

The Under Reporting of Women's Economic Activity in Bangladesh: An Examination of Official Statistics

Simeen Mahmud
Sakiba Tasneem

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Acronyms

ASO	Assistant Statistical Officer
BBS	Bangladesh Bureau of statistics
DHS	Demographic and Health Survey
FHH	Female headed households
ILO	International Labour Organization
JSA	Junior Statistical Assistant
LFPR	Labor force participation rate
LFS	Labor Force Survey
MENA	Middle East and North Africa
PSU	Primary sampling unit
SA	Statistical Assistants
SI	Statistical Investigator

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Abstract

In Bangladesh women are engaged in a variety of economic activities ranging from homestead based expenditure saving activities to outside paid work. However, women's work always remains under reported, especially women's non-market homestead based economic activities. Under reporting is particularly critical in the case of official statistics. The types of work women are involved in are often overlooked by women themselves. Non recognition of women's economic activity not only leads to undervaluation of women's economic contribution but also contributes to their lower status in society relative to men. This paper intends to explore why official statistics fail to enumerate the entirety of women's economic activity in Bangladesh. To do this, we used different definitions of economic activity (work) used by the Bangladesh Bureau of Statistics (BBS) to estimate women's LFPR for women aged 15 and above in 69 villages of eight districts of Bangladesh.

The study finds that the female LFPR ranges between 4% and 16 % in the eight districts when economic activity is defined in the narrowest sense, i.e. outside paid work in last 12 months. These rates become considerably higher (increases by 3-16 folds) if market work inside the home is taken into account along with the paid work. If we further extend our definition to include women's expenditure saving activities in last 12 months, the rates rise further ranging from 55% to 82% in the eight districts. The paper argues that widely held beliefs regarding women's work contribute to the under reporting of women's economic activity by official statistics, in addition to data collection constraints in the field like inadequate time and work burden of investigators.

1. Introduction

The under reporting of women's work in official statistics has been a longstanding problem in Bangladesh. The official definition of work or economic activity, the term preferred by the Bangladesh Bureau of Statistics (BBS), is based on the ILO definition (page 5), and is actually quite inclusive. Despite the broad based definition, however, the manner in which such statistics are routinely collected is not conducive to an adequate enumeration of women's work, especially women's self employment, seasonal or part time work or work that takes place within the home in the family farm or enterprise. Comparison of estimates of women's labor force participation rates derived from sample survey data with official rates suggests that a large proportion of women who engage in economic activities of various kinds are designated as 'housewives' in the official labor force, i.e. persons who do not make economic contributions to the family and society. Even women themselves often fail to identify some of their work as economic activity. Given their generally lower social position vis-à-vis men, non recognition as a worker carries greater consequences for women, especially poor women, in terms of their own self esteem, the value accorded by the family and community and even in terms of their identity as citizens of Bangladesh. Hence, it is important to understand the reasons why official statistics fail to enumerate them as workers and there is a strong case for taking extra caution to capture the true extent of women's economic activity.

In Bangladesh 'work' is commonly understood as an activity that produces goods and/or services having a market value, and by extension as generally the activity of adult males. A serious implication of this perception of work is that although women engage in a variety of economic activities ranging from home based expenditure saving activities to outside paid activities, much of it is not socially valued as 'work'. The values and beliefs of ordinary people who make up society "act on the state and market and are in turn acted upon by them in complex ways and at different levels" (Beteille pp 176 as cited in Kabeer 2008a). It is not surprising, therefore, that this social perception of 'work' affects the definition of economic activity used by state agencies like the Bureau of Statistics. For instance, not only of women's unpaid care work (reproductive and household maintenance activity), but even women's unpaid work in the family farm or enterprise tends to become invisible in official statistics.

This paper explores how and why official statistics fail to enumerate the entirety of women's economic activity in Bangladesh. To do this we estimate female labor force participation rates (LFPR) using a number of different definitions of economic activity, including the BBS definition, and compare how the rate varies depending upon what activities are excluded/included. Before turning to these estimates, however, we present in Section 2 a brief description of the trends in women's labor force participation in Bangladesh and the rationale for investing in better enumeration of women's economic activity. This is followed by the methodology (Section 3), findings (Section 4) and discussion and conclusions (Section 5).

2. Trends in women's labor force participation

Bangladesh is experiencing a more rapidly growing female labor force compared to the growth of the male labor force¹. It is interesting to note that the non recognition of large numbers of women workers in official statistics is taking place even as women are entering the labor force at a faster pace than men, particularly during the last decade. LFPRs for women increased from 16% to 26% between 1996 and 2003, while they remained unchanged around 87% for men.

The real situation of who are officially recognized as economically active persons in Bangladesh can be seen from the information presented in Tables 1 and 2. It is found that out of every four workers in the official labor force only one worker is a woman, and that the participation rate of women in economic activity is 30% compared to 87% for men.

Table 1. Numbers of economically active persons officially enumerated by sex, selected years (in million)

	1999-2000	2002-03	2005-06
Bangladesh	40.7	46.3	49.5
Men	32.2	36.0	37.3
Women	8.6	10.3	12.1
Urban areas	9.2	11.3	11.7
Men	7.1	8.6	8.9
Women	2.2	2.7	2.8
Rural areas	31.5	35.0	37.8
Men	25.1	27.4	28.5
Women	6.4	7.6	9.3

Source. Labor Force Survey Report 2005-06, Bangladesh Bureau of Statistics

¹ The size of the female labor force more than doubled from 5.4 million in 1995 to 12.1 million in 2005-06, while the male labor force grew from 30.7 to 37.3 million in this period.

Table 2. Official labor force participation rates by sex, selected years

	1999-2000	2002-03	2005-06	2009-2010
Bangladesh				
Men	84.0	87.4	86.8	87.2
Women	23.9	26.1	29.2	31.5
Rural areas				
Men	84.0	88.1	88.0	87.9
Women	23.1	25.6	29.8	30.2

Source. Labor Force Survey Report 2005-06, Bangladesh Bureau of Statistics

2.1 Real rise or better enumeration

The increasing rate of participation of women in the labor force has generated some debate as to the reasons behind it that also bears upon the recognition of women as workers and economic contributors. One explanation is that since the increase in women's labor force participation is dominated by the increase in women's unpaid family work, the rise in women's LFPR is really better enumeration: interviewers are responding to criticism about the inability of labor force statistics to enumerate women's work adequately. In other words, this is a "non trend and merely a reflection of the corrected record of women's actual contribution through the domestic economy" (Amin 2005). That is in the past these women were doing the same work but were not included in the official labor force, but now they are. In other words, the rise in women's LFPR has been small, as measured by the small increase in the percentage of women engaged in paid non family work².

This explanation is not supported by other trends in the labor market. First, the proportion of unpaid male workers among employed males has increased between 2000 and 2003 from 6% to 10%, particularly for younger men, and second there has been a rise in self employment for men. In this case the explanation of better enumeration rather than employment expansion cannot be supported since there has been a corresponding expansion in the number of rural non farm enterprises during this period as well (Shilpi 2005). It is quite plausible that at least a part of the workers, both women and younger men, recorded as unpaid workers in the official labor force are in fact newly employed workers in these family enterprises. Third, the greatest expansion of women's employment in this period has been in the health and social services sector (29% rise compared to an average of 8% for all sectors, LFS 2002-03 report, pp48).

² Amin (2005) estimated that the percentage of women in paid non family work rose from 6.5% in 1995-96, to 10.5% in 1999-2000 and 10.9% in 2001-2003.

In addition, the 2004 Demographic and Health Survey (DHS) estimated the participation rate of married women in cash work (paid work) as 28% in urban areas and 23% in rural areas (BDHS 2004), very similar to the BBS LFPRs for 2003 of 26% in urban areas and 27% in rural areas, which included the category of unpaid work (LFS 2002-03). In the DHS, paid work is defined as jobs for which women are paid in cash or kind, or sell things, or have a small business, or work on the family farm and in the family business. Apparently, what is happening is that activity that is recorded as cash work in the DHS is recorded as unpaid family work in the labor force survey. So labor contributions by women in the family enterprise, although it is income earning, is recorded as unpaid work in official statistics.

Hence, the more plausible explanation about the rise in female LFPR is that this is indeed a real trend: there has been an increase in women's participation in the labor force, mainly through rising employment in family farm or enterprise, but this work is recorded as unpaid work in official statistics. In fact, the percentage of women in unpaid family work reported by the BBS labor force surveys in various years has risen tremendously from 18% in 1995-96, to 34% in 1999-2000, and to 48% in 2001-03. Generally, unpaid work is also not valued since this is seen as 'helping' out rather than as economic contribution, particularly in the case of women, and therefore does not lead to recognition as a worker.

2.2 The rationale for better enumeration

The official definition of work or economic activity in Bangladesh is based upon the ILO definition of economic activity:

a person aged 15 years and above, who was either working one or more hours for pay or profit or working without pay in a family farm or enterprise or organization during the reference period (week preceding the interview date) or found not working but had a job or business from which he/she was temporarily absent during the reference period.

The official LF also includes persons who are unemployed during the reference period but are actively looking for work. This definition is followed by the BBS to identify persons who belong to the 'labor force' i.e. are economically active persons or workers. Hence, ideally this definition should not in principle exclude women workers from the labor force.

As Kabeer (2008b) points out “countries which combined highly corporate organization of family and kinship relations³ with strict controls over women’s mobility in the public domain generally reported lower levels of female labor force participation than the rest of the world and hence high levels of female dependency on male breadwinners and guardians, ... largely found in a belt of countries stretching from Middle East and North Africa (MENA region) and the northern plains of the South Asian subcontinent, including Pakistan and Bangladesh”.

In these societies, including in Bangladesh, there are strict perceptions about the division of labor by sex: men contribute productive labor while women contribute reproductive and care labor. Women’s paid work outside the home is usually acknowledged as economic activity (but not always socially valued if this involves manual waged labor by women) and can even lead to some empowering outcomes (decision making in the household, mobility in the public sphere, control over own income). However, unpaid income earning or expenditure saving work within the home, as distinct from unpaid reproductive and care work, which constitutes the bulk of the work for the majority of women, is not seen as economic activity, even by women and family members themselves. It is not surprising, such perceptions influence how work is measured by official data collection processes despite the fairly inclusive definition employed.

In such societies, recognition as a worker who contributes to the household and community economies has transformative implications for women’s lives. The extent to which work might help to transform the life options available to women - including the extent and terms on which they undertake unpaid care work, depends upon how society and state values this work and accords recognition. Apart from the transformative potential at the individual and family spheres, the recognition of women’s work, especially unpaid economic work, at the public or official sphere is the essential first step to claim the rights/freedoms that the constitution guarantees all workers, which includes rights in the workplace (terms and conditions of work, freedom from discrimination, freedom of association, etc) and beyond (maternity leave, child care, social protection, housing, health insurance).

³ Patriarchal family organization with the following hierarchy: male head or patriarch, adult male family members, adult female family members, children.

3. Methodology

In this paper we want to make alternative estimates of the extent of women’s economic activity in rural areas of Bangladesh using the official labor force definition of work or economic activity, and calculate a range of labor force participation rates based on an increasingly broader definition of economic activity. To do this we conducted a census (complete enumeration) of women aged 15 and above in a number of villages located in eight districts of Bangladesh: Tangail, Comilla, Faridpur, Chapainawabganj, Moulvibazar, Bagerhat, Kurigram and Narayanganj (see map in Annex 1). Besides the usual questions on household characteristics and information on all family members, all women aged 15 years or more were asked about their participation in economic activities during the past week (preceding the interview date) and the past 12 months.

3.1 Sampling

The districts were purposively chosen for the reasons listed in Table 3. For the three districts, Tangail, Comilla, and Faridpur, villages were chosen as the sites of previous research, but for the remaining five districts, the villages (and successive administrative units like upazila or subdistrict and union) were chosen randomly (see figure in Annex 2). Two upazilas were selected randomly for each of the five districts, Bagerhat, Chapainawabganj, Narayanganj, Kurigram, Moulvibazar. Three unions were selected randomly for each of the upazilas; 2 villages were selected randomly from each union. Thus, for each of these five districts, 12 villages were selected randomly. Thus, we carried out our census in 69 villages, of them 60 were selected randomly and 9 were chosen purposively. The response rate was high: 94 % of the women in the sample villages were directly interviewed, while 6 % were not available for interview mainly due to social visit.

Table 3. Study areas and sampling

	Upazila	Number of upazilas	Number of unions	Number of villages
Tangail	Modhupur	1	1	4
Comilla	Chandina	1	1	4
Faridpur	Faridpur sadar	1	1	1
Moulvibazar	Srimangal	2	3+3=6	12
	Rajnagar			
Bagerhat	Bagerhat sadar	2	3+3=6	12
	Rampal			
Chapainawabganj	Chapai sadar	2	3+3=6	12
	Shibganj			
Narayanganj	Narayanganj sadar	2	3+3=6	12
	Araihazar			
Kurigram	Rajarhaat	2	3+3=6	12
	Ulipur			

A total of 50 enumerators were employed to do the field work. They were divided into 13 teams, each team comprised of three or four members, one of the members had the additional responsibility of a team leader. Each team was responsible for one upazila. The enumerators cross checked each others' filled out questionnaires. Then Field Team Leader checked all of the questionnaires that are completed in the field. Besides, four people were engaged as supervisors. By observing and cross checking some work in the field, their main responsibility was to ensure whether the teams were working efficiently and effectively. To ensure whether the data was being collected accurately, key researchers involved with the study also visited the field during the survey. All the team members, team leaders and supervisors were trained extensively by the key researchers. One Deputy Director of BBS in charge of the implementation of the Labor Force Survey was also invited to conduct a part of the training regarding definition of economic activity and identification of economically active persons.

3.2 Respondents' Profile

It is important to examine whether our sample is similar to the national sample from which the official labor force statistics are collected. For this purpose we compare the distribution of our study population (all women aged 15 years and above) with the national sample for the 2005-06 LFS with respect to age, marital status and education level of the respondent, presented in Tables 4, 5 and 6 respectively.

Table 4. Distribution of women 15+ by age group (% of all women)

Districts	Number	Age group		
		15-29	30-64	65+
Faridpur	1,250	42.9	49.9	7.2
Comilla	3,194	42.9	48.5	8.6
Tangail	3,379	45.5	48.6	5.9
Chapainawabganj	6,972	40.6	53.9	5.5
Moulovibazar	2,919	44.0	48.4	7.6
Bagerhat	4,735	41.3	50.9	7.8
Kurigram	6,073	40.7	51.9	7.5
Narayanganj	6,972	49.4	45.6	5.0
All areas	35,494	43.5	49.9	6.6
LFS (2005-06)	3,11,88,000	40.8	53.2	6.0

Table 5. Distribution of women 15+ by marital status (% of all women)

Districts	Unmarried	Married	Widowed	Divorced	Separated	Total
Faridpur	14.7	70.5	12.6	0.6	1.5	1,250
Comilla	11.5	74.7	12.5	0.8	0.5	3,194
Tangail	5.6	81.2	10.3	1.2	1.7	3,379
Chapainawabganj	8.3	79.5	9.4	1.5	1.3	6,972
Moulovibazar	21.2	64.5	12.4	1.1	0.8	2,919
Bagerhat	10.6	74.1	12.6	0.8	1.9	4,735
Kurigram	7.3	76.7	13.8	1.0	1.3	6,073
Narayanganj	13.8	74.0	10.4	0.6	1.2	6,972
All areas	10.8	75.4	11.5	1.01	1.3	35,494
LFS (2005-06)	10.8	75.9	11.9	0.8	0.5	3,11,88,000

Tables 4 and 5 show that the two samples are more or less similar with respect to age and marital status. However, our sample respondents seem to be slightly younger on average, especially the sample from Narayanganj. It is interesting to note that there is wide regional variation in the proportion unmarried, with Moulovibazar showing the twice the proportion of unmarried women than the average of 11% for the entire sample.

Table 6 compares the education level of women who are in the labor force. We find that our sample has a relatively lower proportion of women with no education (no formal schooling) and somewhat higher proportion with primary and secondary level education compared to the national sample for the 2005-06 LFS.

Table 6. Distribution of women 15+ in labor force by education level

Districts	No education	Class 1-5	Class 6-8	Class 9-10	SSC/ equivalent	HSC/ equivalent	degree above	Number of women
Faridpur	39.0	24.6	16.0	9.6	6.3	2.2	2.5	688
Comilla	46.8	29.4	14.2	5.4	3.2	0.8	0.3	2,596
Modhupur	53.2	31.8	9.0	3.9	1.3	0.4	0.4	2,734
Chapai-nawabganj	48.6	26.5	15.6	5.7	2.6	0.6	0.4	5,556
Moulovibazar	37.0	37.5	13.0	8.8	2.4	0.7	0.6	2,030
Bagerhat	29.2	36.8	19.8	9.1	3.6	0.9	0.6	3,329
Kurigram	55.2	21.9	13.0	5.3	3.3	0.7	0.6	4,956
Narayanganj	41.8	31.2	14.3	7.5	2.7	1.3	1.3	4,020
All areas	45.5	29.3	14.4	6.5	2.9	0.8	0.7	25,909
LFS (2005-06)	54.3	23.3	10.7	5.4	3.6	1.4	1.1	92,85,000

4. Findings

In our study we used the same definition (page 5) as the BBS LFS 2005-06 to identify an 'economically active person', i.e. a person belonging to the labor force. This definition excludes full time students, beggars, disabled persons and other persons who did not work for pay or profit at least one hour during the reference week (last 7 days preceding the interview day). In addition, we asked our respondents whether they were engaged in any type of economic activity in last 12 months preceding the day of survey, to cover any activity that may have been overlooked because it had not been performed in the last 7 days (the labor force reference period). To match the definition of BBS, we included students and beggars in the category of "not in any economic activity", although we found that a significant proportion of students were involved in economic activity. On the other hand, since we did not ask respondents whether they were unemployed or looking for a job, some "unemployed" women have also been included in the category of "inactive", though BBS definition considered them as economically active. This should not affect the estimates of LFPR based on the 12 month reference period too much since the number of temporary unemployed persons during a whole year will be relatively small, especially compared to the 7 day reference period.

We record women as participating in the labor force on the basis of two questions. The first has a reference period of 7 days preceding the survey: In the last week, were you involved in any economic activity for *at least an hour* for pay/household earnings/profit increment or own consumption or use? (LFS 2005/06). The second has a longer reference period of 12 months: In the last 12 months, were you involved in any economic activity as a salaried employee/unpaid family worker for contribution to family earnings/increment in profits/own consumption and use? On the basis of the first labor force question we found that of a total population of 35,494 women aged 15 years or more 11,615 women or 33% were reported "not in any economic activity" i.e. outside the labor force. On the basis of the second labor force question 9,585 or 27% were found not in the labor force.

4.1 Distribution of women by occupation and work category

We examine the types of activities or occupations of women in the labor force in the study population based upon the labor force question with the longer reference period and a follow up question: In the last 12 months, mainly what economic activity were you involved in? Types of economic activity were then grouped into a number of broad occupations, and Table 7 presents the distribution of women in the labor force by occupation group. Not unexpectedly, participation in own agricultural activity was by far the most common occupation involving from 50% to 86% of economically active women in our study population. The next most common occupation was small business/trade (on average 8%), followed by non agricultural wage labor, subsistence activity and formal service. Agricultural wage labor, informal service and skilled worker were the least common occupations.

However, the wide variation in occupational distribution by district should be noted. Some districts have women workers more concentrated in own agricultural activity (Comilla, Tangail, Chapainawabganj, Bagerhat and Kurigram), while in Narayanganj and Faridpur there is more diversity of occupation for women. In two districts (Comilla and Moulovibazar) subsistence activity is relatively important, could be related to greater conservatism regarding women's mobility outside the home.

Table 7. Distribution of women in labor force by main occupation (%)

Districts	Agri-culture own	Agri-culture labor	Non agri-culture labor/factory	Sub-sistence activity	Small business/trade/handi-craft	In-formal service	Formal service	Skilled worker
Faridpur	68.2	0.3	7.0	0.0	13.2	1.7	9.6	0.0
Comilla	80.3	0.1	2.0	11.8	4.2	0.4	1.2	0.0
Tangail	85.9	1.0	4.5	1.7	4.8	0.8	1.1	0.2
Chapai-nawabganj	86.0	0.1	1.8	1.6	9.1	0.3	1.1	0.0
Moulovi-bazar	73.1	0.5	5.8	13.7	2.9	0.6	3.3	0.1
Bagerhat	81.4	0.8	4.4	1.6	9.3	0.6	1.8	0.1
Kurigram	79.4	2.6	11.7	2.4	2.8	0.3	0.9	0.0
Narayanganj	50.3	0.1	12.9	0.8	18.6	3.3	9.6	4.3
All areas	76.5	0.8	6.5	3.6	8.1	0.9	2.9	0.7

Based on the information of the types of activity women engaged in we also categorized economic activity into three broad groups with respect to place of work (outside or inside the home) and income earning or expenditure saving. It is our belief that LFPRs will vary depending upon how broadly or how narrowly economic activity is defined. The categories of work are as follows:

- *Outside Paid Work (OPW)*: Income earning work done outside the household premises of the respondents, for example, agriculture day labor, garments worker, domestic servants etc.
- *Market inside (MI)*: Income earning work done inside the household premise of the respondents, for example, livestock and poultry rearing, work on family shop or trade, quilt sewing.
- *Expenditure saving (ES)*: Work done for saving expenditure or for own consumption, for example, cow and goat rearing for own consumption, poultry for own consumption, kitchen garden for own consumption etc.

We found that the most common types of outside paid work were: domestic service (27%), formal service in the public sector or NGO job (15%) and factory work (14%). Cow or goat rearing (45%) and poultry raising (39%) were the most common types of market work inside the home (MI) work. These are also the common occupation for women engaged in expenditure saving economic activity.

Table 8 gives the distribution of the study population by work or economic activity category, including the category of “not in any economic activity”. We find that women are far less likely to be engaged in outside paid work compared to participation in other types of economic activity. On average, 10% of women are doing outside paid work, nearly half (48%) are doing market work inside the home and 15% are doing expenditure saving work inside the home. The proportion of women doing OPW was highest for Narayanganj (16%) and lowest for Comilla (4%), probably reflecting varying opportunities for and acceptability of women’s outside paid work (Comilla has a relatively conservative society, while Narayanganj is semi urban area and location of many garment factories). A relatively large proportion of women across regions (28%- 60%) engaged in inside market work, the highest proportion in Kurigram (60%) and lowest in Narayanganj (28%), where a fairly large proportion of women was also found not in any economic activity (42%). The proportion of women not in any economic activity was similarly large in Faridpur (45%), while this proportion was lowest for Kurigram (18%), where poverty level is relatively higher and opportunity cost of being idle is also higher.

Table 8. Distribution of women 15+ by work category (%)

Districts	Economic activity			Not in economic activity	Total number of respondents
	Outside paid work	Market inside work	Expenditure saving work		
Faridpur	13.2	39.0	2.9	45.0	1,250
Comilla	3.8	59.4	18.1	18.7	3,194
Tangail	11.7	50.2	19.0	19.1	3,379
Chapai-nawabganj	4.2	59.7	15.8	20.3	6,972
Moulvibazar	8.6	28.7	32.2	30.5	2,919
Bagerhat	8.9	48.6	12.8	29.7	4,735
Kurigram	14.0	60.0	7.6	18.4	6,073
Narayanganj	16.2	28.0	13.5	42.3	6,972
All areas	10.2	47.8	14.9	27.0	35,494

4.2 Socio demographic differences by type of economic activity

It is expected that women in the different work categories will vary by their socio demographic characteristics. We look specifically at differences with respect to age, household headship (Table 9) and years of formal schooling (Table 10).

On average mean age of women does not vary according to work category. However, there are differences within districts. For example, in Narayanganj and Faridpur women doing outside paid work were found to be younger than the women involved in other economic activities. On the other hand, it was the reverse in Kurigram, Tangail and Chapainawabganj. No difference in mean age by district was observed for MI and ES work categories.

Table 9. Mean age of women and percent of female household head according to work category and district

Districts	Economic activity						Not in economic activity		All women	
	OPW		MI		ES		Mean age	FHH (%)	Mean age	FHH (%)
Faridpur	34	19.4	36	4.1	37	5.6	37	7.8	36	7.8
Comilla	35	32.8	35	13.1	36	15.4	40	21.4	36	15.8
Tangail	38	26.9	34	6.0	34	4.7	36	11.9	35	9.3
Chapai-nawabganj	37	36.4	35	7.7	35	12.3	36	13.7	35	10.8
Moulvibazar	34	24.2	34	12.2	35	9.9	37	14.3	35	13.1
Bagerhat	37	24.2	35	4.4	37	3.0	38	9.8	36	7.6
Kurigram	40	29.1	35	6.3	36	2.8	38	14.5	37	10.8
Narayanganj	29	27.7	34	18.0	37	20.5	34	16.7	33	19.4
All areas	35	27.8	35	8.7	36	10.8	36	14.2	35	12.4

In general, a relatively larger proportion of women doing outside paid work belonged to female headed households (FHH) compared to women in other work categories. Female headship was least common for women engaged in inside market work. The second highest proportion of FHH was found for women “not in economic activity” category. One possible explanation could be that this group contains older widowed women and (also beggars) who are often designated as heads of their son’s households. There were visible differences by district. In Faridpur women in outside paid work were less likely than average (19%) to be in a FHH while in Chapainawabganj this proportion was the highest (36%). In Comilla the highest proportions of women not doing any economic activity and women engaged in ES work belonged to FHH compared to the other districts. In Narayanganj female headship was relatively higher than average for women doing MI work and ES work.

Table 10. Mean years of schooling according to work category by district

Districts	Economic activity			Not in economic activity	All women
	Outside paid work	Market inside work	Expenditure saving work		
Faridpur	4.9	4.0	5.6	5.5	4.8
Comilla	3.5	2.9	3.5	4.1	3.2
Tangail	1.7	2.6	2.7	3.5	2.7
Chapainawabganj	3.2	2.9	3.4	4.2	3.3
Moulvibazar	3.4	3.7	3.8	4.9	4.1
Bagerhat	3.9	4.3	4.7	4.9	4.5
Kurigram	1.4	3.0	4.1	4.3	3.1
Narayanganj	3.8	3.4	3.5	5.2	4.2
All areas	3.0	3.2	3.6	4.7	3.6

It is interesting to note that mean years of schooling was on average highest for women not doing any economic activity, followed by women doing only ES work, reflecting possibly the familiar relationship between socio economic status of the household and women's participation in income earning work and the labor force. Again, large variations by district are seen. Women belonging to all work categories had higher levels of formal education in Faridpur compared to other districts. The opposite was seen for women in Tangail, and to some extent women in Kurigram.

4.3 Female labor force participation rates

In this section we present estimates of the labor force participation rate (LFPR) based upon our census data from the 69 villages. LFPR or economic participation rate is calculated as the number of the economically active population (labor force) divided by the number of people in the population aged 15 years and over expressed in percentage. In estimating the LFPR BBS included women engaged in all the categories of economic activities (OPW, MI, ES) within the 7 day reference period. The national rural female LFPR calculated by the BBS was 29.8% in 2005-06 (LFS 2005-06). In our study population, out of a total of 35,494 women aged 15 years or more in the 96 villages 25,909 were doing some type of economic activity during the preceding 12 months yielding a LFPR of 73%. Based upon the reference period of 7 days the number of women doing some type of economic activity was found to be less at 23879 with a LFPR of 67%. Both these estimates, as we shall see below, were much higher than the official BBS female LFPR for 2005-06.

The various estimates of the female LFPR for the study population are presented in Table 11 by district, including the BBS estimate for 2005-6 (column 1). Column

2 shows the LFPR following the BBS definition exactly and column 3 shows the LFPR1 using all three work categories during the longer 12 month reference period. The next two estimates show LFPRs (for the 12 month reference period) using increasingly narrower definitions of economic activity: for LFPR2 in column 4 economic activity is defined as outside paid work and inside market work only; for LFPR3 in column 5 economic activity is defined as only outside paid work.

Table 11. Labor force participation rates according to various definitions and reference periods by district and BBS (%)

	BBS LFPR* 2005-06	Study LFPR*	Study LFPR1	Study LFPR2	Study LFPR3
	1	2	3	4	5
Faridpur	21	52	55	52	13
Comilla	34	78	81	63	4
Modhupur	19	76	81	62	12
Chapainawabganj	22	69	80	64	4
Moulvibazar	39	62	70	37	9
Bagerhat	33	68	70	58	9
Kurigram	10	80	82	74	14
Narayanganj	9	51	58	44	16
All area	30**	67	73	58	10

Note. *= OPW+MI+ES reference period last 7 days; **=national rural BBS female LFPR for 2005-06; LFPR1= OPW+MI+ES ref per 12months; LFPR2= OPW+MI ref per 12months; LFPR3= OPW ref per 12months

On average, we found that all our LFPR estimates, except LFPR3 which used the most restrictive definition of economic activity, were considerably higher than the BBS LFPR by nearly 2-8 folds. Using the exact same definition we estimated a rate of economic participation of 67% compared to the BBS national rate for rural areas of 30%. Using the same definition of economic activity but increasing the reference period from 7 days to 12 months yielded the slightly higher rate of 73%, indicating that a shorter reference period excluded some women from the labor force. Excluding ES activities from the definition of economic activity reduced the LFPR visibly to 58%, and using the narrowest definition of outside paid work as economic activity, i.e. excluding also market work inside the home, rendered the LFPR as low as 10%.

The estimates of LFPR are found to vary a great deal by district, reflecting the regional variation in the kinds of work available to women. The BBS LFPR ranged from a low of 9% in Narayanganj to a high of 39% in Moulvibazar, but the district pattern was not always the same in our study population. In our study population LFPR using the exact BBS definition was highest in Kurigram, while the lowest was

also in Narayanganj. Extending the reference period increased the LFPR relatively more in Chapainawabganj, Moulovibazar and Narayanganj and relatively less in Faridpur, Comilla, Bagerhat and Kurigram, indicating that seasonal or part time work (that were likely to be missed in the 7 day reference period) was possibly relatively more common in the former districts.

Moving to the LFPRs based on more restrictive definitions of economic activity, we find that by excluding ES work LFPR declined considerably for all districts but most visibly in Moulovibazar and least in Faridpur. With the narrowest definition of economic activity (only OPW) LFPR declined the most for Comilla, Chapainawabganj, Moulovibazar and Bagerhat. These changes all indicate the hugely different patterns of women's economic activity in the various regions of the country, often reflecting both economic opportunity structure and the social cultural structures of women's subordination.

The district variations were presented as an illustration to show the challenges of capturing women's economic activity. In any region the enumeration of economically active women depended upon the definition of economic activity used since there was wide variation in the economic opportunity structure for women. In those regions where expenditure saving work and/or seasonal work was more common, the gap in official and our survey LFPR was the greatest. Thus, enumeration of women's economic activity must also be aware of the nature of labor market activities for women in that area, which can be much more variable than the nature of men's economic activity.

5. Discussion and Conclusions

Since we tried to replicate the BBS definition and data collection methods as far as possible, we were intrigued but not surprised that our estimates of female labor force participation rate in rural areas were much higher compared to the official rate provided by the BBS. It must be remembered that although our estimates are for rural areas within particular districts and we cannot estimate a national figure for rural areas that is strictly comparable with the BBS national LFPR for rural areas, the study population size was large enough to yield robust estimates. We tried to understand the source of these large differences, and had discussions with the BBS Director who had trained our interviewers on administering the BBS labor force question in the field and some of the BBS enumerators who had conducted the interviews. These discussions revealed several significant ways in which the concepts and methods used by us and by the BBS differed, that we thought were responsible for the large difference in labor force participation estimates.

First, there was a gap between the formal ILO definition of economic activity and how economic activity was actually perceived even by the professional staff in the Labor Force Survey Wing of the BBS. We discovered that the BBS Director had an interpretation of economic activity that was 'adapted' to the socio economic reality of Bangladesh, causing women's economic activity, especially if performed inside the home, to be under or unrecorded by BBS enumerators:

- The official ILO definition of work was re interpreted by the BBS Staff following closely the social perception of work, as performed by a full time adult male worker. Thus, market work inside the home was not seen as economic activity if this was not pursued on a commercial basis. In the same way although the ILO definition of economic activity stipulated that it should be performed for at least for *one hour* in the last 7 days prior to the survey, market work that was not done for a 'sufficient number of hours per day' and on a 'regular basis' in the last week was not included. We realized that although the language of the ILO definition was used, BBS interviewers were trained to identify economic activity on the basis of this 'adapted' concept of work. However, there were no standard guidelines regarding how many hours was considered 'sufficient number of hours per day' or what frequency was considered a 'regular basis', giving rise to tremendous enumeration

error. Thus, much of women's economic activities like poultry and livestock rearing, homestead gardening, and similar activities that were for own consumption and/or sold infrequently were not considered economic activity.

- Economic activities performed inside the home that were difficult to categorize neatly into conventional labor force occupations, employment status and type of industry were also discouraged from enumeration as these would complicate the tabulations for the Labor Force Survey Report. These activities were primarily those undertaken by women for own consumption and for occasional sale, such as cow and goat rearing, chicken rearing, homestead gardening, craft making and so on.

Second, the method of conducting the interviews by the BBS enumerators was significantly different from the method in our survey. These are discussed below:

- Junior Statistical Assistant (JSA), Statistical Investigators (SI) and Statistical Assistants (SA) conducted the BBS labor force survey interviews. Each enumerator had the responsibility of 3 or 4 primary sampling units (PSU) per month, with forty randomly selected households in each PSU. Therefore, each enumerator had to interview on average 120 households per month. However, 15 days per month were allotted for this task for each enumerator, working on a continuous basis without any break (the remaining 15 days were spent at the head office for official tasks and to prepare for interviews in next set of PSUs). They spent 5 days to demarcate the PSU area, list all households and draw the random sample of 40 households. Therefore, in reality each enumerator got 10 days for conducting around 120 labor force survey interviews, or in other words, an average 12 interviews per day. An informal discussion with the enumerators directly involved in labor force survey data collection revealed that it required on average 2 hours to complete a labor force survey questionnaire. Enumerators were thus over burdened given the volume of the information they had to collect daily. Even with only one or two members for whom labor force data was collected (women aged 15 or more years) our enumerators were able to complete 8/10 questionnaires per day.
- Our survey was collecting labor force information only on women aged 15 or above, while the BBS enumerators were collecting information on all adults aged 15 or more, both women and men. This meant that the BBS labor force survey interviews were much longer undoubtedly a more difficult interview to do. They also had to switch back and forth between women and men

respondents, where the extra probing needed to capture women's economic activity might be neglected.

- The BBS labor force survey interview respondent was, in most cases, the household head, who was asked to provide information on the economic activities of all household members aged 15 and above. This practice of collecting information might cause serious underreporting of female members' economic activity, since a male head might disregard or not be fully aware of the details of women's economic activity in the household. This problem would be more severe in the case of home based economic activity. In our survey, we directly interviewed all the women aged 15 and above, and in fact our enumerators were required to visit a household several times in order to ensure the direct interview of all eligible women.
- Finally, the BBS enumerators were supervised mainly by Assistant Statistical Officer (ASO), who, most of the time, was supposed to remain present in the field with the enumerators to ensure data quality. However, there was no provision for crosschecking the data after the questionnaire was filled out in the field, before sending the questionnaires to the head office in Dhaka. In our case, the quality of data was ensured by different steps such as, cross checking of filled out questionnaires by the enumerators in a team and field team leader, monitoring and supervision of field work by Field Supervisors and visits from principal researchers.

Our experience from the field indicated that women are reluctant to mention their involvement in MI or ES work, as they themselves do not consider it to be work. Cow, goat and chicken rearing are very common activities for women in rural areas, performed along with her other daily household responsibilities, and they often do not spend a lot of time on these activities as they only have few poultry birds or animals. Spending only one hour in a week on this type of work might be not considered significant to be mentioned by the women, compared to their other reproductive and care work. Therefore extra caution and probing are necessary to capture the true picture of women's involvement in economic activity, especially MI or ES activity. This requires both better training of interviewers and more time per interview, and greater supervision on the field. The fact that very little human resource is involved in fielding the important and vast work of the BBS labor force survey raises serious questions about the quality of data collected by the BBS. For example, in our survey enumerators were instructed to probe further whenever they found any respondent who reported no economic activity as to whether they were engaged in any type of MI or ES activities.

Both conceptual problems as well as problems of fielding the survey, in particular interviewer quality and the heavy work burden, are thought to be responsible for under enumeration of the extent of women's economic activity. The deviation from the ILO definition of work exists at the operational level among professional BBS staff, and is translated to the field enumerators. While the ILO definition has been adopted for the purpose of formality and compliance, unofficially the definition of economic activity actually implemented follows closely social perception of work, which is based upon the usual economic activity of a full time adult male. There is a case to be made for greater attention to resources for capacity and skill development of enumerators as well as for BBS professional staff with respect to training and monitoring. Equally importantly, a case can be made for greater understanding of the genuine operational constraints of BBS staff and the rigidity of conventional ways of data presentation and analysis. This implies coming up with a socially acceptable but realistic definition of work that does not exclude a large number of women workers but is at the same time readily perceived and implemented in the field. BBS must also realize that a new more realistic definition might require greater flexibility in how work is categorized and labor force data is presented. In this regard BBS can choose to play a very crucial role in generating such a definition of economic activity and ways of categorizing labor force data that can help to counter the widely accepted notion that women in Bangladesh either 'do not work' or work as 'unpaid family helper'.

The concept of 'economic citizenship' is used nowadays to emphasize the rights/freedoms of citizens as workers and economic contributors. Kessler-Harris (cited in Kabeer 2008b) defines economic citizenship in terms of the capacity for self-support, generally through the ability to work in an occupation of one's choice, along with the customary and legal acknowledgement of full personhood, with all this implies for expectations, training, access to and distribution of resources, and opportunity in the market place. She suggests that the complexity of women's exclusion from economic citizenship means that their struggles in the economic terrain has the potential for opening up access routes to other forms of citizenship. From the Bangladesh perspective the importance of women's economic citizenship is even greater given the rise in the percentages of women, particularly women from lower income households, that are either employed or in search of employment since paid work has become one of the primary routes through which the vast majority of women in developing countries enter the public domain (Kabeer 2008). The correct enumeration of women as economic contributors in official statistics is a crucial beginning in the process of establishing women's economic citizenship in Bangladesh.

References

BDHS 2004. Bangladesh demographic and health survey 2004, NIPORT, Dhaka.

F Shilpi 2005. Improving the rural investment climate for non-farm enterprises, Chapter 10 in S Ahmed (ed.) *Transforming Bangladesh into a middle income economy*, World Bank and Macmillan India, Washington DC and Delhi.

LFS 2002-03. Labor Force Survey Report 2002-03, Bangladesh Bureau of Statistics, Government of Bangladesh, Dhaka.

LFS 2005-06. Labor Force Survey Report 2005-06, Bangladesh Bureau of Statistics, Government of Bangladesh, Dhaka.

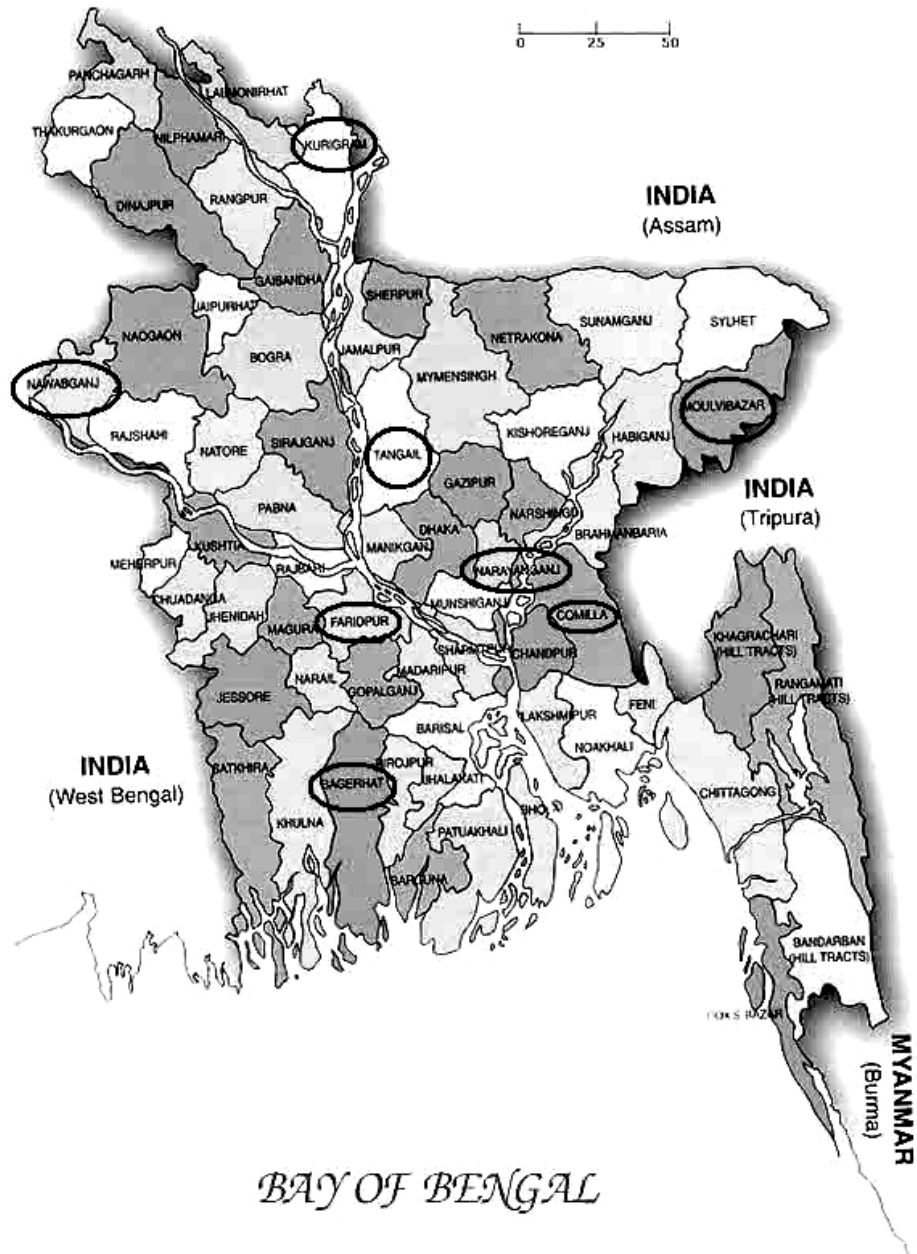
N Kabeer 2008a. 'Changing the 'habits of the heart': development NGOs and the struggle for democratic values in Bangladesh', Deepening democracy, building citizenship and promoting participation Development Research Centre, IDS, Sussex University. (unpublished)

N Kabeer 2008b. 'Researching the relationship between paid work and women's empowerment: complexities, contradictions and contestations', Pathways of Women's Empowerment Research programme Consortium, IDS, Sussex University. (unpublished)

S Amin 2005. 'Selective inclusion or active discrimination? Women and Labor Market in Bangladesh', Chapter 12, *Emerging Issues in Bangladesh Economy: A Review of Bangladesh's Development 2005-06*, Centre for Policy Dialogue and UPL, Dhaka.

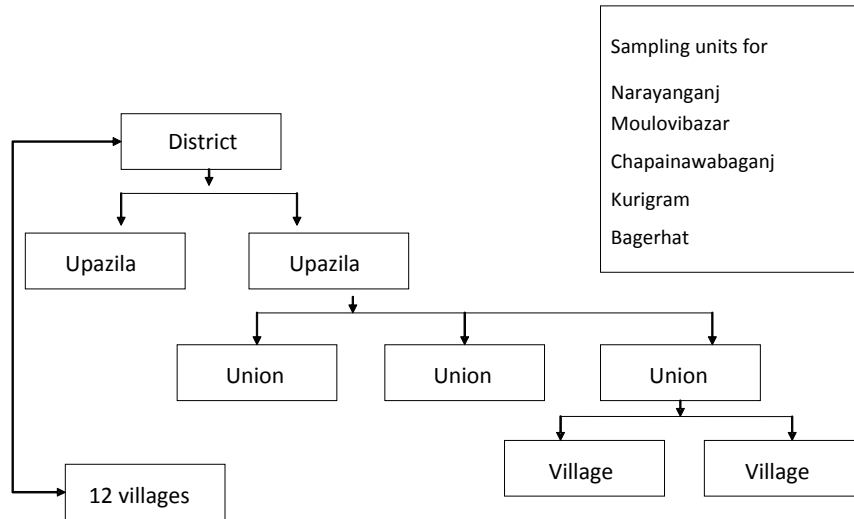
Annex

Annex 1. Map showing study areas



Annex 2. Sampling process

Sampling



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