased during 2006 to 2010 when female LFPR increased substantially.

**Table 4.5. Underemployment\* rates among employed male and female labour force (per cent)**

Year	Male	Female	All
2010	6.6	31.5	14.2
2006	3.7	40.1	12.6
2000	7.4	52.8	16.6

*Note:* \* - Those working less than 35 hours a week have been defined as underemployed.

*Source:* BBS, LFS (various years).

**Table 4.6. Average hours worked per week by employed male and female labour force**

Year	Male	Female	All
2010	51	35	46
2006	52	26	46

*Source:* BBS, LFS (various years).

### 4.4 Sector of employment

An important manifestation of economic development is structural change in the labour market. Changes in industry composition in a broad sense involve a movement of the labour force from agriculture to non-agriculture. Changes in the sectoral pattern of employment of the female labour

force of Bangladesh and a comparison with the structure of employment of the male labour force is pertinent for an understanding of the dynamism of the female labour market.

On the basis of data from the recent rounds of the Bangladeshi LFS, a comparison of the sectoral structure of employment is possible for 1996 to 2010. Table 4.7 presents relevant data. Changes in the sectoral distribution of the male and female labour forces over the last one and half decades show contrasting patterns. The share of the male labour force in agriculture went through a slight decline. It was 52.3 per cent in 1990-91, 51.8 per cent in 1999-2000 and 49.8 per cent in 2002-2003. In 2006 and 2010 the shares were 41.8 and 40.2 per cent. Thus, during 1996 to 2003, the change was somewhat slow. The decline of the share of male labour force in agriculture was much larger during 2003 to 2010. The trend, therefore, conforms to the conventionally expected structural change.

**Table 4.7. Distribution of male and female labour force by broad economic sectors, 1996-2010**

Period	Male (%)			Female (%)			Male and Female (%)		
	Agriculture	Non-Agriculture	Total	Agriculture	Non-Agriculture	Total	Agriculture	Non-Agriculture	Total
1995-1996	52.3	47.7	100.0	27.8	72.2	100.0	48.9	51.1	100.0
1999-2000	51.8	48.2	100.0	46.9	53.1	100.0	50.8	49.2	100.0
2002-2003	49.8	51.2	100.0	58.7	42.3	100.0	51.7	48.3	100.0
2003-2006	41.8	58.2	100.0	68.3	31.7	100.0	48.1	51.9	100.0
2006-2010	40.2	59.8	100.0	64.8	35.2	100.0	47.6	53.1	100.0

Source: BBS, LFS (various years).

The share of the female labour force in agriculture went through a sharp increase during the 15 year period. The share was 27.8 per cent in 1996 before increasing to 46.9 per cent in 2000 and 64.8 per cent in 2010. The rising share of employment in agriculture stands somewhat contrary to expectation, especially in view of the declining share of agriculture's contribution to GDP. The sharp increase of female labour force in agriculture has, to some extent, been due to the change in definition and better enumeration and, therefore, calls for further investigation. This has been done through probing into more disaggregated data on female employment.<sup>19</sup> Such disaggregation reveals that a predominantly large share of women is engaged in livestock sub-sector (Table 4.8). 35 per cent female and less than one per cent male labour force have been engaged in this sub-sector.

**Table 4.8. Number and share of male and female labour force in livestock and poultry-raising**

Year	Description	Female	Male
2000	Number ('000s)	1000	340
	Share of total employment (%)	12.6	1.1
2006	Number ('000s)	3975	221
	Share of total employment (%)	35.2	0.6
2000-2006	Changes (%) in employment in livestock & poultry	+297.5	-35.0

<sup>19</sup> Such data has been presented for 2000 and 2006. For other rounds of LFS, the disaggregated data has not been made available.

Source: BBS, LFS (various years).

The conventional social attitude does not recognize women who tend the family's animals as agricultural labour force. Changes in social attitude during the recent years and growing awareness about the need for recognition of women's economic activity resulted in enumeration of women doing livestock and poultry-raising as agricultural labour force (the figure was 1 million in 2000 and 3.975 million in 2006). This has obviously raised female LFPR. It may be concluded that the recent increase of the female LFPR has resulted from counting unpaid women workers in the family who are engaged in livestock-raising as employed labour force. Thus, the reverse structural change of total employment has taken place through a rise of total labour force participation rate of women and their rising involvement in livestock sub-sector, especially in the rural areas.

Taking a look at the detailed sectoral distribution of the female labour force, it can be observed that agriculture, manufacturing and community and personal services are the significant contributors of employment (Table 4.9). Among major sectors, the female employment growth rate per annum during 2006 to 2010 was 8.4 per cent in agriculture, 9.6 per cent in manufacturing, 12.0 per cent in community services and 23.4 per cent in wholesale and retail trade (Table 4.10). Growth of the labour force in manufacturing sector is higher for women compared to men. The same is true for the agriculture and community services sector.

**Table 4.9. Distribution of employed persons by industry and sex, 1996-2010 (per cent)**

Major Industry	1995-96			1999-2000			2002-2003			2006			2010		
	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F
Agriculture, forestry & fisheries	48.9	52.3	27.8	50.8	51.8	46.2	51.7	49.8	58.7	48.1	41.8	68.3	47.57	40.18	64.84
Mining & quarrying	0.1	0.1	0.0	0.5	0.3	1.0	0.2	0.2	0.0	0.1	0.1	0.1	0.20	0.25	0.10
Manufacturing	10.2	7.7	25.3	9.5	7.5	17.7	9.8	7.6	17.3	11.0	10.9	11.5	12.46	12.75	11.77
Electricity, gas & water	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.1	0.2	0.2	0.0	0.18	0.24	0.03
Construction	2.9	3.1	1.5	2.8	3.2	1.3	3.5	4.2	1.0	3.2	3.9	0.9	4.84	6.31	1.40
Trade, hotel & restaurant	17.2	18.5	9.8	15.8	18.2	6.3	15.1	18.6	2.5	16.5	20.4	4.1	13.97	17.24	6.34
Transport, storage & communication	6.3	7.2	0.7	6.3	7.8	0.6	6.8	8.7	0.3	8.4	10.8	0.6	7.36	9.87	1.51
Finance & business services	0.6	6.6	0.3	1.0	1.2	0.6	0.5	0.6	0.2	1.6	1.7	1.1	0.67	0.83	0.32
Community & personal services & others	13.6	10.1	34.9	12.9	9.6	26.2	12.2	9.9	20.1	10.9	11.0	13.6	12.75	12.33	13.69
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: BBS, LFS (various years).

**Table 4.10. Number of women employed in major sectors and average annual growth rate of sectoral employment**

Sector**	2003-2006		2006-2010	
	(Average growth rate)		(Average growth rate)	
	Male	Female	Male	Female
Agriculture, forestry and fishery	-4.23	9.32	1.79	8.41
Manufacture	14.18	-8.70	5.15	9.62
Wholesale & retail trade	4.39	23.48*	-0.66	23.39*
Hotels and restaurants	7.64	15.62	4.01	2.34
Transport, storage and communications	9.37	38.21*	-0.78	32.99*
Community, social and personal service activities	13.34	-11.85	2.28	11.96
	Number employed (millions)			
	2006		2010	
	Male	Female	Male	Female
Agriculture, forestry and fishery	15.09	7.68	15.22	10.51
Manufacture	3.93	1.30	4.83	1.91
Wholesale & retail trade	6.70	0.40	6.53	1.03
Hotels and restaurants	0.66	0.07	0.78	0.06
Transport, storage and communications	3.91	0.12	3.79	0.25
Community, social and personal service activities	1.65	0.97	1.81	1.56

Note: \* - The high rates of growth are associated with low base; \*\* - These six sectors employ about 97 per cent of female labour.  
Source: BBS, LFS (various years).

## 4.5 Status of employment

Self-employment is usually the predominant type of activity in a subsistence agriculture based production system, as in Bangladesh. Growth of the industry and service sectors leads to commercial production and is expected to result in increased use of hired employment. The other status of employment akin to self-employment is 'unpaid family helper'. This group participates in family enterprise but does not directly earn a pay or profit. Within hired employment, 'day labourer' is an inferior type compared to 'employees' with regular employment and earnings. Women's empowerment is more likely to be associated with direct income earning. The status of 'unpaid family helper' would be ranked lower than self-employment in terms of such benefit.

Table 4.11 presents pertinent data on status of employment. It shows that 25.1 and 47.5 per cent of Bangladesh's employed women and men are in self-employed category. In rural areas, this category accounts for a large share because family-based subsistence agriculture is the main economic activity. In addition, 56.3 per cent of the employed female labour force is in the category of unpaid family worker. Among the male labour force 7.1 per cent is in this category. Only 8.9 per cent of female labour force and 17 per cent of male labour force are in regular paid employment. 7.1 per cent women are employed as day labourers/irregular employees.

Table 4.12 presents data on the changes of share of employment status of men and women during the period 1996 to 2010. The share of self-employment in female employment was 46.7 and 25.1 in 2000

and 2010. Share of women in employee and day labourer groups showed a large decline during 2000 to 2010.<sup>20</sup> The decline in the share of hired employment is larger among female workers compared to male workers. Share of women in self-employment also shows a small negative change. This has been made up by a large increase in women employed as unpaid family helpers. As has been mentioned earlier, the increase of ‘unpaid family workers’ among women is to some extent a reflection of better enumeration in recent LFS rounds.

**Table 4.11. Status of employment by sex by location, 2010 (per cent)**

Status of employment	Urban		Rural		Rural + Urban	
	Female	Male	Female	Male	Female	Male
Self-employed	29.9	45.3	11.5	51.5	25.1	47.5
Employer	0.1	0.3	0.1	0.3	0.2	0.2
Employee	33.3	30.5	5.0	9.6	8.9	17.0
Unpaid family helper	22.3	5.5	71.8	10.9	56.3	7.1
Day labourer	8.1	16.6	7.8	26.3	7.1	28.9
Others	6.3	1.8	3.8	1.4	2.4	-

Source: BBS: LFS, various years.

**Table 4.12. Distribution of status of employment by sex, 1996 to 2010 (per cent)**

Status of employment	1995-1996		1999-2000		2002-2003		2006		2010	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Self-employed	31.3	47.8	26.6	51.4	24.5	50.6	15.9	50.0	25.1	47.5
Employer	0.5	0.4	0.0	0.3	0.2	0.4	0.1	0.3	0.2	0.2
Employee	28.5	14.9	20.3	15.8	13.4	13.8	11.7	14.5	8.9	17.0
Unpaid family helper	18.6	11.0	34.1	6.4	48.0	9.9	60.1	9.7	56.3	7.1
Day labourer	21.2	26.0	19.0	26.1	9.6	22.9	7.9	24.0	7.1	28.9
Others	-	-	-	-	4.3	1.3	4.3	1.5	2.4	-
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: BBS: LFS, various years.

In this context, the net changes in the number of women in each status of employment should be considered. Pertinent data for 2006 and 2010 has been shown in Table 4.13. Employment in each status has increased for female labour force, due to low base. In the three major categories, self-employment, unpaid family worker and day labourer group large increases have taken place (42, 34 and 28 per cent respectively). As has been mentioned in the previous discussions, the large share and growth of unpaid family workers has been partly due to better enumeration of women working in family owned livestock/poultry unit. In contrast, the regular employee category, which is actually the most sought-after employment type, saw a very small increase (9.2 per cent). The increase in this category is much higher in the case of male employment (22.7 per cent) indicating that the attractive employment choices are taken up by men.

<sup>20</sup> The picture of status of employment of Bangladeshi women stands in contrast with the situation of other South Asian Countries. Share of paid workers in total female employment is much higher India.

**Table 4.13. Number of male and female labour force by status of employment, 2006-2010**

Status of employment	2006 ('000s)		2010 ('000s)		% change from 2006 to 2010	
	Female	Male	Female	Male	Female	Male
Self-employed	1789	18056	2544	9789	42.2	-45.8
Employer	13	117	30	89	130.8*	-23.9
Employee	1318	5249	1439	6440	9.2	22.7
Unpaid family helper	6780	3488	9116	2677	34.4	-23.2
Day labourer	893	8667	1145	10979	28.2	26.7

Note: \* Due to small base.

Source: BBS: LFS, various years.

## 4.6 Formal versus informal employment

The sectoral pattern of female employment and the changes involving the larger increase in agricultural employment, especially livestock rearing, implies that most of the employment expansion would be in the informal sector. Informality is one of the most important disadvantages in the female labour market.<sup>21</sup> Data on the extent of informality and its changes have been presented in Table 4.14. During 2000-2006, about 15 per cent of employed women were in the formal sector. It has come down to 7.7 per cent in 2010. However, data on informality has to be used cautiously. Neither the employees nor the field enumerators would have sufficient information as to whether the unit in which they work is a formally registered one. Moreover, even the registered enterprises may provide employment on an informal basis as it is more convenient. Some workers may consider themselves as regular formal employees, but they do not have any written contract or job offer. Doubts about the quality of this specific data also arise due to the sudden decline in the share of formal employment. The decline in the absolute number of women engaged in the formal sector adds to such doubt.

**Table 4.14. Distribution of employed labour force by sex and sector (formal versus informal)**

Year		Male		Female	
		Number ('000s)	Share (%)	Number ('000s)	Share (%)
2000	Formal	8420	27.1	1230	15.6
	Informal	22669	78.9	6660	84.4
2006	Formal	8594	23.8	1614	14.3
	Informal	27486	76.2	9663	85.7
2010	Formal	5542	14.6	1244	7.7
	Informal	32391	85.5	14959	92.3

Source: BBS, LFS (various years).

<sup>21</sup> The LFS reports (2000, 2006, and 2010) provide definition of concepts used. But none of the reports include a definition of 'Informal' employment.

## 4.7 Wage differentials

So far, the discussion has centred on LFPR and employment. Sections 2 and 3 have referred to previous studies on wage differentials, especially in the RMG sub-sector. This section presents recent data on gender differences in wage in Bangladesh. Data for 2006 has been quoted in the LFS report (Table 4.15). Female wage is observed to be only two thirds of the male wage. The ratios are similar for rural and urban areas. The LFS 2010 report does not provide tables on wage, possibly because of anomalies in data. Therefore, wage data from HIES 2010 have been presented in Table 4.16. Data shows that the female to male wage ratio is 0.84, which is an improvement compared to the ratio obtained from the LFS 2006. The improvement of the ratio of female to male wage reflects a tightening of the casual labour market. HIES data show that the female to male ratio for monthly salary of salaried employees is much lower than the ratio of daily wage. Gender differential of wage consists of three factors, gender segmentation of occupation, differences in endowment and pure discrimination, which is linked to the lower bargaining power of female workers.<sup>22</sup>

**Table 4.15. Female and male wage by location, 2006**

	Female	Male	Total
Urban	69	111	62
Rural	61	93	66
Urban & Rural	63	95	66

*Source:* LFS 2006.

**Table 4.16. Wage and salary for men and women, 2010**

	Wage	Salary
Male	169.3	18154.7
Female	142.9	9762.1
Female/Male	0.84	0.54

*Source:* HIES 2010.

# 5. Drivers of and barriers to female employment

## 5.1 Determinants of female labour supply: an analytical background

In the basic neo-classical theory, labour supply decision and labour force participation depends on the labour-leisure choice. In the basic model, the choice is derived from a utility function consisting of leisure and goods (and thus income). The basic predictions of neoclassical labour-leisure choice theory is that, as wage rises, labour supply will increase due to the substitution effect (opportunity cost of leisure rises). An income effect will work simultaneously and, if leisure is a normal good, its demand will fall and labour supply will rise with the rise in wage. A person, who just enters the labour

<sup>22</sup> In-depth analysis of the factors influencing gender differential of wage is not within the scope of the paper.



force, will only be affected by the substitution effect and wage increases will raise the chance of participation.

Mincer (1962) and later Becker (1965) brought the role of housework into the analysis of the participation of married women in the labour force and expanded the dichotomy between work and leisure choice to the pioneering concept of trichotomy of housework, leisure and market work. Although this approach faced the criticism that application of neo-classical framework to predict equalization of marginal utilities from various choices is somewhat tautological, or a statement of the obvious, and cannot go more in-depth into the analysis of the real choices related to home production. For example, 'when time is an input in the household production process, joint production is the rule and not an exception because the input of time into many household activities is itself a direct source of utility or disutility' (Pollak and Wachter 1975). Gronau (1986) considers this possibility and presents a model incorporating the direct utility/disutility of each type of activity. This approach is more relevant for female labour supply in Bangladesh, where casual wage employment may be associated with loss of social prestige, while involvement in self-employment is not only prestigious but may also be congenial for joint production or, in other words, compatible with household activities.

The Beckerian model of 'New Home Economics' and other models of the same group are actually unitary models where household members maximize a joint utility function and take decision about members' labour supply. In effect, this may mean that the altruistic household head has the decision-making authority and influences female labour supply decisions. A number of other rival theoretical positions extend this unitary model or go beyond it and can be useful to throw light on the process of women's labour market decision. Sen (1983) criticizes the notion of identical utility function of household members and emphasizes the role of institutional factors. Many researchers (Folbre 1986) highlighted that some family members may take a 'free ride' on the benevolence of hard working female members of the family. There may be a tendency to reach a bargaining solution as well (Manser and Brown 1979). The theoretical developments actually imply that the relationship between women's labour market participation and other earning sources (male earners, unearned income, and asset-based production) may not follow the predictions from standard neo-classical theory. Keeping this in view, the role of standard predictions about the factors influencing women's labour force participation and the deviations have been discussed below and later tested empirically. In addition, the literature review (Chapter 2) has identified individual and household level variables that influence female LFPR. The following discussion places these factors in the context of demand and supply related forces.

## **5.2 Major factors on the demand and supply side in female labour market in Bangladesh**

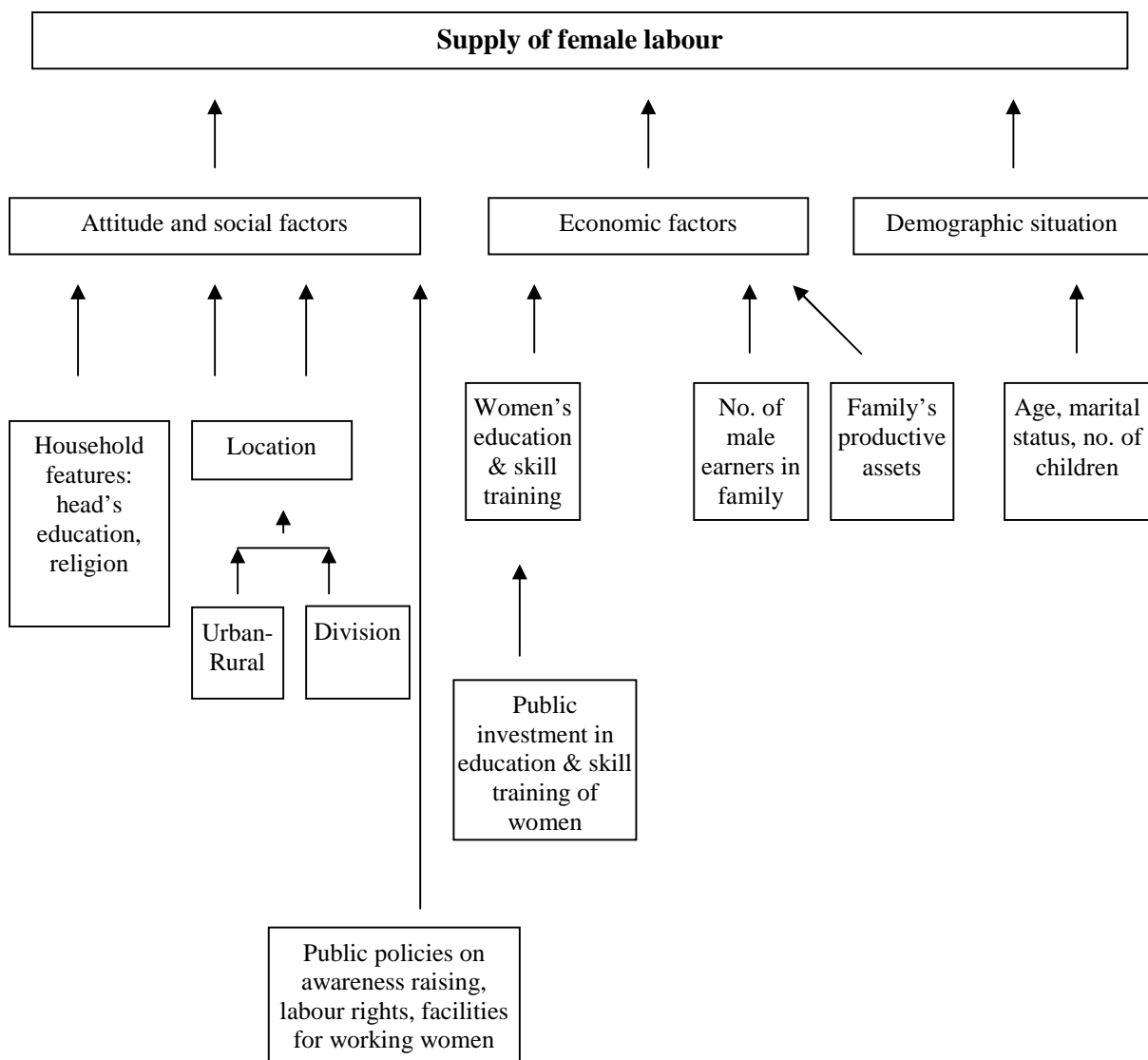
For a practical application of the theoretical predictions based on a competitively functioning labour market, the implications of the non-competitive features prevailing in the economies with surplus labour as in Bangladesh must be incorporated. When there is an imbalance in the economy and it takes the form of inadequate labour demand, the demand side factors will also influence women's LFP decisions. Therefore, in the following discussion, both supply and demand side factors have been presented in the figures and in the descriptions.

Figure 5.1 contains three sets of factors operating on the supply side. The economic factors correspond to the traditional labour-leisure choice. The opportunity cost of leisure is represented by

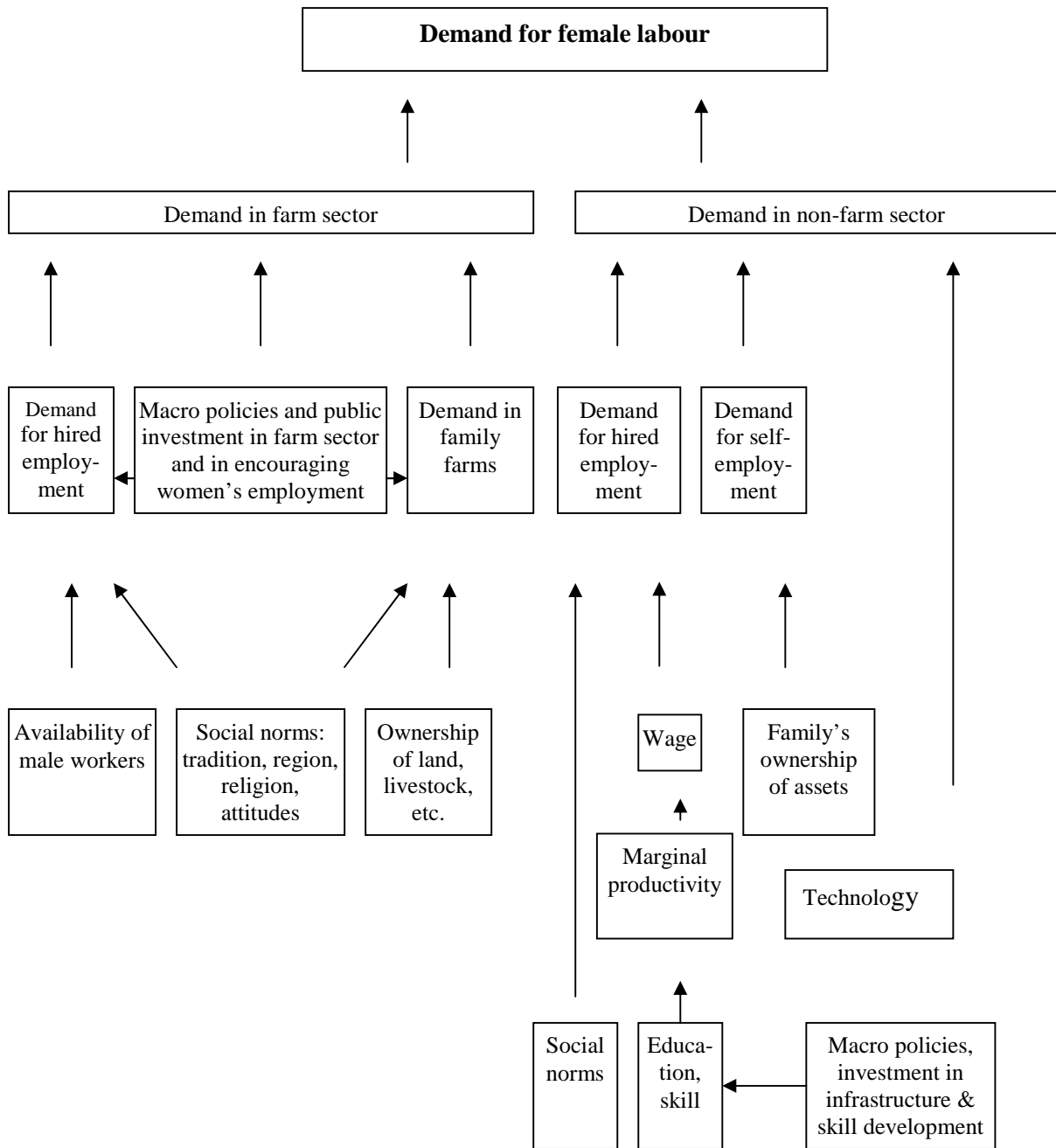
wage, which is influenced by education and skill. Skill and family's productive assets incorporate substitution effect through the influence on productivity of self-employment activities. In addition to assets, non-earned income (e.g. spousal wages, remittances etc.) will also exert an income effect. Beckerian's 'home economics' dimension has been included through the last box on the right. Mincer's extension in the form of joint production and utility of self-employment versus wage employment has been included through factors affecting attitude and social status.

The demand side has considerable overlap with variables influencing the supply side (Figure 5.2). In the interpretation of empirical results, the net impact of both sides has to be focused. For example, social norms, education and location are linked to both. In addition to the individual and household characteristics, the macro policies and macroeconomic variables will have strong influence on the demand side. The macroeconomic aspects of the demand side deserve in-depth analysis and will be taken up in a subsequent section. Some of the major individual/household characteristics featuring both supply and demand aspects has been elaborated below, both in general terms and as applied to Bangladesh.

**Figure 5.1. Supply side factors behind female LFPR**



**Figure 5.2. Demand-side factors influencing female LFPR**



### 5.3 Female labour force participation (LFP) and poverty

Poverty is expected to act as a push factor in the female labour market and a positive relationship between poverty and female LFPR is likely to be observed. As mentioned earlier, social attitude is an important impediment to female labour force participation in Bangladesh. Nonetheless, the poorer women may be in a desperate situation and would be willing to break the social barrier if it enables them to earn a livelihood. Conservatism is more prevalent among richer households.

The demand side may, however, operate in a manner that modifies the above relationships. Certain types of employment, especially salaried employment in the formal sector, need some minimum education. Women from poorer households usually enter the labour market without any school education. Therefore, they will not have access to such salaried employment. They are likely to resort only to the inferior categories of employment, namely, casual and daily basis work.

An important feature of the relationship between poverty and female labour supply is that usually these two reinforce each other. Figure 5.3 shows how these linkages operate. The causality flows in both directions. Women from poorer households may have higher participation in inferior types of casual employment. Poverty can also act as a negative force on wage. This can be attributed to lower productivity and lower bargaining power of poor women. This, in turn, leads to lower earnings.

However, the positive impact of poverty on women's participation may hold only for paid employment and not for self or family employment. The reason behind the difference is that family employment requires a family's possession of productive resources (like land, livestock, etc.) and poorer households usually possess less of these assets. As a result, the relationship between family employment and poverty may even be reversed. LFPR (taking into account all types of employment) of women may not, therefore, show the expected positive relationship with poverty. Net impact of poverty on LFPR will depend on the weight of the two types of employment.<sup>23</sup> Breaking this vicious cycle requires initiatives to provide poorer girls with access to education and skill development facilities. In addition, industrial units in sectors with larger proportion of female employment may be provided with various forms of support and such support should be linked to the benefits received by female workers.

The possible linkages discussed above can be relevant for both men and women. In fact, the income (or asset or unearned income) effect in labour supply function focuses on this relationship and does so from the supply side (by looking at the net impact through income and substitution effect). In Bangladesh, and especially in the case of self/family employment, the links also operate from the demand side.

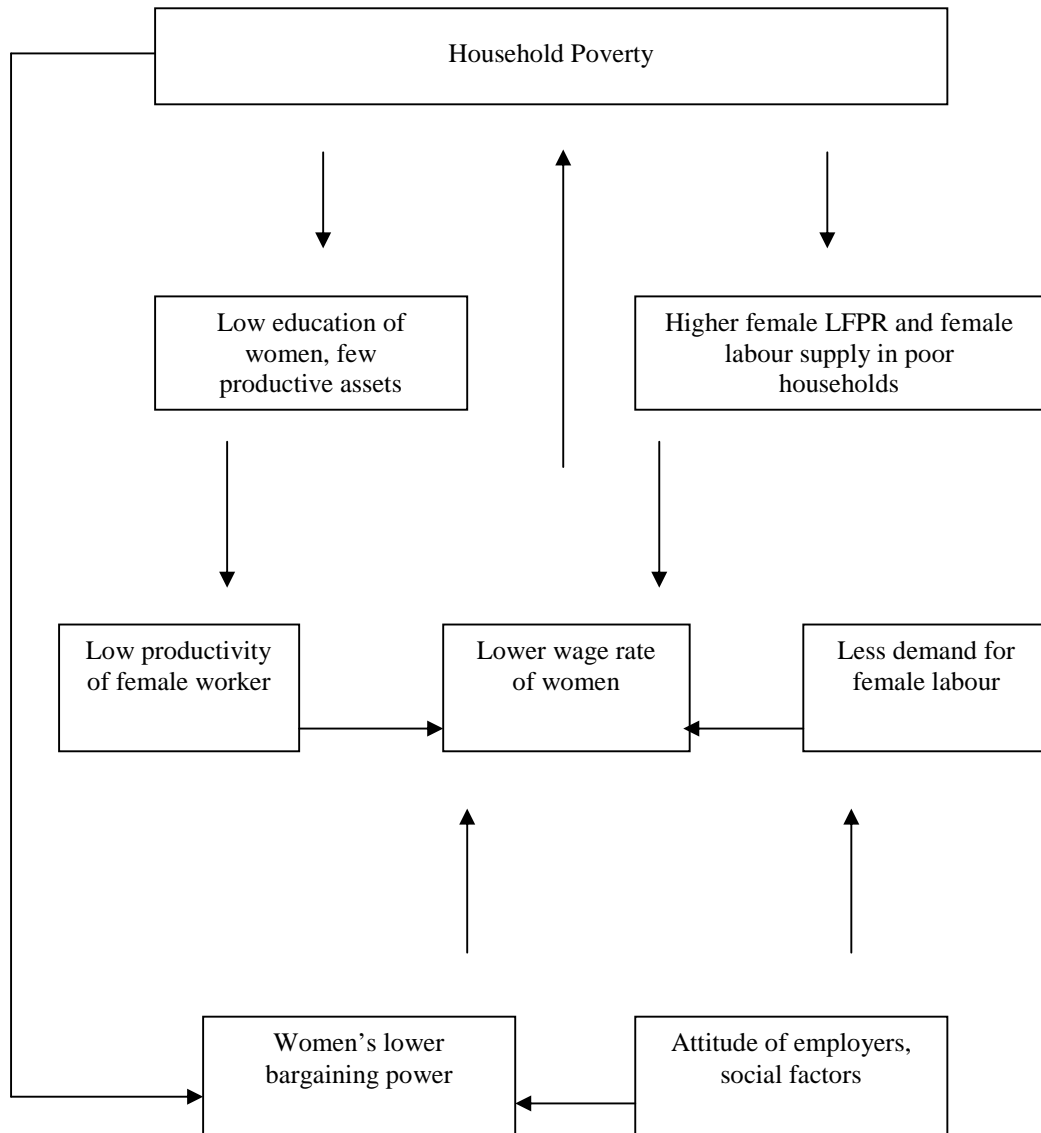
In the following analysis, the relationship between poverty and LFPR will be assessed on the basis of LFS 2010 data. However, LFS does not provide expenditure data. Therefore, the poverty based groups cannot be directly identified. Instead a proxy indicator of poverty has been used that is based

---

<sup>23</sup> A study on this relationship was conducted on the basis of HIES data of Bangladesh. It obtained a positive relationship between LFPR and poverty (Bridges et al. 2011). However, the result is due the fact that HIES defines LFPR in a narrower sense, with a much smaller share of women in self/family employment and the participation in paid work dominates the link with poverty.

on landownership and non-land asset. Women’s participation in paid employment and in self-employment among the asset groups has been shown in Tables 5.1 and 5.2.

**Figure 5.3. Household poverty and female labour force participation**



Data shows a clear positive relationship between the extent of women’s participation in self/family employment and asset. In contrast, the relationship is negative in the case of casual and daily employment, which is a reflection of the social norm that casual or daily employment is not acceptable to educated women. Therefore, when all types of employment are combined, one observes a positive relationship.

**Table 5.1. Female participation rate in paid employment**

Asset group	% of women (15 + years aged) participating in		
	Salaried employment	Daily casual employment	All paid employment
No asset, no land	4.0	14.8	18.8
Non-land asset, but no land	9.0	5.9	14.9
Land .01 to .49 acres	2.7	3.8	6.5
Land .50 to .99 acres	1.6	1.6	3.2
Land 1.00 to 2.49 acres	1.6	1.2	2.8
Land 2.50 to 4.99 acres	1.8	0.6	2.4
Land 5.00 + acres	2.5	1.1	3.6

Source: Estimated from LFS 2010 data.

**Table 5.2. Female participation rate in self or family employment**

Asset group	% of women participating in		
	Self-employment	Unpaid family employment	Self + unpaid family employment
No asset, no land	6.9	9.2	15.1
Non-land asset, but no land	5.3	13.4	18.7
Land .01 to .49 acres	6.3	14.7	21.1
Land .50 to .99 acres	10.3	23.8	34.1
Land 1.00 to 2.49 acres	12.6	28.0	40.6
Land 2.50 to 4.99 acres	12.7	26.8	39.5
Land 5.00 + acres	10.5	25.1	35.6

Source: Estimated from LFS 2010 data

## 5.4 Education and Female LFP

Participation of educated women in the labour force is expected to depend on both supply and demand side factors. The prevailing hypotheses related to variation of female labour force participation in developing countries emphasize the positive role of education. Education will result in a change of an individual's attitude. In addition, an educated society will have a more liberal view about women's employment. Female education raises their employability in enterprises using modern technology and this will lead to a rise in the level of salary/wage. Higher earnings prospect, in turn, will result in greater acceptability of women's work. However, a variety of structural and social factors may interact on the demand side and the impact of education on female LFPR may not be observed directly.

Creation of paid employment for school educated women will depend on the demand side and for that matter on the pace of growth of the modern sectors. The quality of education can also be important when the demand side is being considered. Employers will be enthusiastic about employing educated women only if they are certain about higher productivity of such workers. If girls (and boys) with more years education do not possess a significantly higher level of learning than primary educated ones, employers will prefer the latter because the better educated usually expect a higher salary.

Therefore, a few years of secondary education may have adverse impact on the prospects of employment because of quality factors, both actual and perceived.

When the share of educated labour force rises, enterprises are likely to be able to make use of such labour if they make an investment in capital intensive sectors that use advanced technology and require educated workers. The uncertain quality of education may discourage such investment and reduce the possibility of employment of girls with secondary education. The share of female labour force without any education has declined in recent years balanced by increases in groups with education above grade six (Table 5.3).

**Table 5.3. Educational attainment of female labour force, 1996 to 2010 (per cent)**

Level of education	2010		2006		1999-2000		1995-1996	
	Male	Female	Male	Female	Male	Female	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No education	39.9	40.6	37.1	50.9	42.1	58.7	44.3	58.8
Class I-V	22.9	22.7	24.1	22.9	25.4	20.4	26.4	19.2
Class VI – X	22.1	25.8	21.5	16.2	18.9	12.3	16.5	11.9
SSC and above	15.1	10.9	17.3	10.0	13.6	8.5	11.8	10.2

Source: BBS, LFS, various rounds.

The net effect can be only seen from empirical results. Data shows that the labour force participation rate of women rises with education almost continuously (Table 5.4). Does it really mean that education has been effective in removing social stigmas against women's employment? It is critical that the data is interpreted cautiously. The reason for caution can be clarified on the basis of the previous discussion on the link between assets and female LFPR.

**Table 5.4. Female participation in paid employment by education level (per cent)**

Education	Salaried	Daily/ casual/ servant, etc.	All types of paid employment
No education	1.3	4.7	6.0
Class I-V	2.4	2.7	5.1
Class VI-IX	4.2	1.7	5.9
Class IX-X	1.8	1.3	3.1
SSC/equivalent	3.8	1.0	4.8
HSC/Degree	10.9	0.7	11.6
Masters/Medical/Engineer	26.2	0.0	26.2
Technical/others	15.4	0.0	15.4
Total	2.7	3.1	5.8

Source: Estimated from LFS 2010 data

In the previous discussion it has been argued that the positive relationship between assets and female LFPR conceals the fact women's participation in paid casual employment is inversely related with asset ownership, while self/family employment is positively related. Female LFPR calculated on the

basis of all types of work shows a positive relationship with assets. Years of schooling have a positive correlation with asset ownership. Access to schooling and its quality is positively associated with economic strength of households. Therefore, the effect of education may also be similar to that of asset. In addition, household's asset base raises the scope of self-employment of women. Thus education's positive association with LFPR may actually reflect an indirect outcome of inequality in access to education. The multivariate analysis will enable us to ascertain the direction of relationship between education and LFPR after controlling for household assets.

**Table 5.5. Female participation in family employment by education (per cent)**

Education	Self employed	Unpaid family worker	Self & unpaid family worker
No education	9.9	14.9	24.8
Class I-V	9.0	22.3	31.3
Class VI-IX	7.7	24.8	32.5
Class IX-X	5.3	24.8	30.1
SSC/equivalent	5.1	21.4	26.5
HSC/Degree	3.4	14.1	17.5
Masters/Medical/Engineer	15.0	0.0	15.0
Technical/others	12.8	38.5	51.3
Total	8.4	19.1	27.5

Source: Estimated from LFS 2010 data.

## 6. Determinants of female labour force participation rates in Bangladesh

For a better understanding of the determinants of female labour force participation, logistic regressions have been estimated on the basis of data from LFS 2010. All individuals aged 15 and above and not currently studying in any educational institutions have been included in the sample. A total of 58,297 females and 57,525 males constitute the sample. The dependent variables in dichotomous forms are as follows:

- Equation 1: labour force participation (LFP) : 1 = participant, 0 = non-participant
- Equation 2: salaried job participation (SJP): 1 = salaried worker, 0 = other women
- Equation 3: casual job participation (CSP): 1 = casual/daily worker, 0 = other women
- Equation 4: self and family employment (SFP): 1 = self & family worker, 0 = other women

The dependent variables have been chosen on the basis of the analytical framework presented in section 5. Main hypotheses have been described below.



## 6.1 Individual, household and location characteristics

Age is a critical variable because young women's participation in the labour force is usually viewed as a positive feature. The influence of age may be non-linear, that is, may decline after some threshold has been reached. A quadratic term for age has, therefore, been included as well. As has been discussed above, education can have an important positive impact on female LFPR. The influence can be in either direction or non-linear, i.e. first declining and then rising. Four dummy variables (no education is base) with different levels of education have been included in the equations. In fact, age and education together can serve as proxy variables for wage. In these equations, wage has not been included as an independent variable because a large majority of the labour force are self-employed or unpaid family workers for whom market wage data is not relevant.

Marital status of women is likely to influence the chances of joining the labour force because marriage reduces her independence to move to a location away from home. It is likely to discourage paid employment, while self/family employment may be less affected. Having children in the family can have a similar discouraging effect. Having children will mean a larger burden of household chores, which is likely to reduce the female labour supply. However, these variables can also have a reverse impact through push factors arising from the higher subsistence needs of the family. Whether a woman is head of household has been included as an independent variable. The presence of a male head may discourage women's labour force participation. Bangladesh society has a strong patriarchal tradition. Therefore, women's labour force participation is expected to be influenced by the head of household's views and attitude. Head of household's education has been included as a proxy for this.

Urban and rural areas are likely to differ in terms of opportunities of employment. While urban areas are likely to offer more opportunities of paid employment, rural areas are likely to have a higher scope of self-employment. Impact on LFPR on the aggregate can be in either direction. A dummy for urban location has been included in the equation. Moreover, when adults migrate from rural to urban areas, they do so after contacts have been established for getting jobs. Thus, higher labour force participation (of both men and women) in urban areas is not only a reflection of supply side but is also due to the interplay of demand factors and the migration process itself.

The regional (defined by administrative divisions) differences may work from both demand and supply side. Some regions are more conservative than others. Conservatism negatively affects women's education and thus lowers their employability. Eastern (Chittagong, Sylhet) Divisions show this feature, which are areas most likely to have lower female LFPRs. Data on female and male LFPR by administrative divisions have been presented in Table 6.1. Dhaka, Khulna and Rajshahi show higher female LFPRs. Dhaka being the centre of industrial growth with the concentration of RMG units obviously generates higher demand for female workers. Similarly, export-oriented shrimp culture generates female labour demand in coastal areas of Khulna Division. The high female LFPR in Rajshahi has been due to two supply side forces – poverty incidence is higher in this region, which acts as a push factor and there are regions where 'Saotal' women participate in all types of employment without social conservatism. Multivariate analysis presented below shows results are mostly in conformity with the above discussion. In the logit regression analysis, dummy variables for six administrative divisions have also been included. Dhaka is the base which is the major growth centre.

As discussed above, poverty can be an important determinant of LFPR. Studies have used expenditure based poverty lines to capture this impact. The LFS of Bangladesh, however, does not ask questions on household income or expenditure. Therefore, a proxy indicator has been used in the present study.

It consists of various levels of asset ownership. Five cut-offs have been chosen: those who do not own any land or non-land asset (base), those who do not own land but possess some non-land asset, small and medium land ownership, larger land ownership. In fact, land and, for that matter, the non-land assets are expected to be exogenous to the system whereas poverty status may be endogenous because female employment in low paid jobs will result in lower expenditure and poverty. The use of asset based dummy is therefore preferred to poverty line based dummy.

**Table 6.1. Male and female LFPR by division, 2010**

Division	LFPR (%)	
	Male	Female
1. Barisal	79.4	32.2
2. Chittagong	79.1	31.0
3. Dhaka	83.0	36.4
4. Khulna	82.5	36.4
5. Rajshahi	84.5	40.4
6. Sylhet	84.7	33.6

Source: LFS 2010.

## 6.2 Results of the logit regression analysis

In the following discussion, results of each equation (listed above) will be discussed; the variables included in the logit regression analysis are presented in Table 6.2. Equation one is usually estimated in female labour supply analysis. Therefore, this will form the base, which the results of the subsequent equations will be compared to. For each equation, the coefficients along with level of significance are being presented (Table 6.3). Some studies decompose the sample into urban-rural and estimate separate equations. For the first equation, separate equations have been estimated for rural and urban areas. The results are, however, very close and, therefore, have not been presented. Moreover, for the purpose of understanding labour force participation, urban-rural disaggregation may not be desirable on the ground that many of the employed women have a part of their family living in the rural areas. As a result, the attitude and social forces may not be markedly different for urban and rural women. Therefore, for all equations, results based on the combined rural-urban sample have been presented (Table 6.3).

Most of the results of the logit regression analysis presented in Table 6.3 are in conformity with a priori expectations. Among personal characteristics, indicators of family responsibility have significant negative coefficients. These variables include: dummy for currently married, number of children aged 5 years or less, number of male dependents above age five. ‘Whether a woman is the head of household’ is significantly positive.

Among human capital variables, age has a non-linear effect, first positive and then negative. Education has a positive impact. Four levels of education, with ‘no education’ as base case, have gradually rising positive coefficients. Education raises productivity and, thereby, raises wage/salary and through its substitution effect, raises female LFPR.

Among the family characteristics, number of male earners has a significant negative coefficient. Family asset has positive influence. Compared to the base case of households ‘with no land or non-land asset’ women in households with own land assets have a significantly higher probability of labour force participation. However, ownership of some land raises the probability of female LFP, but in the highest land ownership group, it is insignificant, which may be due to use of more hired labour and prestige considerations. This is also reflected in the fact that, in households with male-head occupation of ‘agricultural self-employment’, women have a higher probability of labour force participation. Other earning statuses have significant negative coefficients.

**Table 6.2. List of dependent variables in logit equations**

	<b>Variable(s)</b>	<b>Base for dummy variables</b>
AGE	age	
SQAGE	square of age	
MAR_D	Married dummy	Not currently married
NOC5Y	No. of children <5 years in household	
NOME	No. of male earners in household	
NEARNR-N	No. of non-earning males in household	
DIV1_D	Barishal dummy	Division 3 (Dhaka)
DIV2_D	Chittagong dummy	
DIV4_D	Khulna dummy	
DIV5_D	Rajshahi dummy	
DIV6_D	Sylhet dummy	
ASSET_2	No land, other asset	Asset 1 (No land or non-land asset)
ASSET_3	Small land owned	
ASSET_4	Larger land	
URBAN_D	Urban dummy	Rural
EDUC_D2	Education dummy 2 (primary)	No education
EDUC_D3	Education dummy 3 (secondary)	
EDUC_D4	Education dummy 4 (above secondary)	
EDUC_D5	Education dummy 5 (technical)	
HEDUY	Household head education attainment (number of years)	
HSTAT_D2	Household head status dummy 2 (agricultural-wage employment)	HSTAT-D1 (agriculture-self-employed)
HSTAT_D3	Household head status dummy 3 (Non-agriculture self-employment)	
HSTAT_D4	Household head status dummy 4 (non-agriculture, wage employment)	
HSTAT_D5	Household head status dummy 5 (no – earning)	
REL	Whether head of household	Not head of household

**Table 6.3. Determinants of probability of female labour force participation (FP) and male labour force participation (MLP) in Bangladesh: Results of logit regression**

Independent variables	Dep: $\log \frac{FP}{I - FP}$	Dep: $\log \frac{MLP}{I - MLP}$
	Marginal effect	Marginal effect
AGE	.0193 (***)	.0053 (***)
SQAGE	-.0004 (***)	-.0001 (***)
MAR_D	-.1388 (***)	.0295 (***)
NOC5Y	-.0264 (***)	.0019 (**)
NOME	-.0524 (***)	-
NEARN_N	.0296 (***)	-
DIV1_D	-.0513 (***)	-.0125 (***)
DIV2_D	-.0464 (***)	-.0031
DIV4_D	-.0355 (***)	-.0067 (**)
DIV5_D	-.0083	-.0077 (***)
DIV6_D	-.0280 (***)	.0011
ASSET_2	.0055	-.0026
ASSET_3	.0285 (***)	-.0022
ASSET_4	-.0511	-.0255 (*)
URBAN_D	.0740 (***)	.0007
REL	.3945 (***)	.0581 (***)
EDUC_D2	.0231 (***)	.0141 (***)
EDUC_D3	.0755 (***)	.0215 (***)
EDUC_D4	.0954 (***)	.0171 (***)
EDUC_D5	.2491 (***)	.0264 (***)
HEDUY	-.0043 (***)	-.0031 (***)
HSTAT_D2	-.0714 (***)	-.0074 (***)
HSTAT_D3	-.3427 (***)	-.0031
HSTAT_D4	-.3751 (***)	-.0231 (***)
HSTAT_D5	-.4282 (***)	-.2780 (***)
Pseudo R Square	.30	.36
-2 Log likelihood	53895.80	23246.28
N	58297	57525

Note: (\*\*\*), (\*\*), (\*): The coefficients are significant at .00, .05 and .10 probability level.  
Source: Estimated from LFS 2010 data.

The length of education of the male head of household has a significant and negative influence on participation, possibly reflecting social status impact. Employment status of the male head (agricultural self-employment as base) has significant negative coefficients. The coefficient on the dummy for the head being a non-earner is particularly large. This is because of two factors: first, such heads of households are from older cohorts (both men and women inactive) and second, head remain non-earner imply that they receive asset income and, therefore, women do not work. Region dummies

show that all Divisions have significant negative coefficients, where Dhaka Division is the base case. Women in Dhaka have a higher probability of participation because of a demand factor associated with faster pace of growth of female labour intensive sub-sectors.

A comparison of the 'male LFPR' equation with that of the female equation shows a few differences, which can help with better understanding of the determinants of female LFPR. The major difference is that the dummy for currently married and the number of children under age five have significant positive coefficients in the male equation. This is very much in contrast with the female LFPR equation. This simply reflects the fact that, in this patriarchal society, men are the bread earners and women take up the care responsibilities. The urban dummy has an insignificant coefficient in the male equation, in contrast to the female LFPR equation.

The results of equations of female LFPR based on alternative formulations with each of different status of female employment as dependent variables have been presented in Table 6.4. It can be observed that the equation on self/family employment participation resembles closely with the total employment equation. Therefore, only the equations on salaried and paid casual employment are being discussed. In these equations, the negative influence of the presence of children is much stronger. In the equation on casual/daily employment, the influences of education and family asset ownership are (in most groups, based on asset or education level) negative and significant. The reverse is true for salaried and self/family employment.

An important policy relevant question in this context is whether one observes an income effect (negative) in the labour force participation equation, and especially the income effect of education. On aggregate, female LFP has been positively associated with higher levels of education. This is the case for self-family employment as well as for salaried employment. Although it means more chances that educated women participate in the labour force, the fact remains that only a small share of the female labour force is educated and only a small share of educated women is in salaried jobs, thus highlighting the need for job creation for educated women. Similarly, asset ownership (reflecting other sources of income and/or productivity of female labour) is not associated with negative income effect.

The female LFP equations have given negative coefficients of 'the number of male earners in the household'. Does it imply a negative income effect of male earnings? It is not possible to be certain because this variable may work through another route: more male earners implies more household chores, cooking and care activities, which discourage female LFP. There is an inclination to accept this interpretation, especially in view of the absence of an income effect as discussed above. The negative association of female LFP with being married and having more children in the family have important policy implications that will be discussed in the concluding section.

**Table 6.4. Determinants of probability of female participation in casual (CP), salaried (SP) and self/family employment (SFP): results of logit regression**

Independent variable	Dependent variable		
	Dep: $\log \frac{SFP}{I - SFP}$	Dep: $\log \frac{CP}{I - CP}$	Dep: $\log \frac{SP}{I - SP}$
	Marginal effect	Marginal effect	Marginal effect
AGE	.0170 (***)	-0.0000	.0006 (***)
SQAGE	-0.0002 (***)	-0.0001	-0.0000 (***)
MAR_D	.0335 (***)	-0.0075 (***)	-.0157 (***)
NOC5Y	-0.0062 (***)	-0.0029 (***)	-.0038 (***)
NOME	-0.0213 (***)	-0.0023 (***)	-0.0020 (***)
NEARN_N	.0064 (***)	.0016 (**)	-.0006
DIV1_D	-0.0007	-0.0058 (***)	-0.0052 (***)
DIV2_D	-0.0073 (*)	-0.0021 (**)	-.0027 (***)
DIV4_D	-0.0034	.0009	-.0084 (***)
DIV5_D	.0078 (**)	.0039 (***)	-.0056 (***)
DIV6_D	-0.0120 (***)	.0016	-.0043 (***)
ASSET_2	.0255 (****)	-0.0058 (***)	-.0011
ASSET_3	.0149 (***)	-0.0005	.0034 (***)
ASSET_4	.0049	-0.0073	-.0076 (**)
URBAN_D	.0044	.0076 (***)	.0114 (***)
REL	.1914 (***)	.0444 (***)	.0122 (***)
EDUC_D2	.0139 (***)	-0.0013	.0065 (***)
EDUC_D3	.0348 (***)	-0.0030 (***)	.0153 (***)
EDUC_D4	.0274 (***)	-0.0001	.0277 (***)
EDUC_D5	-0.0210 (***)	-0.0044 (*)	.1319 (***)
HEDUY	.0008 (**)	-0.0009 (***)	-.0005 (***)
HSTAT_D2	-0.0398 (***)	.0049 (***)	.0022 (*)
HSTAT_D3	-.1766 (***)	.0447 (***)	.0093 (***)
HSTAT_D4	-.2302 (***)	.0276 (***)	.0226 (***)
HSTAT_D5	-.2211 (***)	-0.0046 (***)	.0016
Pseudo R Square	.60	.19	.21
-2 Log likelihood	38902.89	10914.55	11738.79
N	58297	58297	58297

Note: (\*\*\*), (\*\*), (\*): The coefficients are significant at .00, .05 and .10 probability level.

Source: Estimated from LFS 2010 data.

## **7. Factors behind female labour force participation: qualitative findings**

The empirical analysis of the previous sections has been based mostly on LFS data. To supplement these findings, discussions have been conducted with key stakeholders. Data analysis and discussions have demonstrated the role of demand and supply side constraints and barriers to the acceleration of women's employment, especially paid employment. The section presents some qualitative observations, which can supplement the results based on quantitative data of the earlier chapters. These observations are based on a focused group discussion (FGD) session with a group of female workers of the RMG sector and meetings with an RMG unit owner and trade union leaders. The discussions with the workers and the employer centred on only RMG sector employment. This was deliberately done because this sector is expected to continue to generate the largest number of regular jobs for women, at least in the near future. The discussion with trade union leaders, of course, covered a wider range of issues. In addition, brief discussions were conducted with a few employers, which have been used to reconfirm or supplement the views obtained from the detailed discussions listed above.

### **7.1 Why young women participate in the labour force: Comments of RMG workers**

To obtain the views of currently employed women on the factors that have driven them to such employment, discussions were held with a group of employees of an RMG unit. These women are employed in the lowest paid category known as helpers. None of them has any school education. They are in the age range of 18 to 22 years. One woman lives with her husband and a child aged six years. Others are either unmarried or not living with their husband. The response to a direct question on why they have taken up this job was that they were in desperate need to do some earning. The woman living with her husband was the only exception who thought that they can live a slightly more comfortable life if both of them can earn. Recently her husband met with an accident and now she is again the only earner in the family. The unmarried RMG workers migrated from rural areas either with their mothers or other members of extended family.

The inputs from these women workers reveal some of the push factors behind their decision to take up such employment. In particular, many of these women did not have a father or other male-earning members in the family; thus, they had no other option. Some probing was done about the possibility of taking up employment in their home village. All of them thought that there was no suitable employment within the village or in the district town. Even if there is some work of crop processing etc., wages are low, often half of RMG workers' minimum wages or even less. Some of the workers have small children and they emphasized that arranging child care is difficult. Two women reported that they have made arrangements with neighbours on monthly payment basis. However, the quality of such care is rather poor. They also viewed the high cost of housing, which takes a large share of their monthly earning, as a serious problem. Moreover, low-cost housing facilities are disappearing as land is being developed by real estate agents.

## 7.2 Views of trade union leaders

Discussion with trade union leaders helped to throw light on a number of issues related to constraints and drivers of female employment. Supply side constraints of the workers were considered as the most important factors. In this context, two aspects were highlighted: problems arising from women's domestic responsibilities, and the lack of amenities and services required to facilitate women's participation in paid employment. The constraint arising from the burden of domestic chores and child care responsibility holds in general for all societies. In the context of Bangladesh, it becomes a binding constraint due to lack of formal child care facilities. The fact that many women still take up low paid employment has been attributed to some extent to their lack of other means of survival. It may be mentioned that the negative impact of child care responsibility on women's probability of labour force participation has also been borne out by the logit regressions reported in the previous section. Workers from the RMG sector also highlighted this point in the FGD session.

In addition, discussion took place on wide ranging issues related to the creation of more job demand, both in the private sector and in the government. In terms of the government's role, a point came up that often goes unnoticed. There is a provision of a quota for women in government jobs. Often demand is made to raise this quota while the existing provision is not usually implemented in practice. In the discussion, the point emerged that poor working conditions, harassment and assault at the workplace discourage women to take up paid employment. Overall insecurity, especially on the way to or return from work, adds to the negative forces. Government's role in ensuring security can, therefore, be critical for encouraging women to work away from home. In this context, it was mentioned that a variety of sub-contracting arrangements, through which women can make a living, can be useful. Such systems, though not widespread, have been found to be rising in importance. Moreover, women's employment may expand if industrial units are established in district towns and not concentrated only in the large cities. In this regard, the discussion centred on the problems of industrial growth in district towns. Inadequate or frequently disrupted power supply was pinpointed as a major constraint. Such constraint was also viewed as an impediment to women's self-employment.

## 7.3 Scope of women's employment: employers' views

In the discussion with employers, the following questions were posed:

- i) Which age group of women is preferred by employers?
- ii) Which average education level is required/preferred for RMG employment?
- iii) What are the prospects of paying higher wages and providing better working conditions?

It is well known that RMG employment consists mainly of young women. Most of the female workers in RMG are less than 30 years old. An employer tries not to employ anyone above the age of 35 years. When women reach this age, it is believed that productivity falls. They make more mistakes, produces defective pieces. On these grounds they are discouraged in various ways and, ultimately, they leave the job.

In the discussion, the entrepreneur, talking about his factory and also in general, expressed the opinion that RMG producing units do not require educated workers. Education up to primary level is sufficient for such employment. Workers require on the job training for a few days rather than more schooling. Moreover, it was stated that a longer period of schooling raises the expected salary level and makes them more alert to labour rights. Discussions with employers from other formal sectors (e.g. banking) highlighted that there is ample scope of employment of educated women in these



sectors and those already employed perform well in their jobs. In these sectors, it is believed that young women educated above SSC can be trained in computer skills and can seek employment in IT service sector, which, in turn, increases women's employment.

The above view has been corroborated through conversations with two other RMG sector employers. When asked about how the situation compares with other RMG exporting countries the fact emerged that, in countries like Vietnam, the RMG employees' wage and education levels are higher. They can afford this because they are compliant factories and, therefore, receive higher product prices from buyers. The discussion moved to the issues of wages and working conditions. This entrepreneur aims to become compliant within a few years. Within Bangladesh, the compliant factories can pay higher wage compared to non-compliant factories (because the former get higher prices for their products). The major constraints to becoming a 'compliant' factory are temporary financial problems and lack of adequate space. Rent is high and additional renting of premises at the same location may not be possible. The employer also talked about the pressure of pay rises in the RMG sector. Instances have been quoted (from other employer's experiences) where workers pressed their demands for timely wage payment in innovative and peaceful ways. Therefore, RMG employers must be prepared to pay higher wages in the near future. In fact, the pressure for wage increase may not continue beyond some level because higher wages will attract more women to this sector. This may further raise female LFPR in the coming years.

## **8. The policy perspective**

Given the observed increase in the participation of women in the labour force and their employment in Bangladesh, it is crucial to reflect on what policies have contributed to this outcome and what can be done to improve the policy environment further for a more rapid increase in the quality of employment in terms of productivity, wages and earnings as well as conditions of work. This section reviews a range of policies and strategies.

### **8.1 Policies and strategies being pursued**

The analysis of factors influencing the growth of women's employment showed that there have been positive developments on the demand side as well as the supply side. It would be useful to see if policies have helped those developments. First, on the demand side, employment of women grew faster during periods of high growth of the economy as a whole and of the agricultural sector. Likewise, within the manufacturing sector, growth of the RMG industry has also been associated with the growth of women's employment. So, in a general way, it can be said that policies that contributed to economic growth, and the growth of agriculture and the RMG industry, also played a positive role in promoting the employment of women. It needs to be noted, however, policies to boost the growth of agriculture and the RMG industry are not adopted with the express purpose of promoting women's employment. Hence, in order to understand what policies may have made a direct contribution to boosting women's employment, it would be necessary to look at the policy environment specifically related to this.

To begin with, it may be noted that the constitution of Bangladesh provides for equal rights for all citizens irrespective of gender. Article 28 of the Constitution states: "women shall have equal rights

with men in all spheres of state and public life”. Various Plan and other policy documents of the government outline measures aimed at promoting women’s rights. The second PRSP (which is called the National Strategy for Accelerated Poverty Reduction II (NSAPR II)) mentions this very clearly, states the goals in this respect explicitly, and provides a detailed schematic presentation of the strategic goals to be pursued and the policy changes envisaged for achieving them. Mention should also be made of the National Policy for Women’s Advancement (NPWA) that was adopted in 2008 and updated in 2011. The goals enumerated in this Policy include demand side issues like promoting gender sensitive growth, enhancing women’s participation in mainstream economic activities, and advocacy and campaigns, to supply side measures that include eliminating discrimination against women, creation of opportunities for education and skills, development of capacity through health and nutrition care, promoting an enabling environment at work places, and protection of women from the adverse effects of climate change and environmental degradation.

The policy changes envisaged to attain the goal of ensuring women’s increasing participation in mainstream economic activities include policy instruments like increasing the share expenditure on women development in total public expenditure, greater access to credit and *khas* land, improved participation in various sectors including manufacturing, banking, services, and physical infrastructure, measures to promote SMEs, and implementation of women’s quota in jobs in various sectors.

One element in the policy environment that has made a very significant contribution to promoting women’s employment has been the provision of access to microcredit. While microcredit has been pioneered in Bangladesh by NGOs like BRAC and the Grameen Bank, the government has played a positive role in this regard by not only creating an enabling environment for the operation of a large number of such programmes but also by introducing and running microcredit programmes through a number of its ministries. As women constitute an overwhelming majority of the borrowers, these programmes have made a significant contribution to the promotion of women’s employment and their participation in economic activities.

Building women’s capacity is envisaged to be achieved through education, training, and access to health services. In this regard, mention may be made of various measures including girl students’ stipend programmes at primary, secondary and higher secondary levels that was implemented to increase the enrolment of girls. This measure has been implemented by successive governments and has yielded rich dividends in terms of achieving better gender balance in enrolment at various levels. Gender parity has been achieved in enrolment at the primary and secondary levels. Results of public examinations show that there is no significant difference between girl and boy students.

For skill development, three polytechnics have been established specifically for girl students. Training courses specifically for women are being organized (by both government and private organizations) in the areas of livestock, poultry, handicrafts, and ICT. Training for promoting entrepreneurship amongst women is being organized by various government ministries/agencies like the Bangladesh Small and Cottage Industries Corporation and the SME Foundation. The central bank of the country created a Small Enterprise Fund from which 10 per cent has been reserved for women. The Ministry of Expatriate Welfare and Overseas Employment has specific strategies to promote employment opportunities abroad for women.

There are programmes aimed at providing food security to poor women, some of which also help promote employment for them. Programmes in this category include both unconditional and

conditional food transfer programmes where food is distributed directly to beneficiaries. The former include vulnerable group feeding (VGF) programme for destitute women while the latter include vulnerable group development (VGD) fund under which food is distributed to destitute rural women on condition of participation in skill development programmes. Allocation under VGF was increased substantially in 2008-09 in response to the adverse effect of the global economic crisis (Table 8.1). The number of women covered by this programme was raised substantially in 2008-09 (to 7.29 million) compared to 2007-08 (4.48 million). The number of women covered by VGD (that includes skill development for future income generating activities) also increased from 600,000 in 2006-07 to 750,000 in 2009-10.

**Table 8.1. Food allocation and number of persons covered by VGD and VGF programmes**

Year	Allocation for VGF (tons)	Number of beneficiaries under VGF (mill)	Allocation for VGD (tons)	Number of beneficiaries under VGD (mill)
2006-07	250,000	3.57	200,000	0.60
2007-08	314,000	4.48	200,000	0.60
2008-09	510,000	7.29	260,000	0.75
2009-10	550,000	7.86	262,000	0.75

*Note: VGF = vulnerable group feeding; VGD = vulnerable group development*  
*Source: Ministry of Food and Disaster Management, Government of Bangladesh.*

## 8.2 Accelerating the growth of women's employment: the way forward

The above discussion shows that, with regard to the promotion of women's employment, a positive policy environment prevails in the country and that significant progress has been made during the past decades. And yet, the rate of female participation in the labour force in Bangladesh remains rather low, much lower than in some countries of East and South East Asia. It can be observed that even after reasonably respectable growth of per capita incomes since the 1990s, the industry and occupational segregation has not changed substantially. Except the RMG industry, no other manufacturing industry employs women in significant numbers. In the urban areas, educated women are increasingly moving into service sectors like finance, telecommunication, etc. But it cannot yet be said that the industry and occupational segregation has been dismantled. Further progress in the area of women's employment and participation in the labour force would depend critically on how the various challenges in this regard are addressed. While some of these challenges are of a social nature (e.g., violence against women, social pressure for early marriage, unfriendly social environment in the pursuit of education, etc.), the present discussion will focus more on challenges directly related to employment.

Barriers to women's entry into the labour force can arise from several directions: (i) access to productive inputs/assets (e.g., credit, land, etc.), (ii) demands on women's time arising from sources other than income generating activities (e.g., child care, household work, etc.), (iii) failure of markets and institutions, and (iv) social norms and environment. As for access to productive assets and inputs, women's access to microcredit is perhaps the single most important factor that has contributed to not only their access to income generating activities but also to their empowerment. However, the time has come to think of ways of "graduation" from minuscule economic activities yielding similar returns/incomes to larger scale and more productive enterprises. Perhaps the SME Foundation and the Bangladesh Bank can play a role in this regard. The impact of the latter's Small Enterprise Fund on

women entrepreneurship could be looked at and, based on an assessment, the case for augmenting the ten per cent quota reserved for women may be reviewed. Lessons arising from private initiatives to promote women's entrepreneurship (e.g., by MIDAS) may be examined for purposes of possible replication on a larger scale.

Regression results indicate that household assets, especially land, have a positive impact on women's labour force participation. For poorer households with very little or no land, the programme of distributing government's land (known as *khas* land) can be a useful source of building an asset base. It would, therefore, be useful to look at the effectiveness of this programme and the extent to which poor women are benefiting from it. Also important would be to look at the legal framework governing women's rights regarding land ownership and their ability to use it for purposes of mortgages.

Education and skill training are essential for developing human capital, which, in turn, plays a critical role in enhancing one's ability to get access to good jobs. Without education and skills that are relevant for and needed by the labour market, it would not be possible for anyone – men or women – to benefit from employment that may be created. And it has been seen from the econometric analysis carried out in the present study that education plays an important (positive) role in determining women's participation in the labour market. Although for some manufacturing industries like RMG, the level of education required is not very high at present, it would be important to expand the supply base of potential workers for the industry by expanding primary education. Moreover, the experience of countries (like China, Malaysia, Thailand, Vietnam, etc.) indicates that if the industry were to graduate to higher level products, it may require workers with higher and better education than is required by the RMG industry in Bangladesh at its current level. Moreover, if the export-oriented manufacturing undergoes diversification into other products (e.g., electronics), it will require workers with higher levels of education and create more demand for female labour. And if women were to benefit from jobs created in such potentially new industries, their level of education also has to improve.

With regard to women's participation in education, the experience of Bangladesh demonstrates that if adequate opportunities (e.g. stipends and other facilities) are provided, girl children do not remain behind boys. Building on this experience, further efforts need to be made to raise the level of education among women and give them access to technical and professional education and training. Given the success achieved by the girl stipend programme, there seems to be a strong case for extending the current programme to the undergraduate level. However, care needs to be taken to see that such a programme does not lead to the supply of graduates who are not employable. The stipend programme may be designed in such a way that women would be encouraged to undergo the type of education and training for which there are potential markets.

In a society like that of Bangladesh, women's time is usually allocated to a host of activities like child care and household chores and, to that extent, their participation in economic activities is constrained. This is corroborated by the empirical evidence presented in this study (in terms of negative effect of the number of children). Effective measures need to be taken to find alternative ways of handling child care and other household chores, and reducing time input that women need to provide to such work so that their time may be released for economic activities. In this regard, the adequacy and effectiveness of existing programmes and facilities may be examined and action taken accordingly. Parental benefits like maternity and paternity leave may also play an important role in encouraging women to participate and remain in the labour force. While some progress has been made in this area as well, much remains to be done, especially in the private sector.

Coming to the possibility of a market failure<sup>24</sup>, the question to be addressed is whether women have the same access to the markets for products and inputs and information about such markets as their male counterparts. It is possible that women entrepreneurs are at a disadvantage in that respect – either facing inadequate information or having to depend on male members of the household for marketing their products. If this is the situation, female headed households may be particularly disadvantaged.

As for institutions, it would be useful to see whether women benefit equally from the existing institutions that provide services and training, e.g., extension services and training relating to agriculture and cottage industries. Laws and regulations relating to labour may also put women at a disadvantage. For example, women are required to obtain special permission in order to go abroad for jobs.

Barriers to women's employment may arise from the existing social environment and norms. The importance of the attitudinal factor is perhaps indicated by the negative effect of the number of male earners in the family on women's labour force participation. While this may be regarded as a reflection of a substitution effect between male and female labour, the possibility of men being regarded as bread earners and women being relegated to household work when there are male earners in the household cannot be ruled out. Another reflection of the attitudinal factor is the unfriendly environment faced by girls in their pursuit of education. Such an environment may make it difficult for them to benefit fully from the stipend programme designed to facilitate their education. Likewise, if the social pressure for early marriage continues, even a stipend programme may not be adequate for achieving the desired goal. It may be remembered that the regression results reported in the present study show a negative impact of marriage on women's participation in the labour force. Hence, attention needs to be provided on all relevant fronts, taking into account possible interactions between barriers of different types.

### **8.3 Summary and conclusions**

Although the received literature on the trend in women's employment hypothesizes a U-shaped relationship between economic growth and women's employment implying a decline in female labour force participation rate during the early stage of growth, the evidence from Bangladesh does not support this hypothesis. In fact, there has been an increase in FLFPR alongside the acceleration in economic growth since the 1990s. Also, there has been no decline in female labour 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 labour intensive export-oriented industries.

An analysis of the relationship between economic growth and employment indicates that, while the elasticity of overall employment growth with respect to output growth has declined somewhat during the second half of the 2000s (compared to the first half of the decade), it rose substantially for women. Thus, economic growth appears to have been more conducive to the growth of female employment. In contrast, output elasticity of male employment declined substantially.

---

<sup>24</sup> For a detailed analysis of the implications of the failure of markets and institutions, see World Bank (2011).

As for the relationship between female employment and the sectoral pattern of growth, the growth of agriculture (especially of poultry and livestock) appears to have been associated with an increase in the former. This is not surprising in view of the rapid expansion of micro finance in rural areas and the support to poultry and livestock provided by such programmes.

In the urban areas, growth of the readymade garment industry has provided a major impetus to the growth of female employment. Although the share of women in total employment in the industry has declined over time, nearly two-thirds of the employment in the industry is still accounted for by women. And given the bright prospects of the industry, it should remain a major source of female employment in the country. However, the economy of Bangladesh as a whole and women's employment in urban areas seem to be too dependent on a single industry as other sectors that are growing are either too small or not employing women in large numbers. Moreover, issues relating to the level of and gender differential in wages, and other aspects of compliance with labour standards, e.g., working hours, safety and health in the work place, freedom of association and collective bargaining remain.

### **Changes in female LFPR and structure of female employment**

During the last fifteen years (1996 to 2010) the female labour market in Bangladesh has gone through many positive changes. Women's labour force participation rate has increased from 16 per cent in 1996 to 24 per cent in 2000 and to 36 per cent in 2010. The rise of female LFPR has been associated with an acceleration of GDP growth during this period. But it must be kept in mind that the rise of female employment and LFPR has been associated with the high growth of the number of self-employed and unpaid female family worker in livestock and poultry raising, which has been at least partly due to better enumeration.

Female LFPR has increased among young age groups while male LFPR has declined among youth. Employment growth in the RMG industry has at least partially contributed to the rise of LFPR of young women. The share of educated women in the labour force has slightly increased during 2000 to 2010. Changes in the sectoral distribution of female labour force show that the share of female labour force employed in agriculture increased from 27.8 per cent to 64.8 per cent during 1996 to 2010. The size of female employment has grown in all the major sectors, the average annual growth rate during 2006 to 2010 was 9.6 and 12.0 per cent in manufacturing and community/personal services, respectively. The share of employed women in unpaid family work increased from 34.1 per cent in 2000 to 56.3 per cent in 2010. The share of employed women in regular employment declined from 20.3 per cent in 2000 and 8.9 per cent in 2010.

### **Determinants of women's labour force participation**

The findings common to a number of earlier studies on determinants of female LFPR in Bangladesh have shown that:

- Poverty and lack of asset raises their participation in paid employment. Being in the role of head of household also raises female LFPR.
- Having a small child, more assets and husband's education reduces the probability of female employment and specifically paid employment.

- A priori reasoning also suggests that poverty and women's employment, especially participation in paid employment, is likely to be interlinked. Education and family asset are expected to raise women's participation in family or salaried employment. These hypotheses have been borne out by multivariate analysis of the present study. The major findings are:
- Women's participation in self-employment is positively influenced by education and asset. It is negatively influenced by having a small child and the number of male earners.
- Women's participation in casual jobs is positively associated with the lack of assets and negatively associated with the presence of a small child, being married, the number of male earners, and education. Women's participation in salaried employment shows similar impact of all variables except education which becomes positive.

Despite the positive changes in the female labour market, glaring gender difference in wage and salary has been observed. Women's wage was only 66% of male wage in 2006 and increased to 84% in 2010. Male-female difference is higher in the case of salary. Women's average salary was 54% of male salary in 2010.

### **Summary of policy experiences and the way forward**

Policies that helped the acceleration of overall economic growth since the 1990s and growth of specific sectors like agriculture and the readymade garment industry were not adopted with the specific goal of increasing women's employment. Having stated this, it needs to be mentioned that the overall policy environment defined by the constitutional guarantee of equal rights for women and various policies enumerated in important policy instruments like development plans in Bangladesh is conducive to women's employment. In addition, there are policies aimed specifically at promoting an increase in the participation of women in mainstream economic activities. They include an increase in the share of expenditure on women development in total public expenditure, greater access to credit and *khas* (i.e., government-owned) land, measures to promote SMEs, and implementation of women's quota in jobs in various sectors.

One element in the policy environment that has made a very significant contribution to promoting women's employment is access to microcredit. While this has been pioneered by NGOs, the government has also played a positive role in this regard by creating an enabling environment for its expansion as well as by running microcredit programmes through a number of its ministries. As women constitute an overwhelming majority of the borrowers, these programmes have made a significant contribution towards promoting women's employment.

The government has also adopted and implemented a number of programmes aimed at enhancing women's capacity through education and skill development. The girl students' stipend programme up to higher secondary level has played a major role in attaining better gender balance in enrolment at various levels. Setting up of polytechnics for girl students is an important step towards enhancing women's skills. Training programmes run by various government ministries and NGOs, programmes of providing access to credit, programmes aimed at food security and skill development of poor women are some other examples of the government's efforts at improving the capacity of women.

The policy environment outlined above has, no doubt, played an important role in raising women's participation in economic activities. And yet, the overall rate of female participation in the labour force remains well below those attained by several countries of South-east and East Asia. The present study has identified a number of barriers to women's participation in mainstream economic activities.

They are grouped into: (i) access to productive inputs/assets; (ii) demands on women's time arising from their role in household work and child care; (iii) failures of markets and institutions in ensuring equality of treatment; and (iv) social norms and environment that stand in the way of women's participation in economic activities. Empirical analysis carried out in the present study indicates that further progress is needed in the areas of women's access to education and skill training, productive assets like land and credit beyond microcredit, and services of various government institutions. Improvement is also needed in the social norms and environment that often act as barriers to women's employment.



## References

- Ahmed, S.; Mitra, P. 2010. "Gender Wage Discrimination in Rural and Urban Labour Markets of Bangladesh", *Oxford Development Studies*, Vol. 38, No. 1.
- Amin, S. 2005. "Selective inclusion or active discrimination? Women and Labour Market in Bangladesh", Chapter 12, *Emerging Issues in Bangladesh Economy: A Review of Bangladesh's Development 2005-06*, Dhaka.
- Bangladesh Bureau of Statistics (BBS). (various years) *Statistical Pocketbook of Bangladesh* (Dhaka, Government of Bangladesh).
- Bangladesh Bureau of Statistics (BBS). (various years) *Labour Force Survey Report*, Bangladesh Bureau of Statistics (Dhaka, Government of Bangladesh).
- Bangladesh Bureau of Statistics (BBS). (various years) *Statistical Yearbook of Bangladesh*, (Dhaka, Government of Bangladesh).
- Betcherman, G.; Islam, R. (eds) 2001. *East Asian Labour Markets and the Economic Crisis: Impact, Responses and Lessons*. (Washington, D.C., World Bank and the ILO).
- Boserup, E. 1970. *Women's Role in Economic Development* (New York, St. Martin's Press).
- Boserup, E. 1990. "Economic Change and the Roles of Women", in Tinker, I. (ed.) *Persistent Inequalities, Women and World Development* (New York, Oxford University Press).
- Bridges, S; Lawson, D; Begum, S. 2011. "Labour Market Outcomes in Bangladesh: The Role of Poverty and Gender Norms", *European Journal of Development Research*, Vol. 23, [www.palgrave-journals.com/ejdr](http://www.palgrave-journals.com/ejdr).
- Choe, Y-B.; Lo, F-C. (eds) 1986. *Rural Industrialisation and Non-Farm Activities of Asian Farmers*, pp. 73-98 (Seoul and Kuala Lumpur, Korea Rural Economics Institute and Asian and Pacific Development Centre).
- Chowdhury, S. 2011. "Employment in India: What does the latest data show?", *Economic and Political Weekly*, Vol. XLVI, No. 32.
- International Labour Organization (ILO) and Asian Development Bank (ADB). 2011. *Women and Labour Markets in Asia. Rebalancing for Gender Equality* (Geneva, ILO).
- Islam, R. 1987. *Rural Industrialisation and Employment in Asia* (New Delhi, ILO-ARTEP).
- Islam, R. 2006a. "The Nexus of Economic Growth, Employment and Poverty Reduction: An Empirical Analysis" in Islam (2006b).
- Islam, R. (ed.) 2006b. *Fighting Poverty: The Development-Employment Link* (Boulder and London, Lynn Rienner).
- Islam, R. 2009. "What Kind of Economic Growth is Bangladesh Attaining?" in Shahabuddin, Q.; Rahman, R.I. (eds) 2009. *Development Experience and Emerging Challenges Bangladesh* (Dhaka, BIDS and UPL).
- Islam, R. 2011. "The Employment Challenge in Developing Countries during Economic Downturn and Recovery", in Islam, I.; Verick, S. (eds) 2011. *From the Great Recession to Labour Market Recovery: Issues, Evidence and Policy* (London and Geneva, Palgrave Macmillan and ILO).
- Islam, R. 2012. "The Nature and Magnitude of the Employment Challenge Faced by Bangladesh". Paper prepared for the Bangladesh Institute of Development Studies, Dhaka.
- Jaim, W.M.H.; Hossain, M. 2009. "Women's Participation in Agriculture in Bangladesh: Changes and Determinants", [bracresearch.org/publications](http://bracresearch.org/publications)

- Kabeer N.; Mahmud, S. 2004. "Rags, Riches and Women Workers: Export-oriented Garment Manufacturing in Bangladesh" in Commonwealth Secretariat (ed.) 2004. *Chains of Fortune: Linking Women Producers and Workers with Global Markets* (London, Commonwealth Secretariat).
- Kabeer, N. 2001. *Bangladeshi Women Workers and Labour Market Decisions: The Power to Choose* (Dhaka, UPL).
- Kapsos, S. 2008. "The Gender Wage Gap in Bangladesh", *ILO Asia-Pacific Working Paper Series* (Bangkok, ILO).
- Kabeer, N. 2012. "Economic Empowerment and Inclusive Growth: Labour Markets and Enterprise Development", Centre for Development Policy and Research, Discussion Paper 29.
- Khandker, N. 2002. "Impact of Globalization on Gender: The Bangladesh Perspective" in *Bangladesh Facing the Challenges of Globalization: A Review of Bangladesh's Development* (Dhaka, CPD and UPL).
- Khandker, S. 1987. "Labour Market Participation of Married Women in Bangladesh", *Review of Economics and Statistics*, Vol. LXIX, No. 3.
- Khandker, S. 1988. "Determinants of Women's Time Allocation in Rural Bangladesh", *Economic Development and Cultural Change*, Vol. 37, No. 1
- Klasen, S.; Pieters, J. 2012. "Push or Pull? Drivers of Female Labour Force Participation during India's Economic Boom", Institute of Labour Studies (IZA), Discussion Paper No. 6395.
- Lee, E. (ed.) 1981. *Export-led Industrialization and Development* (Bangkok, ILO-ARTEP).
- Lewis, W.A. 1954. "Economic Development with Unlimited Supplies of Labour", *Manchester School*, Vol. 22.
- Lopez-Acevedo, G.; Robertson, R. (eds) 2012. *Sewing Success? Employment, Wages, and Poverty following the End of the Multi-fibre Arrangement* (Washington, DC, The World Bank).
- Ministry of Finance. (various years) *Bangladesh Economic Review* (Dhaka, Government of Bangladesh).
- Mahmud, S.; Tasneem, S. 2011. "Under Reporting of Women's Economic Activity in Bangladesh", BDI Working Paper, No. 01.
- Mahmud, S. 2003. "Is Bangladesh Experiencing a Feminization of the Labour Force?", *The Bangladesh Development Studies*, Vol. XXIX, Nos. 1 & 2, March-June 2003.
- Majumder, P. P.; Begum, A. 2000. "The Gender Imbalances in the Export Oriented Garment Industry in Bangladesh", Policy Research on Gender and Development, Working Paper Series No. 12 June 2000 (Washington DC, The World Bank).
- Majumdar, P.P.; Begum, A. 2006. *Engendering Garment Industry: The Bangladesh Context* (Dhaka, UPL).
- Majumdar, P.P.; Zohir, S.C. 1994. "Dynamics of Wage Employment: A Case of Employment in the Garment Industry", *The Bangladesh Development Studies: Special Issue on Women, Development and Change*, Edited by Sajeda Amin, Vol. XXII, Nos. 2 & 3, June-September 1994.
- McKinsey & Company. 2011. *Bangladesh's Ready-made Garments Landscape: The Challenge of Growth* (Frankfurt, McKinsey & Company).
- Microcredit Regulatory Authority (MRA). "Microcredit in Bangladesh", available at: <http://www.mra.gov.bd/>.

- Psacharopoulos, G., Tzannatos, Z. 1989. "Female Labor Force Participation: An International Perspective", *World Bank Research Observer*, Vol. 4, No. 2, pp.187-201.
- Psacharopoulos, G., Tzannatos, Z. 1991. "Female Labor Force Participation and Education", in Psacharopoulos, G. (ed.) *Essays on Poverty, Equity and Growth* (Oxford, Pergamon Press).
- Rahman, M.M. (undated) "Trade Liberalization and Gender Gap: Bangladesh Experience", University of Southern Queensland, Australia.
- Rahman, R.I. 1996. "Determinants of the Gender Composition of Employment in Manufacturing Enterprises, The Bangladesh Development Studies, Vol. XXIV, Nos. 1 & 2, March-June 1996.
- Rahman, R. I. 2005. "The dynamics of the labour market and employment in Bangladesh: A focus on gender dimensions", *ILO Employment Strategy Papers*, 2005/13, ILO, Geneva.
- Rahman, R.I. 2006. "Gender and Labour Market: Trends and determinants", Working paper for The World Bank, Dhaka.
- Rahman, R. I. 2011. *Bangladesher Arthaneeti O Unnayan: Swadhinatar Por 40 Bachhar* (in Bengali) (Dhaka, UPL).
- Rahman, R. I.; Mondal A.H.; Iqbal, Z. 2011. "Employment and the Labour Market: Recent Changes and Policy Options for Bangladesh", Paper prepared for the Planning Commission, Government of Bangladesh, Dhaka.
- Ranis, G.; Fei, J. 1961. "A Theory of Economic Development", *American Economic Review*, Vol. 51.
- Schultz, T.P. 1990. "Women's Changing Participation in the Labor Force: A World Perspective", *Economic Development and Cultural Change*, Vol. 38, pp. 457-488.
- Shand, R.T. (ed.) 1986. *Off-Farm Employment in the Development of Rural Asia* (Canberra, National Centre for Development Studies, Australian National University).
- Todaro, M.P.; Smith, S.C. 2006. *Economic Development* (Ninth Edition) (London/New York, Pearson-Adison Wesley).
- Todaro, M. P. 1969. "A Model of Labour Migration and Urban Unemployment in Less Developed Countries", *American Economic Review*, Vol. 59.
- World Bank. 2011. *World Development Report 2012: Gender Equality and Development* (Washington DC, The World Bank).
- Yunus, M.; Yamagata, T. 2012. "The Garment Industry of Bangladesh" in Fukunishi, T. (ed.) 2012. *Dynamics of the Garment Industry in Low-Income Countries: Experience of Asia and Africa* (Tokyo, IDE-JETRO).





## **Female labour force participation in Bangladesh: trends, drivers and barriers**

In contrast to the stylized implications of the U-shaped hypothesis, there has been an increase in female labour force participation in Bangladesh, alongside the acceleration in economic growth since the 1990s. In this regard, Bangladesh has witnessed a substantial increase in female employment in labour-intensive export-oriented industries in urban areas. The study also finds that the rapid expansion of micro-finance in rural areas has supported women's employment. However, the economy in general and women's employment in urban areas in particular seem to be too dependent on a single industry. Moreover, issues relating to the level of and gender differential in wages, and other aspects of compliance with labour standards remain. Empirical analysis carried out in the present study indicate that further progress is needed in improving women's access to education and skill training, productive assets like land and credit beyond microcredit, and services of various government institutions. Improvement is also needed in the social norms and environment that often act as barriers to women's employment.

ILO DWT for South Asia and Country Office for India

India Habitat Centre, Core 4B, 3rd Floor  
Lodhi road, New Delhi-110 003  
India

Tel.: +91 11 4750 9200, Fax: +91 11 2460 2111  
Email: [delhi@ilo.org](mailto:delhi@ilo.org)

[www.ilo.org/india](http://www.ilo.org/india)

**DECENT WORK**

A better world starts here.

ISSN: 2227-4391 (print)  
2227-4405 (web pdf)