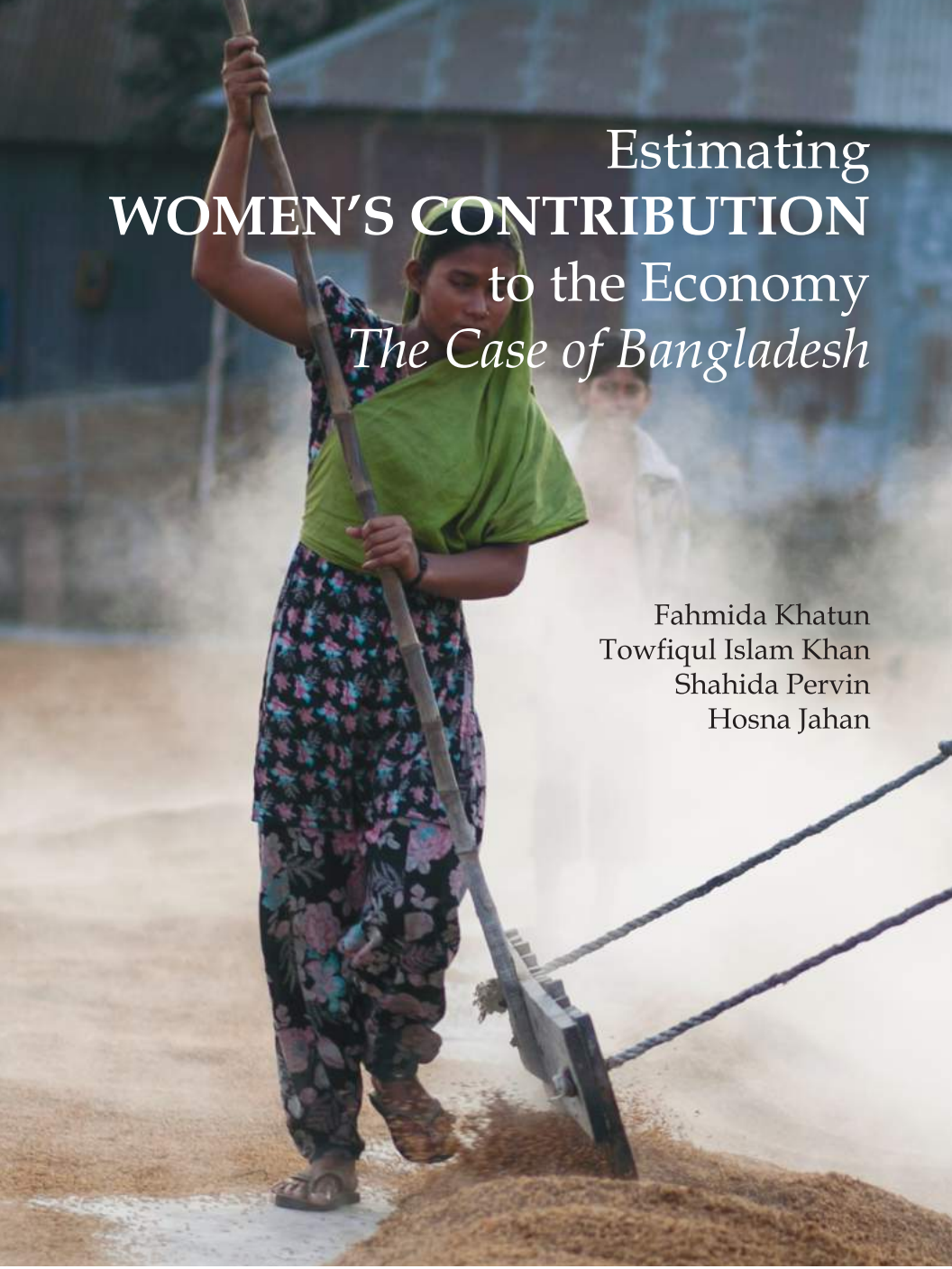

Estimating WOMEN'S CONTRIBUTION to the Economy

The Case of Bangladesh

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Towfiqul Islam Khan
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About CPD & MJF

Centre for Policy Dialogue (CPD), established in 1993, is a civil society initiative to advance the cause of a participatory, inclusive and accountable development process in Bangladesh. Over the past more than two decades, the Centre has emerged as a globally reputed independent think tank with local roots and global reach. A key area of CPD's activism is to organise multistakeholder dialogues to address developmental policy issues that are critical to national, regional and global interests.

The other key area is to undertake research programmes on current and strategic issues which include – macroeconomic performance analysis, poverty and inequality, agriculture, trade, regional cooperation and global integration, infrastructure and enterprise development, climate change and environment, development governance, policies and institutions, and post-2015 international development agenda. CPD-led two ongoing global initiatives are: *LDC IV Monitor* and *Southern Voice on Post-MDG International*

Development Goals. CPD's publications include more than 375 titles. These publications and other relevant information are regularly posted on its website: www.cpd.org.bd

Manusher Jonno (MJ) started in 2002 as a project of CARE Bangladesh. It became an independent organisation in 2006 as the **Manusher Jonno Foundation (MJF)** with funding support from the UK Aid.

It is the largest national organisation supporting human rights and governance work with funding and capacity building support, and in the last 13 years has partnered with over 200 civil society organisations. MJF has also been in the forefront of enactment of some of the most progressive legislation and law reforms, i.e. the Right to Information Act, Domestic Violence Protection Act, review of Labor Law, Protection of Persons with Disability Act, etc. A major focus of MJF programme is reducing discrimination and violence against women. MJF also supports movements and networks advocating for a discrimination-free society.

The guiding principles of MJF are inclusiveness, diversity, equality, gender sensitivity, transparency and accountability. For details, please visit: www.manusherjonno.org

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Preface

Conventional measures of economic activities, such as the gross domestic product (GDP), do not capture the multidimensional and diverse range of activities that inform the interface between human beings and the economy. GDP primarily considers goods and services produced for markets. Consequently, a large part of economic activities undertaken by the people of a country remain unaccounted for. Women's unpaid work, such as household chores, care and agriculture work are only some of the examples. This results in underestimation of women's contribution to the national economy. Cross-country studies have shown that if these various activities in which women engage were accounted for, women's contribution to GDP would be significantly higher than what is normally the case.

The exclusion of unpaid work is a major shortcoming of the existing national accounting system in Bangladesh, and as also, in many other countries. This underestimation does not only undermine the true

contribution of women in the national economy, it also transmits wrong signals to policymakers whose allocative and distributional decisions are then influenced by this. Women's actual worth within the family and in the economy remain unrecognised, unremunerated and unappreciated. Attitudes of the family members towards a woman who does not work outside the home, and therefore, does not have a monetary income, are often discriminatory. Such attitude also occasionally leads to violence. Thus, while on the one hand, due to absence of adequate data on women's unpaid work, the Government of Bangladesh is not being able to undertake appropriate measures to improve women's participation in the labour market, on the other hand, their status and stature in the society also suffer because of this.

In view of the above, there is an urgent need to capture, in value terms, the contribution women are making to the economy, particularly in the context of the GDP. It is in this backdrop that the Centre for Policy Dialogue (CPD) and Manusher Jonno Foundation (MJF) took the initiative to measure the GDP by keeping the gender lens in the perspective. Thus, the CPD-MJF study has made an attempt to capture all types of economic activities undertaken by women – market-oriented and non-market as well as personal activities – in order to capture the true estimation of women's contribution to the GDP.

Using the time use survey technique, the study has assessed the time use patterns of both females and males in 5,670 households across 64 districts of Bangladesh. The population covered by the study was 25,266. A detailed questionnaire was administered among 8,320 women and 5,334 men of the aforementioned households aged 15 years and above. The study is, thus far, the most comprehensive research on the subject in Bangladesh in terms of both coverage of population and rigour of estimation techniques and analyses.

The study has come up with a number of new findings that have implications for the System of National Accounts (SNA). First, it shows

that time spent on non-SNA activities by a female member of a household is about three times higher than that by a male household member. Second, the study estimates that the value of women's unpaid household work (non-SNA activities) was equivalent to 76.8 per cent of Bangladesh's GDP in FY2013-14 based on the replacement cost method, and 87.2 per cent of GDP based on the willingness to accept method. These figures are 2.5 to 2.9 times higher than women's income from paid work estimated in this study.

The findings of the study draw attention to the urgent task of broadening the ambit of the national accounting system to include women's unaccounted economic activities. Based on field-level evidence, the study re-emphasises the need for taking specific measures to improve women's status in the Bangladesh society. It is hoped that policymakers and relevant stakeholders will be motivated to play a more proactive role to advance women's position and situation in different spheres of socio-economic life in Bangladesh by recognising their contribution to the economy. It is earnestly hoped that the comprehensive data and information presented in this study will help in this regard and will trigger initiatives to address the current shortcomings that inform the existing national accounting system.

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We would like to express our sincere appreciation to the authors, *Dr Fahmida Khatun, Mr Towfiqul Islam Khan, Ms Shahida Pervin* and *Ms Hosna Jahan*, for undertaking this challenging and pioneering study. Valuable research support was received from *Mr Mohammad Afshar Ali*, former Research Associate; *Ms Nusrat Jahan*, former Senior Research Associate; *Mr Ziad Quader*, former Research Intern; *Ms Anika Zaman*, former Research Intern; and *Ms Anjum Noor Choudhury*, former Research Intern, CPD.

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On behalf of the authors, we would also like put on record our gratitude to *Dr Debapriya Bhattacharya*, Distinguished Fellow, CPD who has provided valuable guidance in the design of the study and given helpful comments on the initial draft. We would also like to thank those who were present at the expert group meetings and national level consultation for sharing their views, insights and comments which have enriched the study.

The CPD publication team led by *Ms Anisatul Fatema Yousuf*, Director, Dialogue and Communication deserves special appreciation for its tireless efforts in bringing out this publication. *Ms Nazmatun Noor*, Deputy Director, Publication has acted as the coordinator of the publication process. *Mr Avra Bhattacharjee*, Deputy Director, Dialogue and Outreach has designed the cover of the book. *Mr Md. Shaiful Hassan*, Programme Associate (DTP) has provided able support to get the present volume ready in pre-printing format. Contribution of *Mr Md. Meftaur Rahman*, Chief Publication Officer, Bangladesh Institute of Development Studies (BIDS) in preparing the manuscript for publication is thankfully

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Mustafizur Rahman
Executive Director
Centre for Policy Dialogue (CPD)

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Acronyms

BBS	Bangladesh Bureau of Statistics
CPD	Centre for Policy Dialogue
EU	European Union
FGD	Focus Group Discussion
GDP	Gross Domestic Product
GNI	Gross National Income
GNP	Gross National Product
HIES	Household Income and Expenditure Survey
HSC	Higher Secondary School Certificate
ICATUS	International Classification of Activities for Time-Use Statistics
ILO	International Labour Organization
LFS	Labour Force Survey
MJF	Manusher Jonno Foundation
NGO	Non-Government Organisation
OECD	Organisation for Economic Co-operation and Development
PPP	Purchasing Power Parity
PSU	Primary Sample Unit

RMG	Readymade Garments
SNA	System of National Accounts
SSC	Secondary School Certificate
TFR	Total Fertility Rate
UN	United Nations
UP	Union Parishad
USD	United States Dollar

Chapter One

Introduction

The socio-economic conditions of women in Bangladesh have improved significantly over the years. Progress can be observed in a number of social indicators concerning education, health and empowerment. Indeed, this is a reflection of the increased participation of women in the labour force. Notwithstanding the dynamics of change in labour market composition, the contribution of women in official estimations of gross domestic product (GDP) is much lower than that of men. Under-representation of women's contribution in national income accounting can be explained by women's disproportionate engagement in the informal sector, where there is no or little monetary remuneration. Worldwide, according to the International Labour Organization (ILO), women account for about one-third of the workforce in the informal sector. In Bangladesh, only 3.25 per cent of employed women work in the public sector and 8.25 per cent work in the private sector. The remaining 89.5 per cent are employed in the informal sector with varying, and often unpredictable, earning patterns.

Many of them work without compensation. Unpaid work of women in Bangladesh comes in many forms such as chores, child care and care of the elderly, sick and disabled people in the household, and volunteer work in the community (International Labour Office, 2006). The national accounting system based on the System of National Accounts (SNA)[1] does not include such unpaid works, which are performed mainly by women.

Due to the nature of women's predominant engagement in the unpaid work, their contribution to the GDP is under-represented. Unpaid work performed by women is not counted in GDP or gross national income (GNI). However, activities such as domestic labour and care giving have value and create social capital, which would add substantially to the GDP of a country if they were valued appropriately. Non-recognition of women's unpaid works leads to undervaluation of their economic contribution. It also lowers their social status relative to men. Unpaid work has thus been viewed as an integral part of unequal power relations between men and women (Thompson & Walker, 1995). If women's unpaid activities were taken into account, the actual contribution of women in the economy would be widely acknowledged.

Women's economic contribution is under-represented in Bangladesh's economy because Labour Force Surveys (LFSs) have been unable to adequately capture their various activities. The LFS of 1999-2000, conducted by the Bangladesh Bureau of Statistics (BBS), for the first time included a question on the main activity performed by a person during the previous week. Answering the question involved selecting from a list of three categories of unpaid household and family work. Later, the LFS of 2002-03 introduced a number of questions regarding the working status of members of the working-age population (aged 15 years and

[1]The SNA is defined as "the internationally agreed standard set of recommendations on how to compile measures of economic activity in accordance with strict accounting conventions based on economic principles" (EC, IMF, OECD, UN & World Bank, 2009, p. 1).

above) at home or on household premises. The LFS of 2005-06 and LFS of 2010 continued to keep records of unpaid family work. Most recently, the LFS of 2013 included two modules that asked respondents about the time use patterns of non-economic activities and production activity for final self-consumption.

The BBS undertook the Pilot Time Use Survey in 2012 to gather data on the time distribution of men and women in both the employed and unemployed categories. The Pilot Time Use Survey was a commendable initiative, but it was conducted only to improve the country's statistical database. It did not aim to estimate the costs of unpaid work performed by women or link the survey findings with the national accounting system.

Comprehensive studies on the economic value of all types of activities performed by women across all economic and social strata in Bangladesh are few and far between. Existing studies suffer from limitations such as narrow sample size. Additionally, they do not take into consideration regional diversity. The present study is the first of its kind in Bangladesh to estimate women's unaccounted activities based on a rigorous methodology. It is based on a nationally representative survey of households that provided information on their time use patterns with regard to various activities in a day. Thus, the present study addresses the issue of women's unaccounted activities in Bangladesh in a comprehensive manner. The three main objectives of the study are to:

(i) estimate time spent by both women and men on all types of daily activities;
(ii) quantify time spent on activities in monetary terms to gauge the economic value of women's unaccounted activities; and
(iii) generate recommendations to capture women's full contribution to the economy with a view to improve women's status in the family and society.

The findings of the study will help to identify activities performed by women that are counted in the GDP, but not recognised, and to accept non-income-generating works as economic activities. Hopefully, the study will contribute towards changing the mindsets of people and acknowledging women's contribution to their families, society and the economy.

The book is organised in the following manner. Chapter 1 is an introduction, which is followed by a brief discussion on the dynamics of women's contribution to economic activities in Bangladesh in Chapter 2. The conceptual framework of the study is presented in Chapter 3, which also reviews relevant national and international sources. Chapter 4 outlines the methodology of the study. The findings of the study are presented in Chapter 5. Concluding remarks and recommendations are offered in Chapter 6. The book includes two appendices. Appendix 1 presents a number of estimates of women's unpaid contribution to the national economy. These estimates were done for several countries, both developing and developed. The questionnaire used for household interviews during the field survey for this study is included as the Appendix 2.

Chapter Two

Women in the Economy of Bangladesh *Some Stylised Facts from the Perspective of Labour Force*

Comprising half of the country's total population, women play a pivotal role in the economic and political spheres of Bangladesh. The increasing involvement of women in economic activities over time can be attributed to four causes. The first is the implementation of family planning policies by the Government of Bangladesh. Beginning in the late 1970s, these policies not only helped decline in total fertility rates (TFRs), but also created 'respectable' jobs for women in the health and community sectors. The second cause was the microcredit revolution in the mid-1970s. Loans were specifically targeted towards women because they are considered more reliable in terms of repayment to creditors, than men. Notably, women's involvement in agricultural production (which accounted for 65 per cent of the female labour force as of 2010), mostly through microcredit facilities, has alleviated poverty in rural areas. The third was industrial policy aimed towards developing Bangladesh's export-oriented industries

in the early 1980s. The majority of the workers employed by the readymade garments (RMG) sector are women. The fourth cause is the Food for Education programme piloted in 1980, which provided food to poor families on the condition that they send their children to school (Kabeer, Mahmud, & Tasneem, 2011). This in effect helped reduce the gender gap in education at the primary and secondary school levels (Kabeer, 2013).

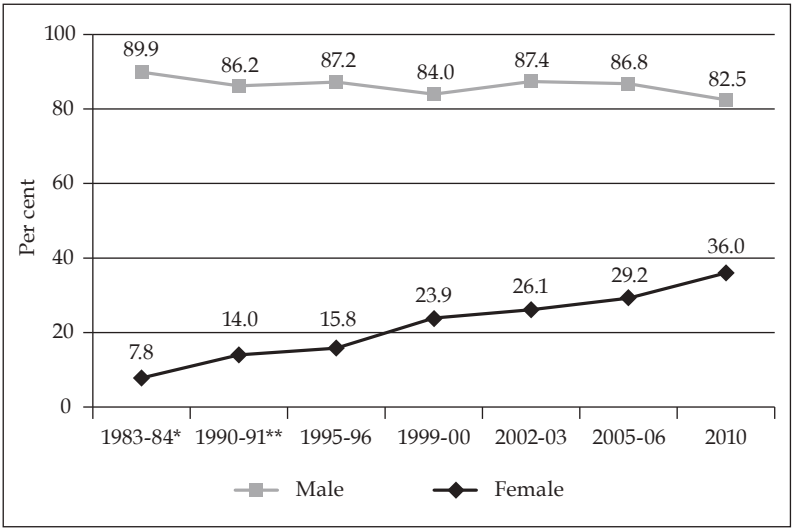
In the political sphere, the share of elected women in the national assembly was 20 per cent in 2011, an increase from 10.3 per cent in 1991. The number of women in union parishads (UPs) elected as chairpersons was 22 against 4,132 men, and the number of female members was 12,236 against 38,036 men in 2011-12. The share of women at the ministerial level was 13 per cent in 2011, up from 4 per cent in 1972-75 (BBS, 2013). In addition, as part of community development programmes, many non-government organisations (NGOs) and microfinance institutions in Bangladesh regularly undertake political and legal awareness programmes for women and encourage women to participate in various political campaigns and protests. Such efforts have not only increased women's participation in elections, but also helped them gain greater political consciousness.

Despite this progress, Bangladesh, by and large, remains a patriarchal society. Parents still have a greater preference for boys over girls. With fertility rates decreasing, the issue of gendercide is a looming concern. Female child mortality has been found to be higher than male child mortality, despite there being equal access to nutrition (UNICEF Bangladesh, 2011 & 2015). Indeed, women still face various kinds of economic discrimination and social stigma regarding their status in society. In addition to economic and cultural constraints, women face religious and spatial constraints that sometimes restrict their access to public spaces, such as the market and various economic opportunities. Consequently, a large share of women are left to work in the informal sector, such as in care giving near their homes.

In Bangladesh, the participation of women in the labour force has been increasing faster than that of men. In 2010, the female labour force participation rate was 36 per cent, which is about 4.5 times higher than what it was in 1983-84. In 1974, the labour force participation rate of women aged 10 years and above was only 4 per cent. There was no significant change in the participation rate of men during this period – it was 80.4 per cent in 1974 and 82.5 per cent in 2010. During the post-independence period, except for a few years in the 1980s, the male labour force participation rate ranged between 80 and 90 per cent, while the female labour force participation rate increased every year. Figure 1 presents the labour force participation rates since the 1980s.

These data demonstrate the increased participation of women in conventional economic activities in addition to 'unrecognised' household

Figure 1: Labour Force Participation Rates



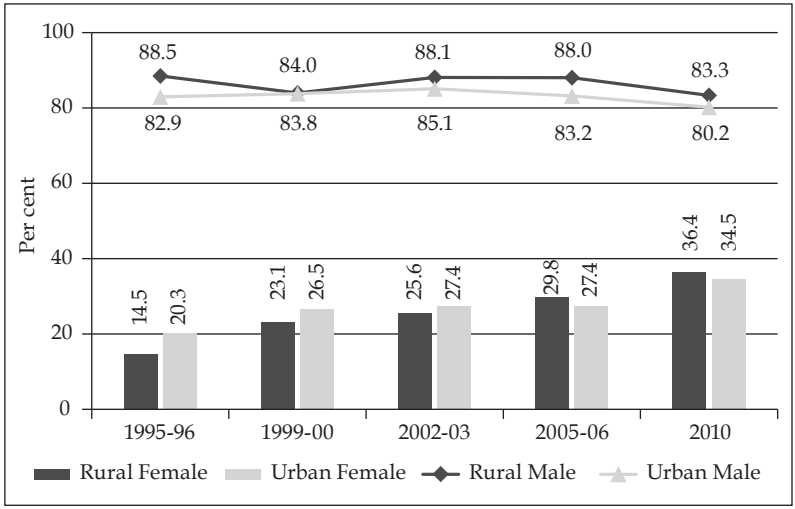
Source: BBS (1984, 1995, 1996, 2002, 2004, 2008, & 2011a).

Note: *Calculated from the Labour Force Survey (LFS) of 1983-84 using civilian labour force; **Adopted from Rahman (2007).

work. It is, however, difficult to measure women's contribution in terms of household work due to the unavailability of relevant data. The LFS of 1989 and LFS of 1990-91 provided some information on women's contribution in terms of unrecognised work. The two surveys considered a number of activities, such as ploughing, irrigation, threshing, etc. to be economic activities. As a result, the labour force participation rates of females were 61.6 per cent in 1989 and 58.2 per cent in 1990-91, as opposed to 1985-86 when the rate was only 9.4 per cent. As for the male labour force, the rate increased, but generally remained steady, reaching 86.2 per cent in 1990-91, up from 81 per cent in 1989, and 76.9 per cent in 1985-86. Evidently, the inclusion of a few activities that were traditionally part of unrecognised household work increased the female labour force participation rate significantly. This also demonstrates that with the labour force participation rate of women being lower than that of men, women's engagement in the informal sector must be somehow assessed. BBS (2011a) shows that among the total working-age population, 64 per cent of women and 17.5 per cent of men were outside the purview of the labour force in 2010. However, 82 per cent of the female working-age population who remain outside the labour force, are involved in household work. In contrast, only 14 per cent of the male working-age population outside the labour force do household work.

The increase in the labour force participation rate of rural women has been higher than that of urban women. The rate for rural women was 36.4 per cent in 2010 compared to 7.4 per cent in 1983-84, while it was 34.5 per cent against 11.1 per cent for urban women over the same period (Figure 2). The rate for rural women surpassed that for urban women in 2005-06. No noteworthy changes took place in male labour force participation during this period. The participation rate of men has traditionally been higher in rural than urban areas. The annual compound average growth rate of the female labour force was 8.7 per cent in rural areas against 8.5 per cent in urban areas in 2010, increases from 6.6 per cent and 2.1 per cent, respectively, in 2005 (BBS, 2011a). Between 1996 and 2010, the labour force

Figure 2: Labour Force Participation Rate of Population Aged 15 Years and Above by Region



Source: BBS (1996, 2002, 2004, 2008, & 2011a).

participation of rural women increased by 3.5 times against an increase of 2.5 times for urban women. Despite such increases, women have yet to catch up with men in terms of labour force participation. The participation gap is declining, however.

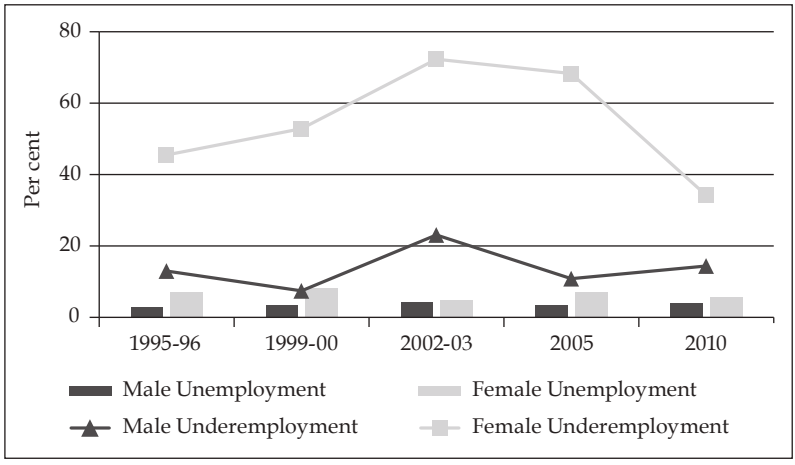
Education plays an important role in influencing the labour force participation rate. With higher levels of education, women tend to take part in the labour market more. About 63 per cent of the total labour force in Bangladesh is comprised of people with primary education or no education (BBS, 2011a). The rate of engagement in the labour market with such education levels has been traditionally higher among women than men. This has changed in recent years (BBS, 1996, 2002, 2004, 2008, & 2011a). In 2010, about 10.5 per cent of the male labour force had a level of education corresponding to either the Secondary School Certificate (SSC) or Higher Secondary School Certificate (HSC), in contrast to 8.6 per cent of the female labour force. Only 4.6 per cent of men and 2.3 per

cent of women had a graduation-level education or above. People with no education generally reside in rural areas, while those with higher levels of education tend to reside in urban areas. The uneducated rural labour force is mostly engaged in the agriculture and informal sectors.

For women, marital status is a highly significant factor in determining their participation in the labour force. From 1995 to 2010, participation of married women in the labour force as a share of the total female labour force increased (BBS, 1996, 2002, 2004, 2008, & 2011a). In recent years, the share of unmarried women in the labour force has decreased. This could be an outcome of increased school enrolment and education of women. The share of unmarried women's participation in the labour force is lower in rural areas than in urban areas. Social and cultural views in rural areas may be playing a role. To many people in rural areas, work by women outside the home is considered unacceptable. Women in the LFS marital status category 'others', which includes widowed, divorced and separated men and women, participate in the labour force at a much higher rate (7.2 per cent of total women in the labour force in 2010) than men in the category (0.8 per cent of total men in the labour force in 2010). One of the reasons for this difference is that the number of women in the category (7.5 per cent of total female population aged 15-65 years) is higher than men in the category (0.8 per cent of total male population aged 15-65 years), according to the Population and Housing Census of 2011 (BBS, 2012). This also reflects the fact that women face more hardship than men once they are alone and have to earn their own livelihoods.

Employment status also varies between the female and male labour forces. Female employment is lower than male employment. During 1996-2010, the employment rate for women varied between 92 and 95 per cent. For men, the employment rate ranged between 96 and 97 per cent during the period. Unemployment rates for both men and women are very low in Bangladesh. This is due to the methodology used by the BBS, which considers a person to be unemployed if s/he works less than

Figure 3: Unemployment and Underemployment Rates



Source: Calculated from BBS (1996, 2002, 2004, 2008, & 2011a); data for 1995-96 are adopted from Rahman (2007).

35 hours per week.[2] Given this methodological flaw, underemployment is a more reliable category when it comes to measuring surplus labour in the economy (Rahman, 2007). Underemployment is very high for women compared to men during the 1996-2010 period (Figure 3).

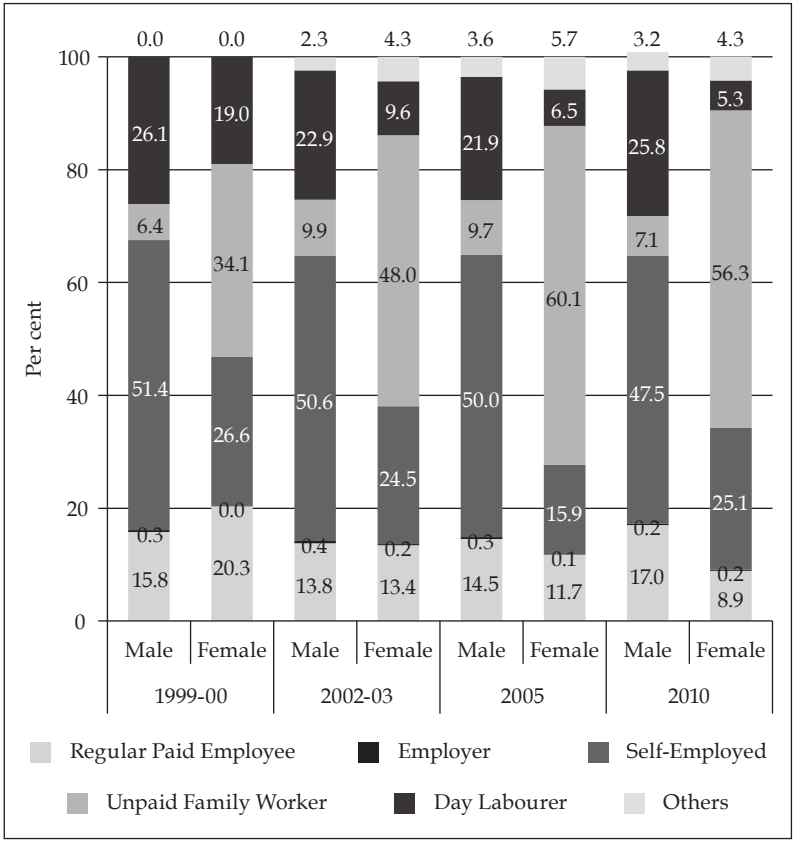
A large number of employed women are also involved in unpaid family work. Instances of this situation increased significantly in 2005 and 2010. In 1999-2000, female unpaid employment in a family-operated farm or business[3] varied between 34 and 60 per cent of total employment. In contrast, the range was between 6 and 10 per cent for male workers. For

[2]This methodology is in stark contrast to those used elsewhere. As per the definition of the ILO, any person who did not work for pay or profit even an hour in the preceding week is termed as unemployed. Furthermore, a person who worked less than 15 hours in a family enterprise as an unpaid family worker, may also be termed as unemployed. A person who worked less than 35 hours in a reference week may be termed as underemployed (BBS, 2011a).

[3]An unpaid family worker is someone who works unpaid at a family farm or business owned or operated by the household head or other members of the household to whom s/he is related by kinship, marriage, adoption or dependency (BBS, 2011a).

female workers, the share of regular paid employment was lower than that for male workers except during 1999-2000 (Figure 4).

Figure 4: Employment Status of Employed People



Source: BBS (2002, 2004, 2008, & 2011a).

Note: 1. Only in 2010, data on self-employment were provided separately for the agriculture and non-agriculture sectors. These two sectors were added to calculate the final figure.

2. In 2005 and 2010, single day labour data were provided separately for the agriculture and non-agriculture sectors. For these two years, data were added to get the final figure.

3. The 'Others' category includes irregular paid worker.

4. The shares (per cent) of different categories have been presented here following the sources mentioned above. However, the authors recognise that in some cases the reported shares may not add up to exact 100 per cent.

In Bangladesh, the agriculture sector is the largest employer of both male and female workers. The share of total employment in agriculture is higher for women, which could be due to the relatively higher mobility of male workers to other sectors. As mentioned, the informal sector is a major source of employment for women, a situation that is more prominent in rural than urban areas.

Women have spent fewer hours working than men across all employment statuses. This is largely because women have to perform unpaid domestic chores. However, the gap in weekly hours spent working between men and women has decreased significantly over time (Table 1).

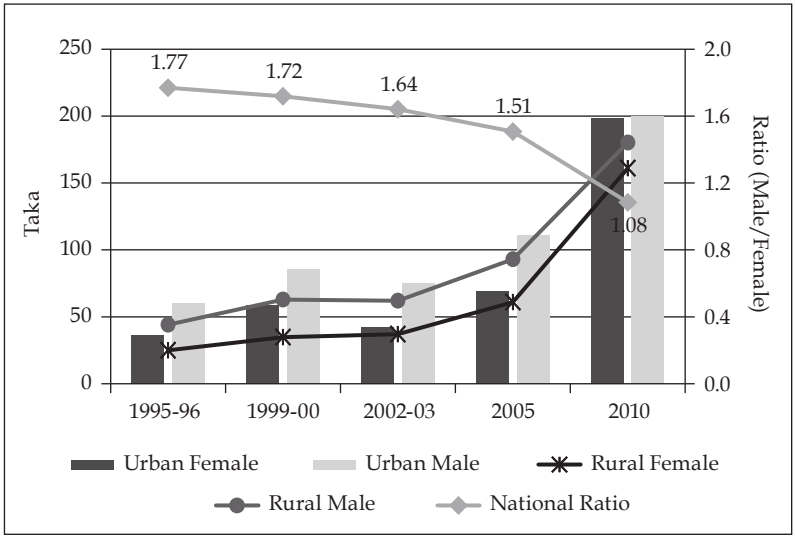
Table 1: Weekly Hours Spent Working by Employment Status

Year	Sex	Regular Paid Employee	Employer	Self-Employed	Unpaid Family Worker	Day Labourer
1995-96	Male	53.0	48.0	48.0	39.0	50.0
	Female	49.0	16.0	31.0	22.0	37.0
1999-00	Male	51.0	46.0	49.0	43.0	51.0
	Female	46.0	4.0	30.0	24.0	38.0
2002-03	Male	49.0	45.0	44.0	43.0	43.0
	Female	41.0	32.0	28.0	34.0	37.0
2005	Male	54.0	53.0	52.0	49.0	51.5
	Female	52.0	47.0	34.0	15.0	46.5
2010	Male	52.0	55.0	52.0	29.0	54.0
	Female	52.0	54.0	48.0	23.0	54.0

Source: BBS (1996, 2002, 2004, 2008, & 2011a).

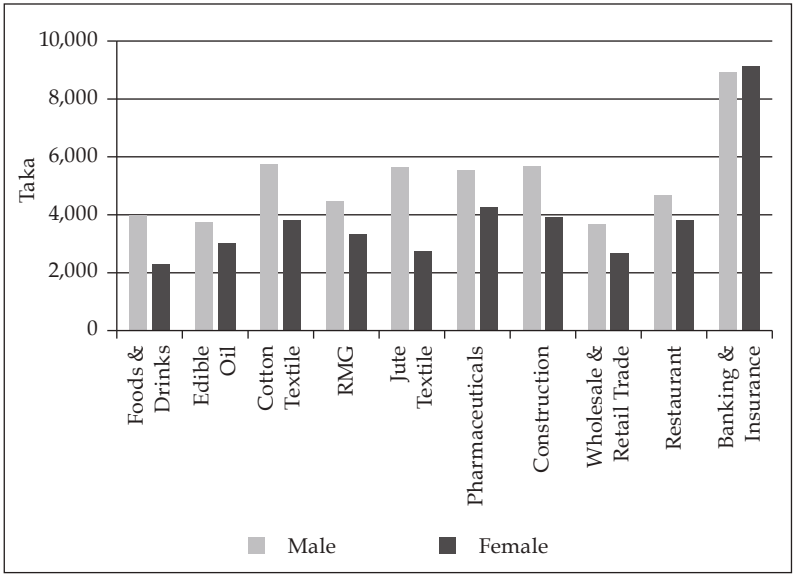
Despite improvements in the labour force participation rate, wage differentiation is still a ubiquitous phenomenon in Bangladesh's labour market. Daily wages are higher for men than women in both rural and urban areas (Figure 5). However, there has been a decline in the wage gap between male and female workers. This gap remains larger in rural than

Figure 5: Average Wage Rates for Daily Labour



Source: BBS (1996, 2002, 2004, 2008, & 2011a).

Figure 6: Average Monthly Earnings by Industry in 2009-10



Source: BBS (2011b).

urban areas. Though data on wage gaps in the informal sector are not easily available, wages are understood to be lower for women, who have very little bargaining power. The situation in the non-farm industrial sector is no better. Women earn much less than men in all sectors other than the banking and insurance sector (Figure 6).

Over the last two decades, women in Bangladesh have made substantial progress in terms of labour market-related indicators. This is reflected from increased labour force participation, lower unemployment and underemployment rates, and higher weekly hours spent working. However, the labour force indictors also suggest that there is still a large gap between the female and male groups within the labour force of Bangladesh. By and large, women continue to be engaged largely in the unpaid works within household, and receive little recognition for their labour.

Chapter Three

Theoretical Context for Recognising Women's Contribution in an Economy

The present cultural setting of Bangladesh expects women, who participate or want to participate in the labour force, to maintain their household work as well. Extra household responsibilities prevent women from participating in the labour market at a higher rate. The national accounting system does not incorporate household services for consumption purposes within the household, although it considers such services to be productive work. The female labour force participation rate gives a general overview of the extent to which women are engaged in mainstream economic activities besides household work. This chapter illustrates women's role in the economic development of Bangladesh and their contribution that is under-represented in the national accounts. It outlines the theoretical grounds for recognising women's contribution, drawing from the theoretical contribution of gender economics and the more applied aspects of estimating their economic contribution through

the SNA. It then explores the findings of previous studies and reviews their respective valuation methods.

3.1 Gender, Economics and Development

Gender relations are best understood as 'lived experience', which is deeply embedded in an individual's personal, social, economic and political life (Bradley, 2007). Like all social relations, gender relations are multidimensional, cutting across class, race, religion, culture and other heterogeneities. Such relations embody ideas, social values and identities (Kabeer, 2003). The complex nature of gender ideology is constructed, performed, enacted and limited. Yet, conventional economic models consider gender identity as a fixed, stable and inherent quality, whereby a woman's body symbolises reproduction, and is central to her identity. Women's bodies thus preordain their social destiny. For example, in a cost-benefit analysis of the sexual division of labour within a household, Becker (1991) argued that women are biologically motivated to engage in care giving since they have a comparative advantage in the household due to their natural (biological) endowments and commitments. Thus, the sexual division of labour is efficient because "an hour of household or market time of women is not a perfect substitute for an hour of the time of men when they make the same investments in human capital" (Becker, 1991, p. 38). This notion of 'libidinal body' is central to how women are represented and socialised as individuals (McNay, 1992). It further provides justification for a woman as a 'nurturing mother' who is expected to specialise in the household domain and maintenance of the family. As mentioned, household responsibilities constrain women's full participation in the economy, whether as producers or consumers (Watson, 2005). Motherhood is not regarded in terms of compulsory heterosexuality, symbolising women's bodies as only 'reproductive', it

is rather publicised as the stronghold of feminine identity. The notion of gender, thus, undermines all the other identities of a woman. Although the body has a concrete materiality, it does not have a fixed biological or pre-discursive essence (Foucault cited in McNay, 1992). In reality, a woman's body is a subjective entity that is historically and culturally specific.

Women's familial roles are so deeply ingrained that the source of their deprivation is not visible. The demand for harmonious family living requires that conflicting aspects be resolved discretely rather than through explicit bargaining (Sen, 2010). As a result, customary patterns of conduct are simply taken as legitimate and even reasonable. Gender disparity is normalised through customary patterns and there is a shared tendency to not notice the systematic deprivation of women. In fact, Plato recognised that the most effective way to maintain systems of rule is not through direct violence, but by persuading those who are subordinate that social hierarchy is natural, therefore inevitable, and even desirable. The social constructions of gender ideologies start at a very early age in traditional societies such as Bangladesh, where both boys and girls are raised with certain expectations about responsibilities and appropriate gender roles. The result is that women occupy the role of the 'secondary' workers that must remain close to home, and hence, find themselves working in lower-paying sectors (Pedrero et al., 1997 cited in Haase, 2012). Artificially normalised systems of strong local beliefs also lead many women to believe in their alleged intellectual and physical inferiority, which helps to construct protest-free toleration of social asymmetry and discrimination such as wage discrepancy (Sen, 2010).[4] The demeaning views of domestic work and women's inferior position in society are not only widely accepted by men, but also by women themselves, which is reflected in

[4]For example, studies suggest that women's perception of their relatively lower abilities led the majority of microfinance clients to report that a significant proportion of loans are controlled by male relatives, who invest them in their own income-generating projects (Goetz & Gupta, 1996; Schuler, Hashemi, Riley, & Akhter, 1996).

many studies that demonstrated women had no clear idea about whether their work is valuable. Women's objective illusions about their perceived position, based on faulty interpretations of local observations within a stratified society, make it difficult to address gender disparities because gender inequalities within the family tend to survive by making allies out of the deprived (Sen, 2010).

In reality, men and women do not exist as biologically based categories prior to, and independently of, the power relationship that exists between them (Delphy, 1984). Power constitutes and legitimises itself through institutions and discursive practices. Economic and social phenomena are characterised by gender practices, which have weakened women's position as social individuals, and are responsible for their systemic structural oppression. For example, intra-household distributional inequities exist both as structures (such as different property rights for sons and daughters) and norms and ideas (such as "men work harder than women, they need to eat more"). Gender relations thus play an important role in determining the distribution of resources and assigning authority, agency and decision-making power (Kabeer, 2003).

Dominating social structures and economic models also conceal women's contribution to economic development. The long-standing exclusion of women's unpaid activities from national accounts under the patriarchal system not only renders women invisible in government policy strategies, but also condemns them to highly restrictive and subordinate lives with little or no access to material resources (Kabeer et al., 2011). The contribution of women to national well-being through unpaid household work remains obscured and unrecognised since care giving and other activities do not accrue direct rewards. A concealed fact is that production for the market to a large extent depends on non-market labour being performed. Unpaid household work has indirect effects on productive work, but there is no easy way to measure them. Consequently,

while unpaid household work is considered to be productive work in an economic sense, it remains outside the ambit of traditional economic analysis and the estimation framework for GDP. Women's exclusion from development policies is not a naïve oversight, but integral to the social, economic and political order that feeds into existing power relations. In reality, patriarchy is one of the systems of capitalism that ensures the subordination of women in the labour market and household. Historically, market work time has hardly exceeded non-market work time. Women providing free work benefit capitalism by forming a reserve army of labour, which keeps wages down. Gender inequalities are also part of larger systems of inequality, created by and essential to, capitalist processes of accumulation. By ignoring the social construction of gender, 'gender-neutral' economic models are in fact being 'gender-blind'.

Within the current national accounting system, it has been argued, if an individual enters the labour force and pays all his or her take-home salary to a domestic servant to produce the household services s/he can no longer yield or is no longer willing to do, his or her consumption of goods and services would increase, and so would apparent material well-being (Ahmad & Koh, 2011). However, by focusing only on products, commodities and monetary aggregates (such as GDP and the SNA), gender-blind development policies confuse means (such as generating income) with ends (well-being). Such policies ignore that different people can have different opportunities to convert primary goods into well-being. For example, within poor households, even when women join the paid labour force, they might not be able to afford a maid. These women, who are more likely to be better skilled in domestic work such as caring for children and elders, would have less time to do unpaid domestic work, and the well-being of household members can in fact decrease in their absence. Such a resource-based conception of well-being also fails to recognise the intangible contributions that cannot be quantified and

are priceless in nature (Sen, 1999). Economic opulence and development, while not unconnected, can often deviate. Development understood as one's freedom of choice and capacity of living a life that one has reason to value, depends on various social factors such as social structures, cohesion and harmony rather than just economic affluence (Sen, 2010).

3.2 Women's Work and the System of National Accounts

The SNA is an international guideline that provides a comprehensive conceptual and accounting framework for compiling and reporting macroeconomic statistics that can be used to analyse and evaluate the performance of an economy. In 1954, a modified edition of the SNA explicitly took into account the needs of underdeveloped countries and elaborated the need to provide information on capital transactions. This elaboration kept household services that are bought from other households outside the production boundary. The 1968 SNA also categorised household services that are done by someone outside the household (e.g. domestic help) as 'not productive'. The 1993 SNA improved the production boundary of household output by drawing on the distinction between goods and services. It included the "production of all goods within the production boundary, and the production of all services except personal and domestic services produced for own final consumption within households" (other than the services of owner occupiers and those produced by employing paid domestic staff) (United Nations, Inter-Secretariat Working Group on National Accounts, 1993, p. 527). With regard to own-account production of goods by households, the 1993 SNA removed the 1968 SNA limitations, which excluded the "production of goods not made from primary products, the processing of primary products by those who do not produce them and the production of other goods by households who do not sell any part of them in the

market" (United Nations, Inter-Secretariat Working Group on National Accounts, 1993, p. 527). For instance, the storage of agricultural goods produced by households was included within the production boundary as an extension of the goods producing process.

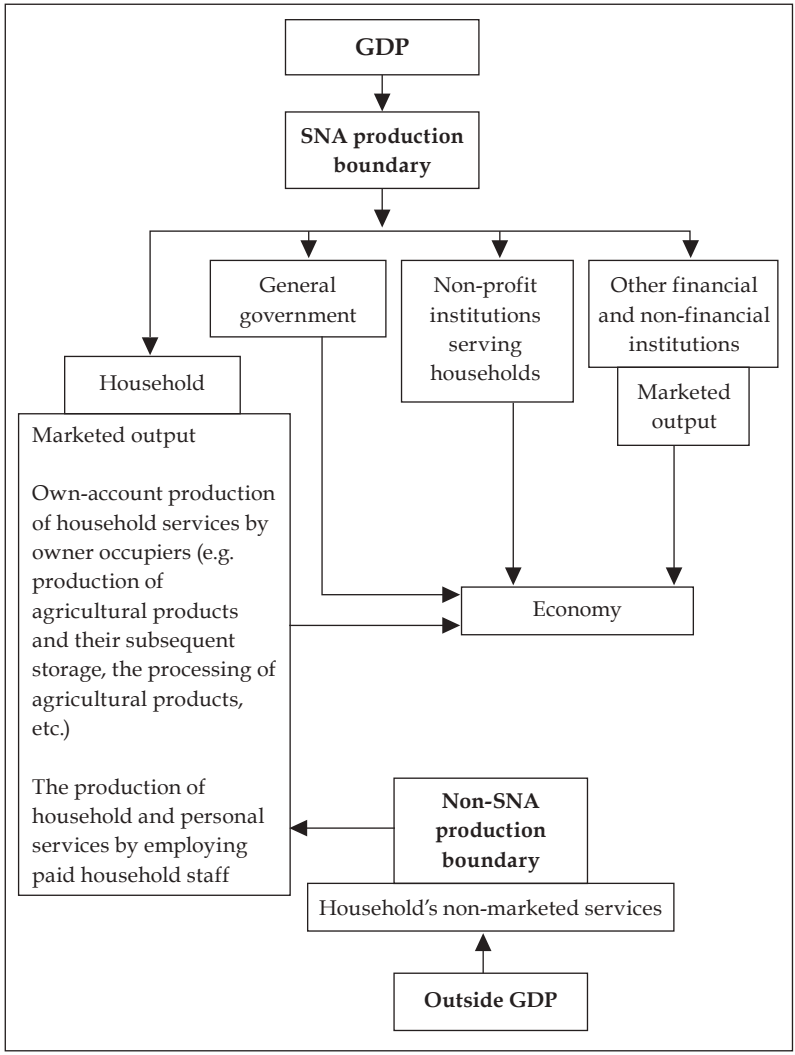
The 1993 SNA excluded household services from the national accounts on the grounds of: (i) having limited repercussions on the rest of the economy; (ii) valuation complexity of the vast majority of household services given the lack of markets; and (iii) complexity of incorporating household services in policy. It discounted unpaid household services on the grounds that they generate income in ways that are tied to automatic consumption, which has little relevance in the analysis of a country's economic equilibrium. If all household work were incorporated within the production boundary, it has been argued, people who do such work would be self-employed, and resultantly everyone in the economy would be considered employed.[5] While the incorporation of unpaid household work and services into the national accounting system would involve some economic shortcomings, it should not be dismissed outright. In recognition of this reasoning, the 2008 SNA introduced some improvements that acknowledged unpaid household services as economic work, and thus brought household services within the extended production boundary. It also suggested a 'satellite account' to incorporate with GDP.[6]

In short, the SNA includes all outputs of production that are destined for the market, whether for sale or barter (Diagram 1). All goods and services provided for free to individual households or collectively to communities by government entities or non-profit institutions serving households are also included in the SNA. To make the SNA as

[5]The 2008 SNA included no fundamental changes, but offered some clarification on the issue.

[6]Due to methodological vagueness, the process of constructing a 'satellite account' is still under development. In 1993, the UN Statistical Commission stipulated that national statistical offices in all countries need to prepare satellite accounts using time use data for unpaid work. However, countries are not compelled to prepare such accounts.

Diagram 1: SNA and Non-SNA Activities



Source: Authors' elaboration based on United Nations, Inter-Secretariat Working Group on National Accounts (1993) and EC et al. (2009).

comprehensive as possible, all goods produced for own use are kept within the production boundary – it is the choice of selling them that ultimately

determines their inclusion in the SNA. Notably, the SNA excludes all services for own final consumption within households that are produced by household members without employing outsiders. Personal activities are not considered to be productive activities, while SNA and non-SNA activities are. Productive activities can be both paid and unpaid work. While all paid work is counted in the SNA, only some unpaid work is counted. Unpaid work that is counted in the SNA remains outside direct recognition and unpaid work that is not counted in the SNA remains outside both direct recognition and the national accounts. Hence, the SNA considers households as final consumers rather than producers of goods and services. There is some contention that many services produced by households are for their own use, but there are many services that share characteristics with similar services produced for the market that are included within the production boundary of the SNA. In countries such as Bangladesh, where women mostly engage in unpaid household work, the lack of recognition of such work renders a good deal of women's productive activities invisible. Since these activities remain outside of the national accounts and formal estimation, they distort development policy concerns. The integration of unpaid work into national policies does not necessarily mean converting all unpaid work into paid work (in monetary terms) (Hirway, 2005). If some unpaid work can be accounted for and valued in a satellite account, this can help policymakers reflect on the importance of unpaid household and family work for economic development and formulate effective policies that improve market accessibility for women as both producers and consumers.

3.3 A Literature Review on Estimating Women's Unpaid Work in an Economy

Scholars and researchers around the world, including in Bangladesh, have explored ways to determine the economic value of unpaid work. The

aim of the extensive literature review is to provide an analysis of previous studies to better understand the patterns of unpaid work and assess its economic value using various methodologies. Appendix 1 provides a summary of various studies.

Studies unanimously suggest that if unpaid work were adjusted, the contribution of women in GDP, and thus the magnitude of GDP, would increase significantly. For example, women in Nepal on an average accounted for 27 per cent of household income in 2006. When this figure was adjusted for unpaid work, it rose to 56 per cent (Shrestha, 2008). Similarly, Collas-Monsod (2007) found that 90 per cent of total unpaid work in the Phillipines is done by women and the inclusion of unpaid work in GDP estimations would increase the country's GDP by 27-40 per cent. Furthermore, Sudarshan (2014) found that women have a higher work performance rate in rural areas, where a large part of unpaid agricultural work, subsistence farming and additional domestic work (such as water-fetching and collection of firewood) is carried out by women. There are also culture-specific issues linked to unpaid domestic work that should be noted. For instance, in developed countries, the amount of unpaid work has decreased with modernisation and technological innovation (such as washing machines and running water systems). Interestingly, Folbre and Yoon (2008) found that the amount of unpaid work, especially involving the care of children and elders, is unchanged by developmental progress in the European Union (EU). The study lists four reasons for increases in time spent on unpaid work within families and communities in most EU countries: (i) an aging population, which involves an increase in the number of dependents; (ii) changes in size of, composition of and mutual aid by households; (iii) changes in the organisation of productive activities; and (iv) the availability of state-provided care facilities (such as paid family leave from employment, family allowances, universal child care and community-based provisions for the elderly). A cross-sectional

analysis of 15 EU countries indicates that adult women spend 58 per cent of their time on unpaid work. Parents with higher education levels spend more time providing child care since children are considered important outputs of a household.

A study on Pakistan found that women spend 328 hours on unpaid domestic works per month or 3,936 hours per year on average. Assigning the wage rate equivalent as a replacement value (where the cost of unpaid work is calculated based on current wages for comparable work) for that work, the study concluded that the contribution of women aged 15-64 years is about USD 37.6 billion or 23.3 per cent of GDP (Arshad, 2008). George, Choudhary, Tripathy, and Abraham (2009) also used the replacement cost valuation method[7] to measure the contribution of women through unpaid work in India. The study found that the contribution of women engaged in unpaid work is equivalent to 61 per cent of Indian GDP or USD 612.8 billion. Surveying a smaller sample of 50 men and 200 women in urban and rural areas, the authors also found that unpaid work (such as cooking and caring for children and elders) is traditionally considered to be women's work and socially deemed 'too degrading' to be done by men. Furthermore, the lack of economic awareness prevented female respondents from realising and assigning monetary value to their work. Shrestha (2008) found similar attitudes towards unpaid household work in Nepal, with most respondents from urban areas believing that it has no economic value and respondents in rural areas not having the required knowledge to give an informed answer. Like Arshad (2008) and George et al. (2009), Shrestha used the replacement cost valuation method (particularly the wage classifications determined by the Labour Act of 1992) and concluded that despite lower wages, rural women earn more than urban women because they work more hours. Rural and urban

[7]In this study, out of 33 instances of paid work done by women aged 15-64 years, eight were selected, and the average of payments for those activities was applied to the total 33 activities.

housewives spend 13.2 and 9.7 hours per day, respectively, on unpaid domestic work. If the time spent on household work is adjusted using the government's prescribed rate of 120 rupees for 7 hours per day, the value of such work is USD 11.3 billion, equivalent to 91 per cent of the country's GDP.

In Bangladesh, using the replacement cost valuation method, Efroymson, Biswas and Ruma (2007)[8] found that women's unpaid work amounted to a yearly contribution of USD 81.9 billion.[9] Women in Bangladesh were each found to be doing a total of 45 tasks every day, together working about 771.2 million hours per year. Using a mid-rate government salary of Tk. 10,000, the total contribution was found to be about USD 91 billion. Interestingly, unlike neighbouring countries India and Nepal, the general consensus in Bangladesh concerning women's unpaid work is that such work plays an important role in society, and is vital for its proper functioning.

Hamid (1996) conducted one of the first comprehensive studies on the economic contribution made by women through unpaid work. The study used the replacement cost valuation method to assign monetary value to women's unpaid work in Bangladesh. Informal wage rates were used to evaluate time spent on non-market work. Under the 1993 SNA production boundary definitions, 95 per cent of non-market production in Bangladesh was excluded. Conventional GDP estimations captured 98 per cent of men's production, but only 47 per cent of women's production. Extremely poor households that engage in subsistence production spent most of their time gathering and foraging, activities that were unaccounted for in GDP

[8]The study surveyed a total of 315 women and 315 men through individual interviews. Women from rural and urban areas were analysed separately. Day labour wages were applied to women from rural areas and specialist wages (such as the costs of tailors and tutors) were applied to women from urban areas.

[9]This figure was calculated by replacing unpaid work with the value of the average monthly wage rate for cooking.

estimations. The study estimated that the inclusion of non-market work in official calculations in 1989-90 would have increased national GDP by 29 per cent. Of the total time spent on market work, women contributed 25 per cent and men contributed 75 per cent. In contrast, women contributed 89 per cent of the total time spent on non-market work, while men contributed 11 per cent. Moreover, 69 per cent of own-account production is carried out by women. The study also reported that the opportunity cost is 64 per cent of the formal wage rate, while the informal wage rate is 80 per cent of the formal wage rate. This indicates self-exploitation of the rural labour force and undervaluation of non-market work.

However, since these studies used time use survey data and made decisions about equivalent market labour by assigning replacement costs, they have a few limitations. All the studies used either specialist or general replacement values. In the case of specialist replacement valuation, studies (e.g. Efroymson et al., 2007) need to make the following assumptions: (i) the quality of work or productivity of the person engaged in unpaid work is the same as that of the specialist; (ii) the particular specialist is available in the market; and (iii) the domestic production of household and personal services for own consumption has the same capital intensity as that of the market (ESCAP, 2003). In the case of general replacement valuation (e.g. Arshad, 2008 and George et al., 2009), a proxy wage (against time spent) for paid household work, or a category of work comparable to household work, is assigned to unpaid workers. This, in effect, undervalues skilled workers and overvalues unskilled workers. For example, an efficient and highly productive person needs less time to complete a task in which s/he specialises. For example, paid female specialists probably do not need to spend as much time on unpaid work as full-time housewives. On the other hand, the contribution of part-time housewives, who complete most unpaid work within a relatively shorter period of time, is underestimated. Furthermore, the market wages used

to value unpaid household work are the undervalued wages of female-dominated occupations (such as child care provider and domestic help), which distort the actual value of time of these women. As a result, some studies use the opportunity cost (i.e. the wage rate that a woman could earn if she were involved in paid instead of unpaid work) and self-valuation (how one values her own work) methods in addition to the replacement cost valuation method to determine the value of unpaid work.

For example, Hirway (2000) used time use survey data on 18,591 households spread across six selected major states in India to serve as a broad representation of India's population. Of these households, 68.5 per cent were rural and 31.5 per cent were urban. The study indicated that 65.3 per cent of women and 51.7 per cent of men, who also engaged in SNA activities, engaged in unpaid work. However, the average number of hours spent in the reference week on unpaid work by women was 50.5 hours against 33.5 hours by men. The study also showed that 45.2 per cent of the hours spent on SNA work in India went unpaid. The corresponding figures for men and women were 34.7 per cent and 65.7 per cent, respectively. Nonetheless, the study had limitations, specifically a very expensive data collection method that did not allow for a larger sample to be surveyed. Also, since watches are not worn by many people in rural areas, respondents had little indication of the time spent on particular activities.

Building on earlier studies by Virola and de Perio (1998) and Virola (1999), Virola, Encarnacion, Zaguirre, and Perez (2007) used a combination of methods to work with data generated by the Philippine Statistical System, including those from time use surveys. The study adjusted unpaid work covering the years 2000-2006 with GDP and gross national product (GNP) in the Philippines to capture the contribution of such work in the national economy. For the employed, the authors used both opportunity cost and market price approaches. For the unemployed and those outside

of the labour force, only the market price approach was used. They also adopted the self-valuation method. The valuation of unpaid work used the average wage of a janitor and the minimum wage. With the market price approach, total time spent during weekdays on chores, child and family care and shopping for household goods was used. Time was, however, re-scaled to ensure that total hours spent on all activities would add up to 24 hours to mitigate the possibility of double-counting.[10] In addition, direct estimation of unpaid household work using self-valuation results from the time use survey for 2000 was incorporated. The study found that women accounted for 59.6 per cent of total hours spent on unpaid work, and women not in the labour force accounted for more than half of the total value of unpaid work done by women. For the 1990-1998 period, the contribution of women to the GDP of the Philippines was estimated to be about 35-40 per cent, but when unpaid work was taken into account, the share rose to about 50 per cent. Women accounted for only 27.4 per cent of net factor income from abroad, which was about 46.2 per cent of the adjusted GNP. Additionally, the value of unpaid work was higher when self-valuation was incorporated (self-valuation is a perception-based method, hence there is a risk of overvaluation and undervaluation).[11]

A study by Castro (2013) on the Philippines also used the opportunity cost and market price approaches, but adjusted the minimum wage to be the average daily pay of labourers and unskilled workers. Like the study by Virola et al. (2007), the results showed that accounting for unpaid work increases GDP by 79.8 per cent, with 40.2 per cent of that increase contributed by women and 39.6 per cent by men. For the 2000-2009 period,

[10]One of the major limitations of time use surveys is the possibility of double-counting. For instance, some of the time spent on household production of non-market services can be spent on activities related to the production of goods, such as agricultural products for market and own use.

[11]This method assumes that the worker is knowledgeable about market conditions, his/her capability, and exposure to the media.

the share of women's contribution to GDP increased by 5 percentage points when unpaid work was taken into consideration.

Similar to these studies, Kim (2001) used national statistical office time use survey data for 1999 to evaluate the economic value of unpaid work in South Korea. The study also used the opportunity cost and market price approaches. Although there were slight differences in the calculated values for household work performed by full-time housewives according to the approach used, in general, the values were between 13 and 15 per cent of GDP and 30 and 35 per cent of total wages earned in South Korea. Kim used four methods to determine potential wages of housewives following the opportunity cost approach: (i) find the average wage for female workers in South Korea; (ii) find the average wage for women in each age group; (iii) find the average wage for women by age group and education level; and (iv) find the average wage for men by age group. The first three methods produced similar values for household work performed by full-time housewives (between 12 and 15 per cent of South Korea's GDP), while the fourth produced a figure that was much higher (23 per cent). This is indicative of the large wage differential between men and women that exists in South Korea. The total value of household work performed by full-time housewives in South Korea under the specialist replacement value method[12] was 3.4 per cent of GDP and 31.1 per cent of total annual wages. Using the generalist replacement value method[13], the value of household work performed by housewives was 11.9 per cent of GDP and 27.5 per cent of total wages. In addition, results from use of the replacement cost valuation method showed that housewives contributed

[12]The specialist method divides household work performed by full-time housewives into specific activities and applies the potential wages of specialists who would be hired to perform such work to evaluate the economic value of household work performed by full-time housewives.

[13]The generalist method regards household work as a job, and based on the assumption that one worker is hired to do household work, and the wage for such a hired worker is applied.

the most in their 30s. This is largely because the average wage for women hits its peak for this age group.

Landefeld and McCulla (2000) attempted to modify the national income and product accounts of the United States by including the value of unpaid informal work in GDP. To value unpaid household work, they used the wages of general-purpose housekeepers. Analysis of the accounts' data from 1946 to 1997 revealed that the contribution of non-market services in GDP calculations decreased from 43 per cent in 1946 to 24 per cent in 1997, possibly due to the increase in the number of women working for pay in the formal sector. In another study, Landefeld, Fraumeni, and Vojtech (2005) showed that extending the production boundary to include the household production of non-market services not already included in GDP would increase the United States' GDP by 19 per cent using the replacement cost valuation method (using a housekeeper's average hourly wage) and 62 per cent using the opportunity cost approach (using average hourly wages in the country). Interestingly, average annual real growth over the 1985-2004 period differed by only 0.1 percentage point between the two approaches.

Similar studies have been done in Bangladesh. For example, Titumir and Rahman (2014) conducted a survey of 520 households in seven districts to estimate the value of unpaid domestic work done by women in the country. Men were the heads of the majority of surveyed households and 39.4 per cent of respondents were involved in full-time household work. The study applied the replacement cost valuation method and opportunity cost approach. The replacement cost method used the monthly incomes of domestic workers and average incomes of women in the labour force. The opportunity cost approach involved estimating the amount a woman would have earned if she were in the labour force, given her education level, qualifications and wealth status. Results from use of the replacement cost method showed that unpaid work was equivalent to 3.3 per cent of

GDP in FY2012-13. The opportunity cost approach suggested that unpaid work was equivalent to 10.8 per cent of GDP.

It should be noted that studies that use the opportunity cost approach suffer from some limations. The opportunity value varies widely based on education, efficiency, occupation, age, region and so forth. As a result, there is scope to undervalue or overvalue unpaid work, depending on the overall state of the economy of a country. For comparable unpaid work, the opportunity cost approach does not reflect the actual values of the work. In addition, under this approach it must be assumed that there will be no effect on wage rates due to the increase of the labour force. The opportunity cost approach cannot be used to capture the quality of unpaid work by different groups because quality depends not only on education, class and profession, but also other factors such as expertise and government expenditure. Moreover, studies put numerical values on unpaid work (either through the replacement value or opportunity cost approaches) that measure only the menial tasks performed, and miss the more abstract management functions.

Furthermore, a study conducted by Ahmad and Koh (2011) demonstrates that national-level estimates are acutely sensitive to the value placed on labour in producing unpaid household services. The study used the replacement cost valuation method, which applied a proxy value based on the average post-tax hourly wage that is representative of a broad range of household activities, and the opportunity cost approach, which applied the average post-tax hourly wage from across the whole economy. As expected, the opportunity cost approach generated a higher value than the replacement value method. Nonetheless, some comparisons can be made using the estimates of the study. For example, in Canada, where time series data are available, there is a decrease in the value of the household production of non-market services under both the replacement value and opportunity cost approaches (Ahmad & Koh,

2011).[14] The authors observe that since both men and women tend to share household work in Western societies, in contrast to the societies of South and South-East Asian countries, studies usually measure the value of the household production of non-market services rather than the value of women's unpaid household work.

[14]Hamdad (2003) also found that unpaid work in Canada was equivalent to 33 per cent of GDP using the replacement cost valuation method and 52 per cent of GDP using the opportunity cost approach. The study used the Statistics Canada's time use survey data from the General Social Survey of 1998.

Chapter Four

Methodology of the Study

In order to estimate the contribution of women in Bangladesh's economy, primary data was collected under the present study. The primary data collection method included two techniques: a detailed questionnaire-based household survey and focus group discussions (FGDs).

4.1 Questionnaire-based Household Survey

This study involved conducting a household survey on activity-based time use. The BBS periodically conducts LFSs in Bangladesh. In 2012, BBS conducted a time use survey that included the time uses of both men and women. However, the survey did not provide adequate information to estimate the unpaid activities of women. Hence, a new methodology was developed for the purpose to collecting primary data for this study, where the sampling unit was the household.

4.1.1 Sample Design

A two-stage cluster sampling method (using stratum and primary sampling unit (PSU) identifiers) was used in the new survey on activity-based time use to provide nationally representative estimates. At first, the total number of PSUs was determined using the standard sample size determination formula, after which households from the PSUs were selected. The sampling method enabled the estimation of statistics up to the division level. The BBS developed a master sampling frame from the national census data for 2011, consisting of 1,512 PSUs for the LFS of 2013. Each PSU includes 40-160 households. For this study, PSUs were drawn from the master sampling frame of the BBS. The household survey under the present study was conducted in all 64 districts of Bangladesh (including both urban and rural PSUs), with 378 PSUs being selected from the master sampling frame using the stratified sampling method. From each PSU, 15 households were selected using the systematic random sampling method. The total number of surveyed households was 5,670 (Table 2).

Table 2: Distribution of Samples at Division Level

(Number)

Division	PSUs			Households	Female Respondents	Male Respondents	Total Household Members
	Total	Rural	Urban				
Barisal	39	16	23	585	862	545	2,585
Chittagong	59	34	25	885	1,338	822	4,340
Dhaka	89	55	34	1,335	1,855	1,246	5,648
Khulna	49	25	24	735	1,043	702	3,038
Rajshahi	53	29	24	795	1,140	751	3,282
Rangpur	48	26	22	720	1,032	689	3,039
Sylhet	41	17	24	615	1,050	579	3,334
Total	**378**	**202**	**176**	**5,670**	**8,320**	**5,334**	**25,266**

Source: Household survey conducted by CPD.

The sampling distribution at the divisional level (Table 2) helped estimate statistic that are representative up to division level. The household survey was conducted from March to May of 2014. All female members of households aged 15 years and above as well as the head/senior/adult male member of the household were interviewed using a structured questionnaire. A total of 8,320 women and 5,334 men were interviewed face-to-face. The total population covered by this survey is 25,266.

4.1.2 Questionnaire Design

A comprehensive process was adopted to design the questionnaire for the new survey (Appendix 2 contains the questionnaire used in the household interviews). The questionnaire had two parts. Part-1 dealt with the socio-economic conditions of households and general information on all household members and unpaid work by the male member of the household. The most knowledgeable member of each household (e.g. the household head or most knowledgeable man or woman) was questioned based on the first four sections of the questionnaire on household roster, education, poverty status and unpaid work by the head male member. Part-2 focused particularly on the female members of the household aged 15 years and above, and was divided into three sections, which enquired about the activities done in a day by the female members, replacement and opportunity costs of unpaid work, and perceptions of the most knowledgeable woman of the household. The structure of the questionnaire is presented below.

Section A: Household Roster

- Name, age, religion, ethnicity, sex, marital status, occupation, average monthly income of the household members
- Relationship with the household head

- Disability conditions, if there is any kind of disability among the household members
- Type of ownership of the organisations where household members work
- Whether household members work full-time or part-time
- Employment status of household members
- Daily time spent on the main economic activity/occupation
- Whether the household receives microcredit

Section B: Education

- Educational achievements of all household members of 15 years and above
- Education status (current levels of study)
- How many days household members generally attend educational institutions in a week

Section C: Poverty Status

- Size of land that the household owns
- Level of hygiene (type of toilet)
- Members working as daily wage labourers (if any)
- Education status of all children between 6 and 15 years
- Access to home entertainment (ownership of television)
- Details on house infrastructure (wall type, floor type, roof type, electricity connection)
- Animal rearing (whether the household has cattle)
- Existence of separate kitchen
- Number of rooms in the house
- Sources of drinking water
- Sources of cooking fuel
- Status of the household's income and food consumption

- Change in the status of household's income and food consumption in last 12 months
- Household's monthly average income in last 12 months

Section D: Information on Unpaid Work by the Head Male Member

- Types of unpaid work usually done everyday
- Time needed for each type of work
- Replacement cost of the work
- If he is unable to do the work, who helps him in doing that
- Respondent's perception about the responsible person for doing the unpaid work that he does
- Respondent's perception about the perception of women and society regarding the responsibility of doing that unpaid work

Section E.1.1 Activities, Time Spent and Wage/Salary of the Female Member in a Normal Work Day

- Activities, type (paid/unpaid) and time spent on each activity
- Status of employment and payment for paid work
- Replacement cost on unpaid work
- Self-assessment value on unpaid work
- Opportunity cost for time spent on unpaid work
- Number of days in a month that she does work
- Whether anybody helps her to do the work and what relationship she has with him/her
- Respondent's perception about the responsible person for doing the work that she does
- Respondent's perception about the perception of men and society regarding the responsibility of doing that work
- Whether she does multiple tasks at one time

Section E.2.1 Information on Paid Work by the Female Member

- Number of days per month she is involved in paid work
- On a typical work day, number of hours she spends on work
- Average income per month
- Whether any portion of payment is made in kind and its monetary value

Section F. Opportunity Cost and Cross-Check if the Female Member is not Involved in Paid Work

- Whether she likes to be involved in paid work
- If she likes to be involved in paid work, what type of work she prefers to be involved in (full-time, part-time) and which occupation is suitable for her depending on her age, education and the scope of jobs in the region
- Payment of the suitable occupation that the female member prefers to be involved in
- Validation of the preferences of the female member through cross-checking with a key informant

Section G: Additional Questions

Perception and opinion of the head female member about paid and unpaid work. The following points are for full-time unpaid women:

- Reasons to be or not to be interested in being involved in paid work
- Benefits of being involved in paid work
- Drawbacks of being involved in full-time unpaid work

The follwing points are for those women who are involved in paid work:

- Positive and negative aspects of being involved in paid work
- Freedom to spend the money that she earns

In the questionnaire, the variables for all sections were defined by numerical codes for activities done by the population of Bangladesh. Such coding helped keep the study coherent with international standards. In 1997, the UN Statistics Division developed the trial International Classification of Activities for Time-Use Statistics (ICATUS), which is now being used by both developed and developing countries. The main objective of the 1997 classification was to prepare a list of activities that is consistent with the SNA and capture activities that are comparable with other time use classifications. Initially, ICATUS divided the activities into 10 broad categories. These 10 categories were then organised into three groups:

a. SNA activities or activities within the SNA production boundary (categories 1-3)
b. Non-SNA activities or activities considered outside the SNA, but falling under the 'general production boundary' (categories 4-6)
c. Personal activities or 'non-productive' activities (categories 7-10)

The main advantage of ICATUS is that it was designed to look at the specific needs of both developed and developing countries. Still, it has some shortcomings. For instance, the first group of categories can be considered vague since the definition of establishment from the perspective of a developing country has been found to be confusing, irrelevant and invalid (Hirway, 2000). The first group does not clearly identify formal and informal activities or distinguish between subsistence

Table 3: Activity Codes in ICATUS

Code	Activity
SNA Activities (01-05)	
01	Work for corporations/quasi-corporations, non-profit institutions and government (formal sector work)
02	Work for household in primary production activities
03	Work for household in non-primary production activities
04	Work for household in construction activities
05	Work for household providing services for income
Non-SNA Activities (06-08)	
06	Providing unpaid domestic services for own final use within household
07	Providing unpaid care giving services to household members
08	Providing community services and help to other households
Personal Activities (09-15)	
09	Learning
10	Socialising and community participation
11	Attending/visiting cultural, entertainment and sports events/venues
12	Hobbies, games and other pastime activities
13	Indoor and outdoor sports participation and related courses
14	Mass media
15	Personal care and maintenance

Source: ICATUS 2003.

and market-oriented activities. In 2003, an updated version of ICATUS was published on the UN's website.[15] A new list of activities coded at the two-digit level from 01 to 15, with six-digit-level sub-categories under each broad category, was introduced. The survey used for this study adopted the activity codes in the ICATUS 2003 (Table 3).

To observe the usual daily activities of women in Bangladesh, this study designed a list of activities that follows ICATUS 2003 at the two-digit level. Each activity in Bangladesh was assigned a new code at the four-digit level and matched the broad categories of ICATUS 2003 at the

[15]For details, see the website: http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=231&Lg=

two-digit level. Groups were then created for SNA, non-SNA and personal activities for convenient analysis.

4.1.3 Survey Method

Time diary and recall methods are widely used in time use surveys. The time diary method is also known as the 'tool of preference' (INSTRAW, 1995). According to this method, the respondent maintains a diary describing her daily activities from the start to the end of the day. This method is applicable in countries where the literacy rate is high. In countries where the literacy rate is low, a more practical approach is to have an enumerator ask people about their daily work and fill a questionnaire.

The literacy rate in Bangladesh is about 56.8 per cent, with 59.8 per cent of men and 53.9 per cent of women being literate (BBS, 2012). Since these rates are relatively low, it was decided for this study that each respondent would be interviewed by a trained enumerator who would ask respondents to recall activities that they do during a normal work day and the time spent on those activities. To ease their recalling, respondents were to be guided in such a manner that they could describe a very recent day that was considered a typical work day.

One of the caveats of this approach is that a single activity can be performed during more than one specified time span, which gives rise to difficulties in identifying the amount of time spent on each activity. To overcome this caveat, this study adopted the method where total time is calculated for each activity, even when the activity is performed more than one time a day. Another shortcoming of this approach is that in some cases women may multitask simultaneously. This study thus took note of other activities that a woman does during her main task without focus on time spent or patterns.

Enumerators needed to be careful while collecting data from female respondents. Given the cultural setting of Bangladesh, it is difficult to

gather authentic information from women working in the household. This is partially due to the lack of interest from respondents, and partially because women fear consequences from their husbands and in-laws, who forbid them from honestly replying to sensitive questions about their household. In most cases, men and/or in-laws reply on behalf of women.

Enumerators were instructed to interview all female household members aged 15 years and above and only one male member from the same age category, either the household head or the most senior and educated member. As the survey period was limited, if any member was absent at the time of interview, the enumerator waited for her or him to return until the survey team had to move on from that region. If the member did not come back by that time, relevant information on female members was gathered from the available main female member of the family and information on male members was gathered from the main male member (or from any member if it was not possible to maintain these criteria). If all members of a household were absent until the survey team had to move on from that region, the household was replaced by a household in a similar socio-economic category.

Another difficulty in data collection was that there may have been variation in time use during typical work days. There are differences in day-to-day work, work between regions, weekday and weekend work, seasonal work and so on. Still, there are similarities in weekday work, weekend work, work within a region and work during a single season. This study covered only weekdays. Respondents were asked to describe a normal 24-hour work day. Official work days in Bangladesh are from Sunday to Thursday. Variations were allowed if a respondent's work day varied for any reason. Regional variation was covered in this study as the survey was conducted across Bangladesh. Seasonal variation, which is an issue in rural areas where agricultural work is predominant, could not be covered due to the limited scope of this study.

4.1.4 Quality Control

Various quality control measures were followed during the study period. The study was initiated with comprehensive discussions and presentations on the relevant concepts and methodology. Major quality control measures included the following.

Discussion with Professionals

At the beginning of the study period, discussions were held with the statistical specialists of the Centre for Policy Dialogue (CPD) and the BBS with regard to the scope of the study and the sample design methodology. The questionnaire at the draft stage was shared with the BBS officials and other experts in an informal presentation to clarify the scope of the study. Comments that were offered were incorporated going forward.

Expert Group Meetings on the Questionnaire and Sample Design

After the completion of the first draft of the questionnaire, an in-house expert group meeting was held at CPD with subject experts and statistical specialists present. Based on the findings of that expert group meeting, a second draft of the questionnaire was prepared. Once the second draft was completed, a special expert group meeting was held. A briefing on the study was presented by the team leader, after which comments were offered on the questionnaire and study design. The questionnaire was finalised by considering points drawn from the in-house and special expert group meetings. Experts from the BBS were consulted during the sample design. To identify households for the survey, support from local offices of the BBS was sought when necessary.

Training of Enumerators

As the survey of the present study was to be different from regular surveys, enumerators needed a thorough understanding of the study objectives and the appropriate way to interview different groups of people. A five-day rigorous training session was provided to enumerators. Training was provided by experts from the BBS, university academia and the research team. A survey team of 40 enumerators conducted the survey. The team was divided into four groups each consisting of nine members under the supervision of a team leader.

Pre-testing of the Questionnaire

After completion of the fourth day of training, the enumerators went into the field for pre-testing of the questionnaire. One of the members of the research team judged the adequacy of the questionnaire and supervised the enumerators. The objectives of the pre-testing were to observe respondents' reactions to new types of questions, estimate the time to complete a questionnaire, examine the level of respondents' understanding of the questionnaire, acquaint the surveyor with the questionnaire in the real ground situation, study the enumerators' expressions towards the respondents, and understand the coherence and sequence of the different sections of the questionnaire.

Survey Manual

A survey manual was provided to enumerators to avoid confusion and address the complexity of the questionnaire. It was prepared based on issues that arose during training, clarifications that were deemed necessary and the suggestions of enumerators. The manual served as a field guide for the survey team.

Supervision of Field Work

Guided by experienced supervisors, the enumerators entered the field after comprehensive training and testing of the questionnaire. At the end of each day of data collection, the data were checked and cleaned with the support of the supervisors, who were present in the field with the enumerators. The research team communicated with the survey team over phone and online to seamlessly guide and solve problems in the field. Problems as regards locating the listed households were solved by supervisors and members of the research team through direct visits or phone calls to the responsible person at local offices of the BBS. The personnel at regional BBS offices also provided support to find households. In many places, they were present in the field with enumerators. Members of the research team were in the field intermittently to observe progress on data collection and monitor the survey team. Following data collection, the data were processed and cleaned according to a systematic procedure.

4.2 Focus Group Discussions

The survey was conducted to collect very specific data. To capture the perceptions, lifestyles, living standards, cultural variation and various qualitative aspects of life, FGDs were held in some purposively selected areas of Bangladesh. These FGDs helped accentuate the nuances of the survey results. A total of 12 FGDs were conducted in five districts (three in Dhaka, two in Kishoreganj, three in Rangpur, and four in Chittagong and Cox's Bazar), and approximately 150 people participated in the FGDs. The areas were selected on the basis of regional variation to better understand regional differences in time use and other characteristics. Some specific groups were selected to participate in the FGDs:

- Women (educated full-time housewife, full-time housewife with little or no education, part-time working woman, unmarried woman who does not work, unmarried working woman and unpaid family farm/business worker)
- Working and professional women (combination of lower-, middle- and upper-class workers and professionals)
- Microcredit receivers
- Women's rights activists and local government women's representatives (combination of women's right activists, female leaders, NGO workers and local government women's representatives)
- Female students (Grades 8 to 12)
- Men (combination of educated and uneducated working, professional and unemployed men with different family statuses and religious views)

Discussions encompassed a number of specific issues and debates:

- Patterns of unpaid domestic work (economic/non-economic activities)
- Most of unpaid work is done by women/men
- Unpaid work brings/does not bring recognition to contributors from beneficiaries
- Housewives have/do not have control over household income
- Asset and credit control situation of women
- Paid work empowers/does not empower women to practice their rights in each and every sphere of life
- Unpaid household work should/should not be valued to recognise contributors
- Domestic work is/is not less important than formal sector work and should/should not be compared with mainstream economic work
- Need/do not need to recognise female farmers
- Women want/do not want to be involved in paid work

- How marriage affects income-generating work (familial and social treatment before and after marriage regarding participation in paid work)
- Types of suitable work for women

4.3 Valuation of Women's Unpaid Work

Unpaid domestic and personal activities of household members for own household consumption should be valued and preferably recorded in a satellite account of the SNA (ESCAP, 2003). Personal activities cannot be transacted and converted to others' welfare. Therefore, this study focused on estimating the value of work that might be converted to money in competitive processes. For countries such as Bangladesh, unpaid work, especially unpaid household work, is an emotionally sensitive issue as this type of work is connected to feelings of care and commitment. This study avoided the human face of unpaid work and considered only its market value irrespective of the person who did the job. Previous studies applied different methods to estimate unpaid work and the unvalued part of an economy. Hourly wage is specified by most approaches, which can be divided into four basic groups: the average earnings approach, opportunity cost approach, generalist approach and specialist approach (International Labour Office, 2011). In Bangladesh, payment on an hourly basis is rare – payment generally takes place monthly and according to contracts.

Estimating the valuation of unpaid work (non-SNA activities) involved the following formula:

$$V = W \times H \times N$$

Where,

V = Monetary value (shadow pricing) of unpaid work by women

W = Wage rate/time or work

H = Time/work done

N = Number of women

A shadow price was assigned to estimate the valuation by using two methods:

i. Replacement cost method
ii. Willingness to accept method

In this study, these two separate methods were used to check the robustness of estimation results.

The replacement cost method is widely used to estimate unaccounted (unpaid/non-SNA) contributions in developing countries. The present study used the generalist replacement cost method since no specialist sector produces household services in Bangladesh. The shadow wage paid in respective regions for comparable work was used. Data were collected by asking the following question:

If you or your neighbour hires someone else to do a job, how much would you have to pay monthly for this work (in Tk.)?

In the willingness to accept method, the wage that the female respondent was willing to accept for the respective work (outside her own household) was used to estimate the cost. Data were collected by asking the following question:

If someone wishes to pay you for all unpaid work you do daily, how much are you willing to accept per month for this work, considering the type of work, your education, your age and time spent on the work (in Tk.)?

Chapter Five

Findings of the Study

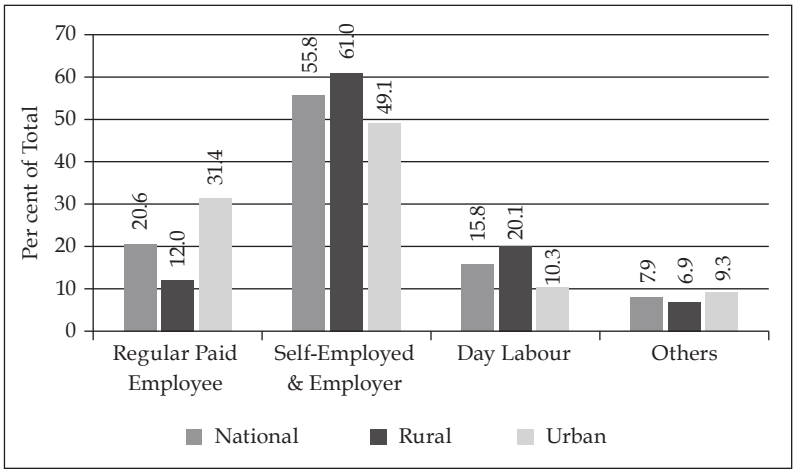
This chapter starts with general information on households and families' characteristics in Bangladesh derived from the household survey conducted under the present study. Such information is important from a sociological research point of view to count the number of households and their distribution in rural and urban areas and measure family characteristics such as household size, ethnicity, religious view and average monthly income. Following the general information, the chapter unveils estimated time use and valuation of unpaid work of women in Bangladesh from the aforesaid survey. Finally this chapter presents the survey results on perceptions of women as regards their involvement in both SNA and non-SNA activities.

Average household size in Bangladesh was found to be 4.5 members. This estimate is consistent with the recent national surveys including the LFS of 2010 (4.5), Household Income and Expenditure Survey (HIES) of 2010 (4.5) and Bangladesh Population and Housing Census of 2011 (4.4). The

estimates for average household size in rural and urban areas are similar at 4.5 and 4.4 members per household, respectively. Among divisions, the number of members per household on average is the highest in Sylhet (5.4), followed by Chittagong (4.9). In contrast, the average household size is the lowest in Khulna and Rajshahi (4.1). If the population aged 15 years and above is considered, each household on average has three such members, with composition equal between men and women.

According to estimates from the survey conducted under the present study, a large proportion of the total working population in Bangladesh are either self-employed or employers (55.8 per cent) (Figure 7). Only about one-fifth of total employed people are primarily involved in regular paid employment. The share of regular paid employees was found to be relatively higher in urban areas (31.4 per cent). In contrast, only 12 per cent of total employed people in rural areas are regular paid employees. In this context, it should be recalled that most of the jobs created in the country are in the informal sector. Hence, the share of regular paid jobs is lower in

Figure 7: Employment Status of Total Employed People



Source: Estimated from the household survey conducted by CPD.

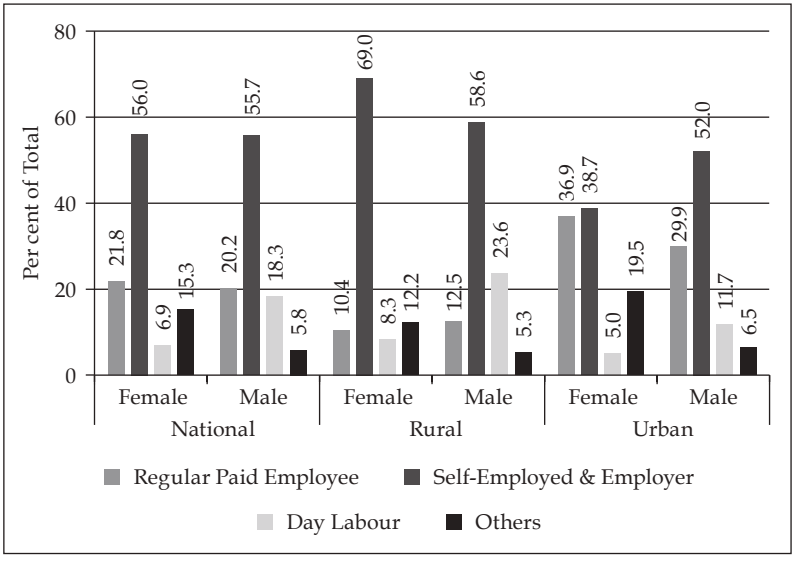
Note: 'Others' include unpaid family workers, irregular/casual paid workers, domestic workers and all others.

Bangladesh compared to many other developing countries. The share of day labour in total employment is almost double in rural areas (20.1 per cent) compared to urban areas (10.3 per cent).

Curiously, the share of regular paid female employees (21.8 per cent) among total women is marginally higher compared to male employees (20.2 per cent) (Figure 8). Indeed, the national average is driven by female employees in urban areas. About 36.9 per cent of total women working in urban areas are involved in regular paid employment. This is similar to the share of women in urban areas who are either self-employed or employers (38.7 per cent). In rural areas, only about 10.4 per cent of working women fall into the regular paid employee category, while about 69 per cent of female workers are either self-employed or employers.

Women are mostly engaged in part-time work – about two-thirds of total female employment is part-time in nature. In contrast, about 82.4 per

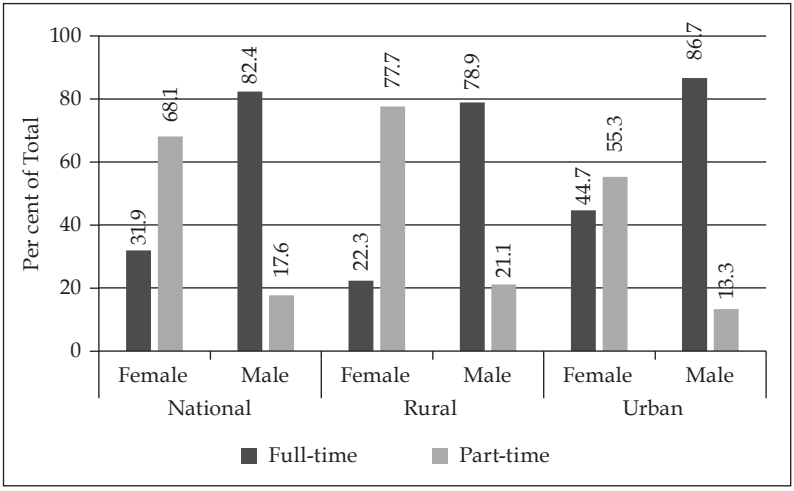
Figure 8: Employment Status by Sex and Location



Source: Estimated from the household survey conducted by CPD.

Note: 'Others' include unpaid family workers, irregular/casual paid workers, domestic workers and all others.

Figure 9: Patterns of Work by Employed People



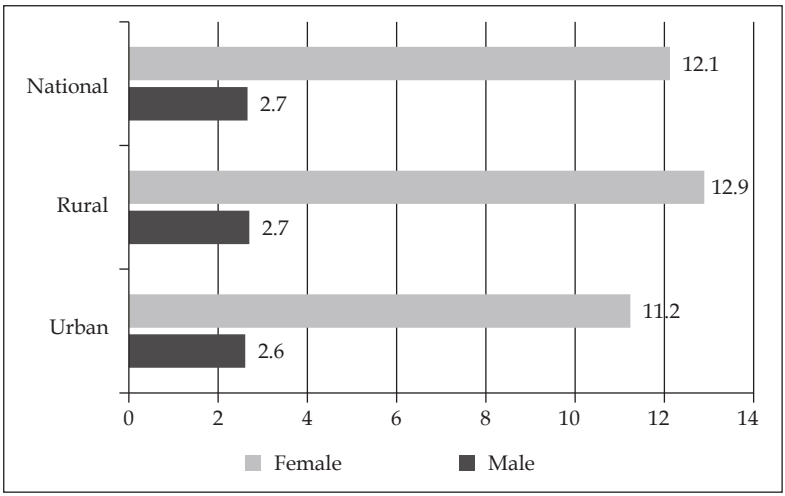
Source: Estimated from the household survey conducted by CPD.

cent of employed men are engaged in full-time work (Figure 9). Even in urban areas where a larger share of women are involved in regular paid jobs, more than half of the women are part-timers. In rural areas, about 77.7 per cent of female workers are involved in part-time work in contrast to about 78.9 per cent of male workers being involved in full-time paid work. A major reason for women in Bangladesh largely being involved in part-time work is that they remain responsible for unpaid household work even when they are employed, with the involvement of employed male household members in household work being substantially lower. These findings were confirmed during the FGDs conducted under this study. The FGDs further confirmed that such practices are largely common across Bangladesh and among different age groups. Participants in the FGDs, who included both men and women residing in rural and urban areas, informed that even when a 'female household head' is employed full-time or part-time, she performs most of the household-related care giving. That is why it is often preferred that the female members of the household take up part-time work.

5.1 Time Use and Valuation of Unpaid Work of Women in Bangladesh

Time use patterns of both women and men can provide insight into the actual contributions of these groups in the economy. The household survey conducted under the present study documented all the activities of women and men (aged 15 years and above) in the household. The activities were categorised according to ICATUS at the four-digit level. From the data collected during the survey, it was found that women are involved in a wide range of activities that do not necessarily fall under SNA or personal activities. It was estimated that, on average, a female member of a household undertakes 12.1 non-SNA activities during a typical day. The corresponding figure for a male household member is only 2.7 (Figure 10). The range of non-SNA activities performed by female household members is wide, while male members only perform a handful of activities – shopping for food, shopping for other items, tending to children, household planning and caring for livestock (the latter only in

Figure 10: Average Number of Non-SNA Activities Undertaken during a Typical Day

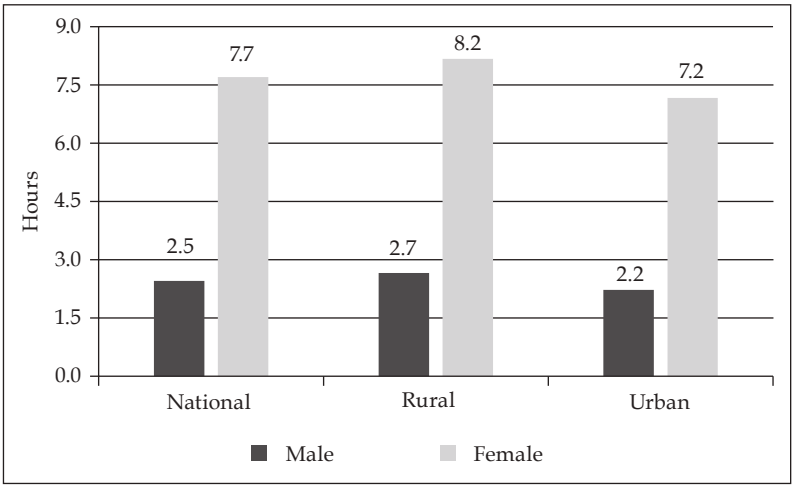


Source: Estimated from the household survey conducted by CPD.

rural areas). These patterns do not vary much between rural and urban areas. In rural areas, the average number of activities reported by women was 12.9 during a typical day, with the corresponding figure for urban areas being 11.2. Notably, men perform an almost similar number of activities in rural and urban areas (2.7 and 2.6, respectively). However, it should to be taken into consideration that the type of work may vary for men between rural and urban areas. For instance, caring for livestock is a common activity for many households in rural areas.

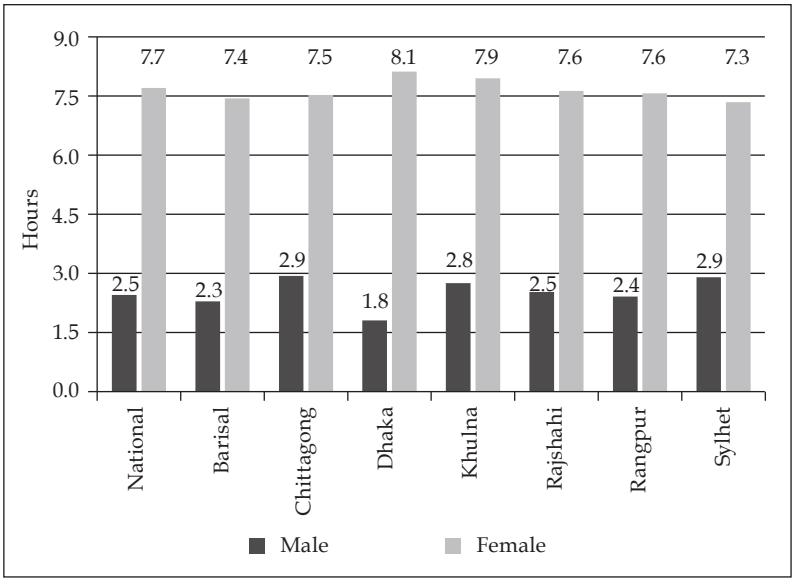
In terms of time use, women who perform a substantially higher number of non-SNA activities also spend a substantially higher number of hours during a typical day on non-SNA activities. It was estimated that, on average, a man works about 2.5 hours on non-SNA activities during a typical day, while a woman works about 7.7 hours or about three times longer (Figure 11). These patterns are similar in both rural and urban areas. However, rural women, on average, spend about one more hour on non-SNA activities compared to women residing in urban areas, which

Figure 11: Average Time Spent on Non-SNA Activities



Source: Estimated from the household survey conducted by CPD.

Figure 12: Average Time Spent on Non-SNA Activities by Division



Source: Estimated from the household survey conducted by CPD.

perhaps also helps explain the reason for the majority of rural women being involved in part-time work.

Among the divisions, women in Dhaka spend the highest number of hours on non-SNA activities on average, while men spend the lowest number of hours (Figure 12). It appears that there is a strong negative correlation between the two groups. Overall, the variation for women spending time on non-SNA activities among the divisions is not very wide – it stands to be less than one hour.

The present study attempted to value the non-SNA activities performed by women in terms of the estimated GDP of Bangladesh. Value addition was estimated based on SNA guidelines. It should be mentioned that the official GDP statistic for FY2013-14 was estimated by following the sectoral contribution method (BBS, 2014). In this study, the valuation of women's contribution in the economy in terms of non-SNA activities was estimated

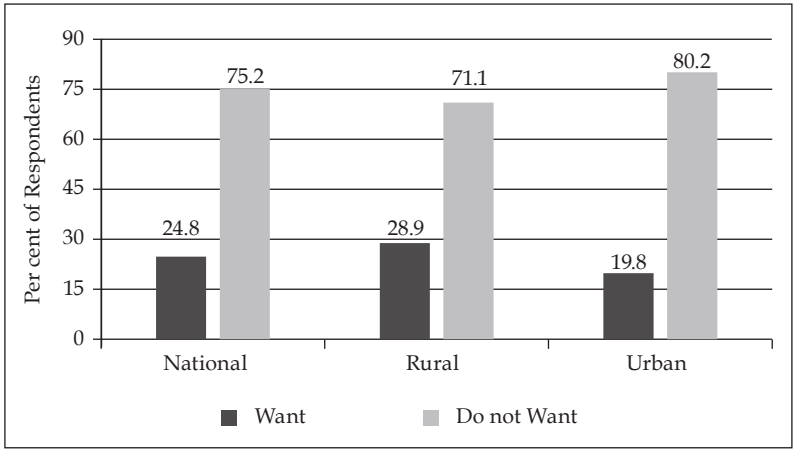
based on the income accounting method, which was applied to estimate the wage income that could be earned if the value addition generated from the non-SNA activities of women was marketed and priced. The study followed two valuation methods: the replacement cost method and willingness to accept method. As mentioned in Chapter 4, these two methods have been widely used in similar studies conducted in several other countries. Based on the replacement cost method, the estimated value of women's unpaid work (non-SNA activities) was equivalent to 76.8 per cent of GDP in FY2013-14. According to the willingness to accept method, the corresponding estimate was equivalent to 87.2 per cent of GDP in FY2013-14. These figures are 2.5 to 2.9 times higher than the income that women received from paid work estimated in this study.

These estimated figures were found to be in between the figures that were estimated for other comparable countries in the region. Using the replacement cost method, George et al. (2009) estimated that the contribution of women's unpaid household work in India was 61 per cent of GDP. Shrestha (2008) used the hourly government wage rate as the price of labour and found that the contribution of women's unpaid household work in Nepal was 91.3 per cent of GDP. Based on the replacement cost method, Efroymson et al. (2007) estimated that the value of women's unpaid household work in Bangladesh was as high as the official GDP figure. The literature review conducted for this study has found that the contribution of women's unpaid work in countries of the Organisation for Economic Co-operation and Development (OECD) was somewhat lower than the estimated value for Bangladesh.

5.2 Survey Results on Perceptions

Besides examining time use patterns and estimating the value of women's unpaid household work, the survey asked all women aged 15 years and

Figure 13: Women's Willingness to be Involved in Paid Work among those who are Currently not Involved in Paid Work



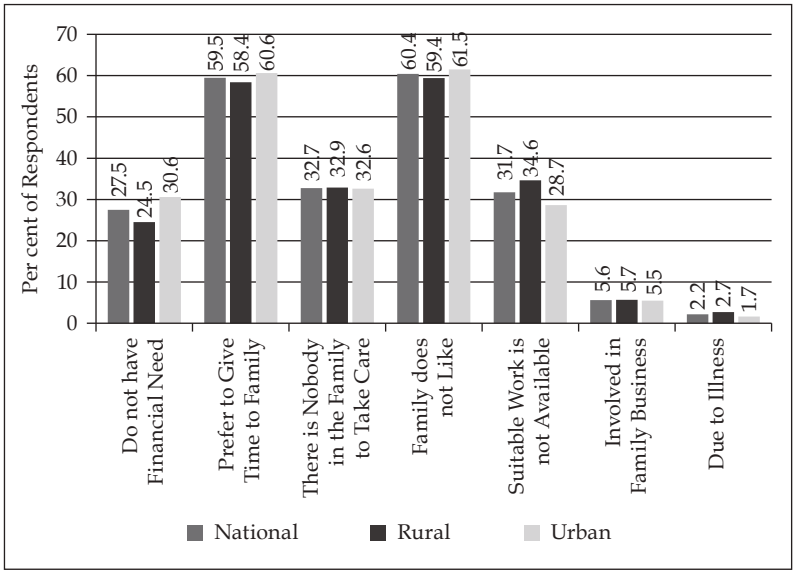
Source: Estimated from the household survey conducted by CPD.

above, employed or not, about their perception on having willingness to be involved in paid work. Among the women who are currently not involved in paid work, only one-fourth want to be involved in paid work (Figure 13). Curiously, the willingness is higher in rural areas (28.9 per cent) than urban areas (19.8 per cent).

About 60.4 per cent of women who do not want to be involved in paid work informed that it was because "family does not like" the arrangement (Figure 14). Interestingly, this perception was more common in urban areas. Among other reasons, "prefer to give time to family" was cited by 59.5 per cent of respondents. Since respondents were allowed to mention more than one reason, many respondents who mentioned that "family does not like" the arrangement also mentioned that they "prefer to give time to family." This suggests that social stigma may force women to comply with the patriarchal nature of society.

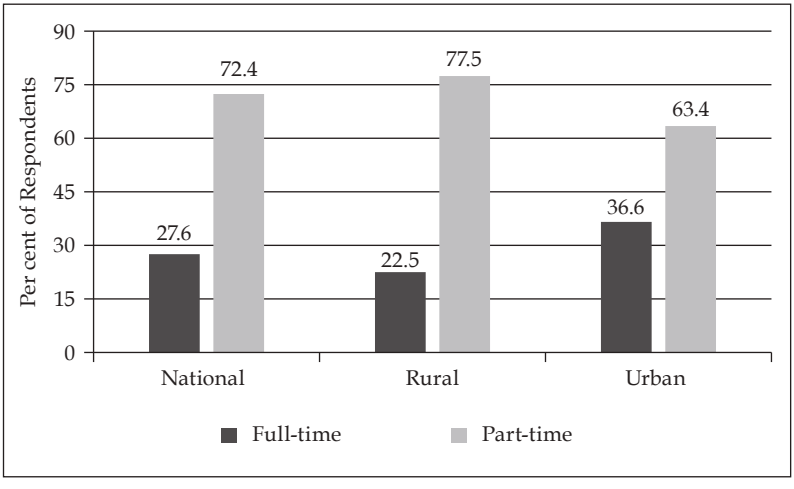
Women who are currently not involved in paid work but want to be, would most likely to look for part-time employment (72.4 per cent)

Figure 14: Reasons for not being Involved in Paid Work among those who are Currently not Involved in Paid Work and do not Want to be



Source: Estimated from the household survey conducted by CPD.

Figure 15: Type of Paid Work Wanted by Women who are Currently not Involved in Paid Work but Want to be

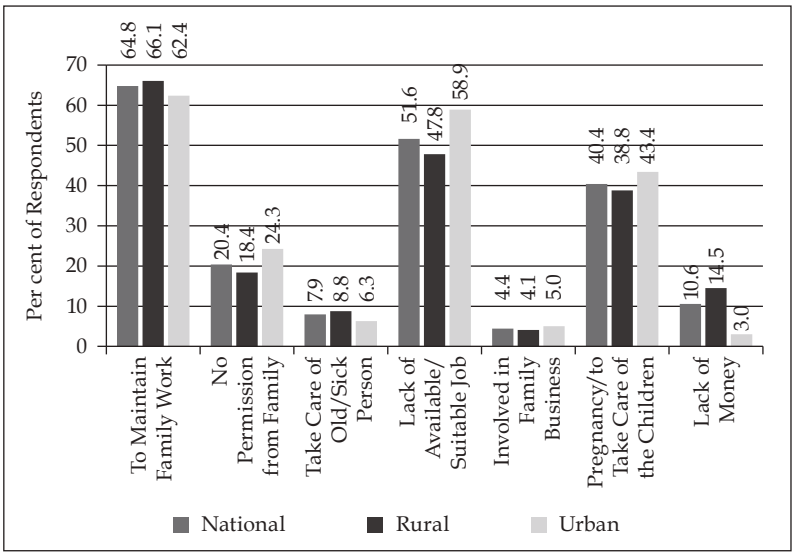


Source: Estimated from the household survey conducted by CPD.

(Figure 15). Compared to women in rural areas, more women in urban areas would prefer full-time jobs, which shows that it is not easy for many women to take up full-time employment responsibilities since they will likely have to continue spending time on non-SNA activities. It follows that employment figures may not significantly change in the near future even if employment opportunities are offered to women who are currently not involved in paid work.

Among women who want to be involved in paid work, about 64.8 per cent informed that they could not do paid work due to maintaining family work (Figure 16). The corresponding figures for rural and urban areas are 66.1 per cent and 62.4 per cent, respectively. Among other reasons, lack of available/suitable job (51.6 per cent) and pregnancy/to take care of children (40.4 per cent) were most common. Unavailability of available/ suitable job was mentioned by a larger share of urban women (58.9 per

Figure 16: Reasons for not being Involved in Paid Work Earlier



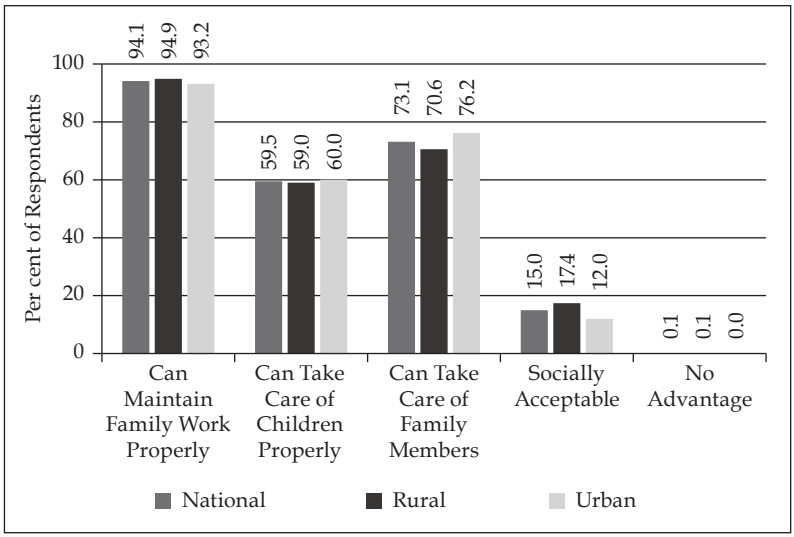
Source: Estimated from the household survey conducted by CPD.

cent) compared to rural women (47.8 per cent). Interestingly, 14.5 per cent of rural women mentioned lack of money to be a reason. It is likely that these women prefer to be self-employed.

Women who are only involved in unpaid work informed that they can maintain family work and take care of family members and children properly (Figure 17). These are considered to be benefits of being involved only in unpaid work. Surely, being involved in paid work implies additional burdens on many women. It was found that women often continue to spend a large amount of time on non-SNA activities despite being involved in paid work. Sharing the burden of unpaid household work is thus very important to promote female employment in Bangladesh.

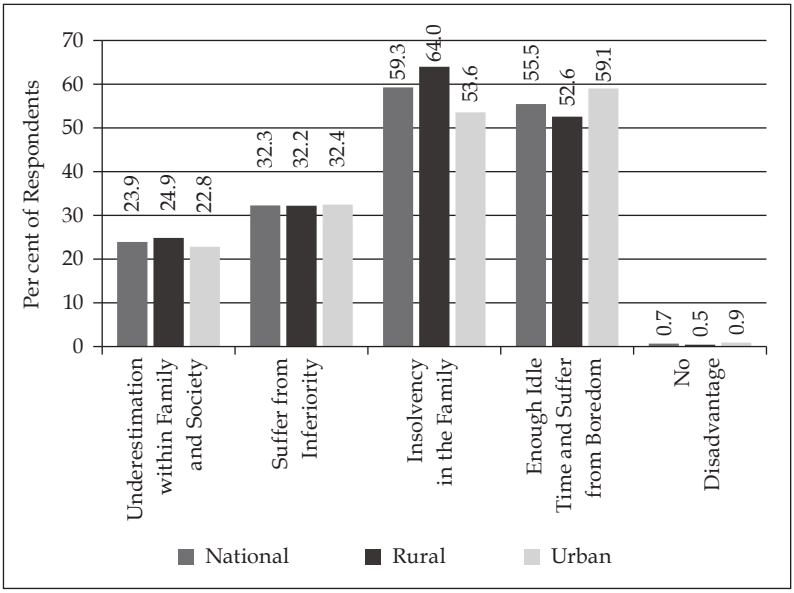
Insolvency in the family features as a major problem for not being involved in paid work (Figure 18). Indeed, during the FGDs, many women and men agreed that both male and female members of the household

Figure 17: Benefits of being Involved Only in Unpaid Work



Source: Estimated from the household survey conducted by CPD.

Figure 18: Problems of being Involved in Full-time Unpaid Work



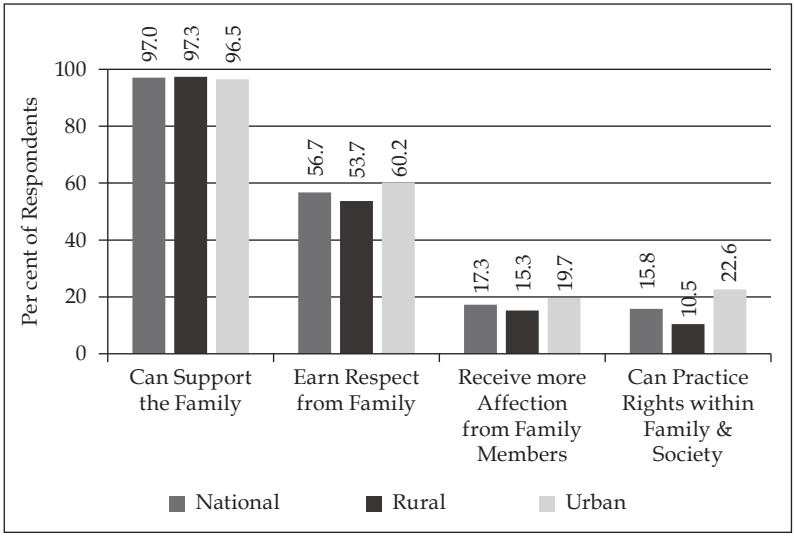
Source: Estimated from the household survey conducted by CPD.

earning money help to run the family and result in a better life. Often additional earnings are used for the education of children, which helps families move out of poverty in a sustainable manner.

Women who are involved in paid work find the ability to support family to be the most common benefit (Figure 19). This result also supports the argument mentioned above which was validated during the FGDs. It is also encouraging that more than half of employed women reported that being involved in paid work led them to earn respect from family members.

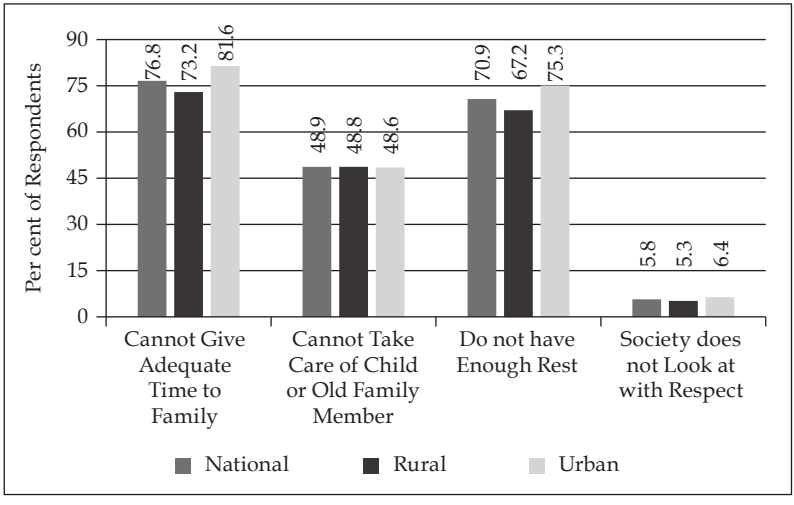
Women who are involved in paid work informed that inadequate time for family was the biggest problem of being involved in paid work (Figure 20). More than three-fourths of employed women reported that they are not able to give adequate time to the family, with incidence being

Figure 19: Benefits of being Involved in Paid Work



Source: Estimated from the household survey conducted by CPD.

Figure 20: Problems of being Involved in Paid Work



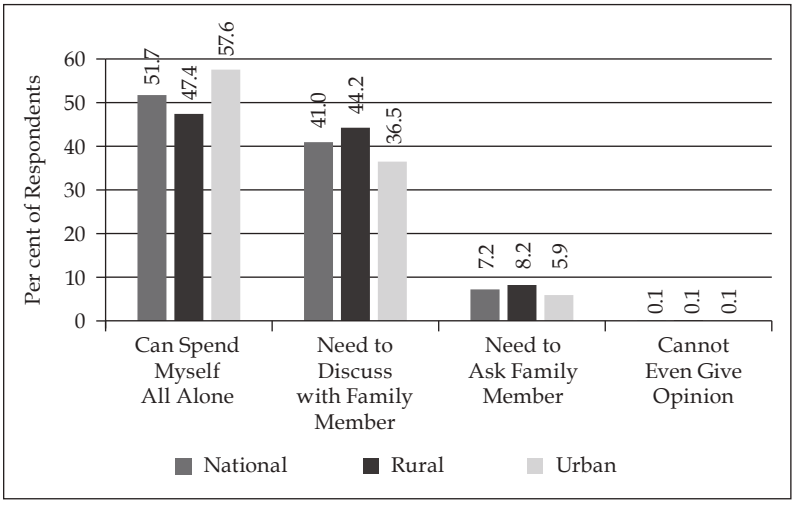
Source: Estimated from the household survey conducted by CPD.

somewhat higher among women in urban areas (81.6 per cent) compared to women in rural areas (73.2 per cent). In general, being involved in paid work implies that women may have little time to rest. This is because they may disproportionately have to spend time on non-SNA activities even when they are employed.

About 51.7 per cent of women who are involved in paid work can spend their earned income by themselves (Figure 21). However, about 41 per cent need to discuss with family member(s) and 7.2 per cent need to seek permission. These phenomena are more common in rural areas.

Women in Bangladesh are mostly involved in non-SNA activities. These activities are obviously productive and create value. However, since they are not marketed and often cannot be priced, the contribution of women in the economy goes unrecognised. This study found that even when a woman is employed, she often has to perform the majority of non-SNA activities in a household. As a result, women are likely to become

Figure 21: Freedom to Spend Income by Women



Source: Estimated from the household survey conducted by CPD.

involved in part-time employment, which is often found in the informal sector and with low pay. This situation prevents women in Bangladesh from using their full potential to contribute to production in the economy that is tracked by official statistics. It is therefore critical to recognise the contribution of women's unpaid work in a household, and raise awareness, so that male household members share women's burdens.

Chapter Six

Conclusions and Policy Recommendations

The present study generated much new evidence on the contribution of women in the economy of Bangladesh. Regarding time use for unpaid work (non-SNA activities), the study found that the time spent by a woman (aged 15 years and above) on non-SNA activities is about three times higher than that by a man (aged 15 years and above). On average, a woman works about 7.7 hours on non-SNA activities during a typical day. In contrast, a man works about 2.5 hours. This pattern is evident in both rural and urban areas. The study also found that, on average, a female member of a household undertakes 12.1 non-SNA activities during a typical day. The corresponding figure for a male household member is only 2.7.

A key objective of this study was to reliably estimate the valuation of unpaid household work (non-SNA activities) undertaken by women. Based on the replacement cost method (using the shadow wage for comparable work), the estimated value of women's unpaid household

work was equivalent to 76.8 per cent of GDP in FY2013-14. According to the willingness to accept method (considering work outside of women's own households), the corresponding estimate was equivalent to 87.2 per cent of GDP in FY2013-14. These figures are 2.5 to 2.9 times higher than the income that women received for paid work estimated in this study.

Based on these findings, this study puts forward a number of policy recommendations for four stakeholder groups: (i) the Government of Bangladesh; (ii) NGOs, women's organisations and the media; (iii) think tanks and academia; and (iv) the private sector.

Recommendations for the Government of Bangladesh

i. The BBS should conduct a comprehensive time use survey on a regular basis in order to gather information on the time use patterns of both men and women in various activities.
ii. The government should undertake policy reforms towards changing the estimation practices of the SNA so that women's unaccounted activities are reflected in the GDP. The government could form a committee consisting of economists, statisticians, gender specialists, advocacy group representatives and relevant stakeholders who can provide concrete inputs for developing a methodology to include women's unaccounted activities in GDP.
iii. The government should undertake programmes that may contribute to decreasing the workload of women in the household. For example, increased accessibility to drinking water and natural gas for cooking as well as the establishment of child care centres can reduce the time spent by women on household work. Decreasing their workload can make women's contribution to the economy more visible and help women get involved in the formal sector or enjoy their personal time.
iv. The government should introduce legal measures to eliminate wage discrimination against women in all sectors. One of the reasons for

the lower contribution of women in the national economy is lower wages for women compared to men. Eliminating wage discrimination should make women's economic contribution more easily measurable.

Recommendations for NGOs, Women's Organisations and the Media

i. NGOs and women's organisations should play an active role towards reducing the wage differential between men and women by promoting equal pay for equal work.
ii. Women's organisations should highlight how the well-being of families depends on household work so that policymakers recognise the economic value of household and other unaccounted activities during policy formulation.
iii. Given that the pre-condition for recognition of women's contribution to the economy is a change in overall attitudes, values and perceptions towards women, NGOs, women's organisations and the media should play an active role in sensitising society and policymakers through the organisation of workshops, seminars and dissemination activities.

Recommendations for Think Tanks and Academia

i. Think tanks should conduct in-depth sectoral studies on women's contribution to various sectors of the economy and disseminate the findings among policymakers, politicians, women's organisations, the media and broader society. The findings of such studies should help policymakers formulate practical policies and programmes.
ii. Universities should promote the study of women's economic contribution both within and outside the household. Attitudes towards research on women's issues need to change.

Recommendations for the Private Sector

i. The private sector should come forward to set up child care centres and hostels for working women in order to facilitate women's participation in the formal sector.
ii. The private sector should provide training to women to enable them to secure high-skilled jobs, which would help reduce the wage differential between men and women.

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Appendix 1: Summary of Estimated Unpaid Contribution of Women in Different Countries

Country (Source)	Calculation Methods (Type of Work)	Value
Bangladesh (Hamid, 1996)	Multiplied the time spent on non-market activities by male or female members of the household by the respective wage rates for similar kind of works	GDP of Bangladesh (1989-90) would increase by 29 per cent if unpaid work was included. Proportion of national production attributed to women would increase from 25 per cent to 41 per cent if unpaid work was included in the national economy estimates
Bangladesh (Efroymson, Biswas, & Ruma, 2007)	i) Market replacement payment by task ii) Per month cooking for single person Tk. 200 is generalised for 45 works iii) Government wage: mid wage Tk. 10,000 (Women's unpaid work)	GDP would increase from USD 61 billion to – i) USD 131 billion ii) USD 143 billion iii) USD 152 billion
Bangladesh (Titumir & Rahman, 2014)	i) Replacement cost ii) Opportunity cost (Domestic work)	i) 3 per cent of GDP ii) 11 per cent of GDP
China (Dong & An, 2012)	i) Opportunity cost ii) Economy-wide earnings iii) Replacement cost (Unpaid work)	Between 25 per cent and 32 per cent for different methods

(Appendix 1 contd.)

(Appendix 1 contd.)

Country (Source)	Calculation Methods (Type of Work)	Value
India (Hirway, 2000)	Prevailing wage rates of workers of various categories	Domestic products of the selected states increased by 26 per cent to 50 per cent, when the value of extended SNA activities were added
India (George, Choudhary, Tripathy, & Abraham, 2009)	Replacement value: wage of current comparable work to per task (Women's unpaid household work)	61 per cent of GDP
Nepal (Shrestha, 2008)	Hourly government wage rate (Women's unpaid household work)	91 per cent of GDP
Pakistan (Arshad, 2008)	Replacement value: wage of current comparable work to per task per month (Women's household work)	23 per cent (official exchange rate) or 8 per cent (Purchasing Power Parity – PPP)
Vietnam (Thu & Efroymson, 2008)	Opportunity cost (household's average income) Market replacement cost (housekeeper cost) (Women's household work)	51 per cent of GDP
Australia 1997 (Ahmad & Koh, 2011)	Unpaid household work	48 per cent of GDP
Australia 2006 (Ahmad & Koh, 2011)	*Individual function replacement cost:* i) Male and female wage rate ii) Person wage rate *Housekeeper replacement cost:* iii) Person wage rate	 i) 44 per cent of GDP ii) 44 per cent of GDP iii) 42 per cent of GDP

(Appendix 1 contd.)

(Appendix 1 contd.)

Country (Source)	Calculation Methods (Type of Work)	Value
	Hybrid replacement: iv) Male and female wage rate v) Person wage rate *Gross opportunity cost:* vi) Male and female wage rate vii) Person wage rate net viii) Person wage rate (Unpaid work)	 iv) 44 per cent of GDP v) 44 per cent of GDP vi) 57 per cent of GDP vii) 59 per cent of GDP viii) 50 per cent of GDP
Australia 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 47 per cent of GDP ii) 60 per cent of GDP
Austria 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost	i) 29 per cent of GDP ii) 46 per cent of GDP
Belgium 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 27 per cent of GDP ii) 46 per cent of GDP
Canada 1971 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 27 per cent of GDP ii) 71 per cent of GDP
Canada 1981 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 23 per cent of GDP ii) 61 per cent of GDP
Canada 1986 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 22 per cent of GDP ii) 57 per cent of GDP
Canada 1992 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 20 per cent of GDP ii) 54 per cent of GDP

(Appendix 1 contd.)

(Appendix 1 contd.)

Country (Source)	Calculation Methods (Type of Work)	Value
Canada 1992 (Hamdad, 2003)	National accounting approach to assess value (Unpaid work)	36 per cent of GDP
Canada 1998 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 18 per cent of GDP ii) 48 per cent of GDP
Canada 1998 (Hamdad, 2003)	National accounting approach to assess value (Unpaid work)	33 per cent of GDP Unemployed women contributed 36 per cent
Canada 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 15 per cent of GDP ii) 40 per cent of GDP
Canada 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 21 per cent of GDP ii) 46 per cent of GDP
Denmark 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 38 per cent of GDP ii) 62 per cent of GDP
Estonia 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 25 per cent of GDP ii) 47 per cent of GDP
Finland 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 31 per cent of GDP ii) 55 per cent of GDP
France 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 33 per cent of GDP ii) 57 per cent of GDP
Germany 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 30 per cent of GDP ii) 54 per cent of GDP

(Appendix 1 contd.)

(Appendix 1 contd.)

Country (Source)	Calculation Methods (Type of Work)	Value
Hungary 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 37 per cent of GDP ii) 37 per cent of GDP
Ireland 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 31 per cent of GDP ii) 52 per cent of GDP
Italy 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 36 per cent of GDP ii) 51 per cent of GDP
Japan 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 42 per cent of GDP ii) 57 per cent of GDP
Korea 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 19 per cent of GDP ii) 46 per cent of GDP
Mexico 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 24 per cent of GDP ii) 42 per cent of GDP
Netherlands 1975 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 42 per cent of GDP ii) 96 per cent of GDP
Netherlands 1980 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 31 per cent of GDP ii) 72 per cent of GDP
Netherlands 1985 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 31 per cent of GDP ii) 71 per cent of GDP
Netherlands 1990 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 26 per cent of GDP ii) 60 per cent of GDP

(Appendix 1 contd.)

(Appendix 1 contd.)

Country (Source)	Calculation Methods (Type of Work)	Value
Netherlands 1995 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 24 per cent of GDP ii) 55 per cent of GDP
Netherlands 2000 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 20 per cent of GDP ii) 47 per cent of GDP
Netherlands 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 19 per cent of GDP ii) 45 per cent of GDP
Netherlands 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 24 per cent of GDP ii) 49 per cent of GDP
New Zealand 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 43 per cent of GDP ii) 59 per cent of GDP
Norway 1981 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 32 per cent of GDP ii) 83 per cent of GDP
Norway 1990 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 29 per cent of GDP ii) 75 per cent of GDP
Norway 2000 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 20 per cent of GDP ii) 53 per cent of GDP

(Appendix 1 contd.)

(Appendix 1 contd.)

Country (Source)	Calculation Methods (Type of Work)	Value
Norway 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 17 per cent of GDP ii) 45 per cent of GDP
Norway 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 22 per cent of GDP ii) 49 per cent of GDP
Poland 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 22 per cent of GDP ii) 41 per cent of GDP
Portugal 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 51 per cent of GDP ii) 59 per cent of GDP
Slovenia 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 36 per cent of GDP ii) 38 per cent of GDP
Spain 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 41 per cent of GDP ii) 52 per cent of GDP
Sweden 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 28 per cent of GDP ii) 58 per cent of GDP
Switzerland 1997 (Sousa-Poza, Widmer, & Schmid, 1999)	Gross-paid i) Market replacement cost (generalist) ii) Market replacement cost (specialist) iii) Opportunity cost: average wages iv) Opportunity cost: potential wages v) Opportunity cost: reservation wages (Unpaid female labour)	 i) 28 per cent of GDP ii) 34 per cent of GDP iii) 30 per cent of GDP iv) 33 per cent of GDP v) 26 per cent of GDP

(Appendix 1 contd.)

(Appendix 1 contd.)

Country (Source)	Calculation Methods (Type of Work)	Value
United Kingdom 1983 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 44 per cent of GDP ii) 118 per cent of GDP
United Kingdom 1987 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 38 per cent of GDP ii) 102 per cent of GDP
United Kingdom 1995 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 29 per cent of GDP ii) 77 per cent of GDP
United Kingdom 2000 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 30 per cent of GDP ii) 80 per cent of GDP
United Kingdom 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 26 per cent of GDP ii) 68 per cent of GDP
United Kingdom 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 32 per cent of GDP ii) 74 per cent of GDP
United States 1975 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 34 per cent of GDP ii) 92 per cent of GDP

(Appendix 1 contd.)

(Appendix 1 contd.)

Country (Source)	Calculation Methods (Type of Work)	Value
United States 1985 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 28 per cent of GDP ii) 75 per cent of GDP
United States 1998 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 24 per cent of GDP ii) 63 per cent of GDP
United States 2003 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 20 per cent of GDP ii) 54 per cent of GDP
United States 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Household production of non-market services)	i) 18 per cent of GDP ii) 48 per cent of GDP
United States 2008 (Ahmad & Koh, 2011)	i) Replacement cost ii) Opportunity cost (Own-account household production)	i) 24 per cent of GDP ii) 55 per cent of GDP

Source: Authors' compilation from various literature.

Appendix 2: Questionnaire for Household Interview

CENTRE FOR POLICY DIALOGUE (CPD)
B A N G L A D E S H
a civil society think tank

Only for Research Purpose

ESTIMATING WOMEN'S CONTRIBUTION TO THE ECONOMY: THE CASE OF BANGLADESH

Questionnaire for Household Interview – 2014*

SL. [Official Use Only] ☐☐☐☐

ID

Division	District	Upazila	Union	Mouja	EA	PSU	HHSl	HHNO
☐☐	☐☐	☐☐	☐☐	☐☐☐	☐☐	☐☐☐	☐☐☐	☐☐

Date of Interview: ☐☐ dd ☐☐ mm ☐☐ yy

Starting Time: ☐☐ hh ☐☐ min

*For the publication purpose, some modules (A, B, D and E) of this Questionnaire are presented with lower number of rows.

(Appendix 2 contd.)

Name of Enumerator: ..... Code: | | |

Sign of Enumerator: .....

Name of Supervisor: ..... Code: | | |

Sign of Supervisor: ..... Date: | | | - | | | - | | |
dd mm yy

Address (in detail): .....

.....

Mobile number: [1] | | | | | | | | | | | |

[HHH and any

other HH member] [2] | | | | | | | | | | | |

E-mail address: .....

(Appendix 2 contd.)

Consent of Respondent

(**Interviewers:** Clearly read out the following to the respondent and take his/her consent before the interview)

Assalam Alaikum/Namaskar. My name is … … … … … … … … … … … … … … … … … . We are conducting a survey on behalf of the Centre for Policy Dialogue (CPD). This survey will help us to estimate women's contribution to the economy. Your HH has been selected randomly for this interview. We will record information from you and female household members of your family. Your participation is voluntary. You can choose not to answer any question, and you can stop the interview at any time. All of your responses will be confidential. This interview will take about 45 minutes. Would you like to ask me anything else about the interview? Do you agree to participate in this interview?

Yes = 1	No = 0

[Take the interview after having obtained the consent]

Signature … … … … … … … … … …

Date … … … … … … … … … …

(Appendix 2 contd.)

PART-1:

Interviewers: Please ask the following questions to the Household Head (HHH)/the most knowledgeable person in the household (HH)/the most knowledgeable female member of the HH

Respondent's name (aged/knowledgeable male, female): ..... Line no. ☐☐

Section A: Household Roster

In total how many people are living in this household now? ☐☐

Please mention names of all the members who are now living in this household (write down the names of all HH members and the HHH in line number 01).

Line no.	Name of the HH members	Age [year in complete number]	Religion	Ethnicity	Sex	Relation with HHH	Present marital status [for 10 years & above]	Disability			Main occupation* [93 = Go to the next member 99 = After filling up 11, go to next member]	Average monthly income [for last one year]**	Type of ownership of the organisation	Pattern of work	Employment status	Daily time spent for the main economic activity/ occupation (Min)	Take microcredit 1 = Yes 2 = No
								Disable? [at the time of survey]	Type of disability	Capable of doing personal work?							
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
01		☐☐	☐	☐	☐	01 = HHH	☐	☐	☐	☐	☐☐	☐	☐	☐	☐	☐	☐
02		☐☐	☐	☐	☐	☐☐	☐	☐	☐	☐	☐☐	☐	☐	☐	☐	☐	☐
03		☐☐	☐	☐	☐	☐☐	☐	☐	☐	☐	☐☐	☐	☐	☐	☐	☐	☐
04		☐☐	☐	☐	☐	☐☐	☐	☐	☐	☐	☐☐	☐	☐	☐	☐	☐	☐

(Appendix 2 contd.)

[02] Religion Code
1 = Muslim
2 = Hindu
3 = Buddhist
4 = Christian
Others (please mention)

[03] Ethnicity Code
1 = Bangali
2 = Adivasi
Others (please mention)

[04] Sex Code
1 = Male
2 = Female
3 = Hijra/Third Gender

[05] Relationship with HHH Code
02 = Husband/Wife
03 = Son/Daughter
04 = Son/Daughter-in-law
05 = Grandchildren
06 = Parents
07 = Brother/Sister
08 = Nephew/Niece
09 = Father/Mother-in-law
10 = Brother/Sister-in-law
11 = Other relatives
12 = Servant
13 = Employee
14 = Non-relative
Others (please mention)

[06] Marital Status Code
1 = Unmarried
2 = Married
3 = Divorced
4 = Widowed
5 = Separated/Deserted

[07] Disability Code
1 = Yes
2 = No (if No, go to Question no. 10)

[08] Type of Disability Code
1 = Physical
2 = Mental

[09] Capability of Doing Personal Works Code
1 = Yes
2 = No

[12] Type of Ownership
1 = Government
2 = Autonomous
3 = Local government
4 = NGO
5 = Private enterprise
6 = Individually owned
7 = Private household
Others (please specify)....

[13] Pattern of Work Code
1 = Full-time
2 = Part-time

[14] Employment Status Code
1 = Regular paid employee
2 = Employer
3 = Self-employed (agriculture)
4 = Self-employed (non-agriculture)
5 = Unpaid family worker
6 = Irregular/casual paid worker
7 = Day labour (agriculture)
8 = Day labour (non-agriculture)
9 = Domestic worker
99 = Recipient
Others (please specify)

*The present survey followed the Occupation Codes used in the Household Income and Expenditure Survey (HIES) 2010 of the Bangladesh Bureau of Statistics (BBS).
**Consider all the sources. If there is any family income, which cannot be separated for individual members, then divide the family income by numbers of people engaged in the business/work according to their contribution.

(Appendix 2 contd.)

Section B. Education (for 15 years and above)

Line no. [from HHR]	Educational Achievement (Highest class completed) If code 17, 18, 19 and 20 go to the next member	Educational Status If code 3, 4, 5 or 6 go to the next member	How many days does s/he generally attend school/ college/university in a week? [Day]
	1	2	3
☐☐	☐☐	☐	☐
☐☐	☐☐	☐	☐
☐☐	☐☐	☐	☐
☐☐	☐☐	☐	☐

[1] Educational Achievement Code

Class 1 pass = 01	Class 11 pass = 11
Class 2 pass = 02	Class 12 pass = 12
Class 3 pass = 03	Graduation = 13
Class 4 pass = 04	Post-graduation = 14
Class 5 pass = 05	PhD = 15
Class 6 pass = 06	Religious study = 16
Class 7 pass = 07	Can write only = 17
Class 8 pass = 08	Can read only = 18
Class 9 pass = 09	Sign = 19
Class 10 pass/SSC = 10	Illiterate = 20

[2] Educational Status Code

Not enrolled/never enrolled = 1
Enrolled & regular = 2
Enrolled but irregular = 3
Waiting to be enrolled = 4
Drop-out = 5
Completed = 6
Not studying now, but has intention to study more (e.g. Open School, Masters, PhD……) = 7

(Appendix 2 contd.)

Section C. Poverty Status (using Mark Schreiner's Poverty Score Card Questions)

1	How much land does your household own? (decimal)	Homestead	Cultivable	Others
2	What type of latrine does this household use?	☐	1 = Open field; 2 = Kacha; 3 = Sanitary	
3	Does any household member work for a daily wage?	☐	1 = Yes; 2 = No	
4	Do all children aged between 6 and 15 go to school?	☐	1 = Yes; 2 = No; 88 = NA	
5	Does the household own a television set?	☐	1 = Yes; 2 = No; 88 = NA	
6	What is the main construction material of the walls of the house?	☐	1 = Cement blocks; 2 = Bricks/Cement/Concrete; 3 = Timber; 4 = Tin; 5 = Mud; 6 = Straw/Coconut leaves/Branches; 7 = Bamboo; 8 = Others	
7	What is the main construction material of the floor of the house?	☐		
8	What is the main construction material of the roof of the house?	☐		
9	Does this household have electricity connection?	☐	1 = Yes; 2 = No	
10	Does the household own any cattle?	☐	1 = Yes; 2 = No	
11	Does the house have a separate kitchen?	☐	1 = Yes; 2 = No	
12	How many rooms does the house have (excluding the ones used for business)?	☐		

(Appendix 2 contd.)

13	What is the main source of drinking water for the members of your household?	☐	1 = Water piped to house; 2 = Piped water outside of the house; 3 = Public tap; 4 = Spring; 5 = Tube-well; 6 = River/pond; 7 = Dug well; 8 = Moveable cart; 9 = Others
14	What is the main source of cooking fuel of this household?	☐	1 = Wood; 2 = Charcoal; 3 = Gas/bio gas/LPG; 4 = Kerosene; 5 = Cow dung; 6 = Leaf, straw; Others (please mention)
15	Based on your income and food consumption, how would you rank your household?	☐	1 = Chronic deficiency; 2 = Occasional deficiency; 3 = Break-even; 4 = Surplus
16	During the past 12 months, how did the status of this rank change?	☐	1 = Improved; 2 = Declined; 3 = Constant
17	Considering the average over the past 12 months, how much did your household earn in a typical month? (in Tk.)		Write the amount below: ☐☐☐☐☐☐☐

Note: For C.4, we consider the children group between 6 and 15 years of age for keeping consistency with rest of the questionnaire. In original Mark Schreiner's Poverty Score Card this reference age of children is between 6 and 17 years.

(Appendix 2 contd.)

Section D. Write information on unpaid works done by the head male member (of 15 years and above) of the HH

Name of the head male member: … Line no. ☐☐

Which unpaid work do you usually do everyday (01-08)? [Excluding personal activities (09-15)]		How much time it needs in total for each work in a day? (Min)	If you/he hire/s an outsider to do the job, how much would you have to pay monthly for this work and time everyday? (Tk.)	If you/he are/is ill or unable to do the work for any reason, who does this work?	Who should be responsible to do this work?	How the female family members look at this work?	How does your society look at this work?
Name of Activity	Activity Code						
Sl	1	2	3	4	5	6	7
01	☐☐☐☐	☐☐☐		☐☐	☐	☐	☐
02	☐☐☐☐	☐☐☐		☐☐	☐	☐	☐
03	☐☐☐☐	☐☐☐		☐☐	☐	☐	☐
04	☐☐☐☐	☐☐☐		☐☐	☐	☐	☐

Line no. from HH roster for HH member
Outsider in exchange of money = 99
The work is left/do later on = 88
Outsider without money = 89
Others (please specify)

Only women should do = 1
Only men should do = 2
Both men and women should do = 3

(Appendix 2 contd.)

PART-2: Interview of Female Member

Fill up separately for all female members (of 15 years and above) of the household [discuss with the most knowledgeable women of this HH who is 15 years and above of age if all the female members are not present]

Section E.1.1 Daily activities, spent time, wage/salary of female members (for a normal working day)

Name of the respondent (female 1)… … … … … … … … … … … ..... … … … … … … … … … Line no. ☐☐

Activities	Name and Code of Activity (SNA+ Non-SNA+ Personal Work)		Total daily time spent for the activities (Min)	Type of activity? 1 = Paid 2 = Unpaid 3 = Personal [If 3, go to the next activity]	Paid/Recipient		Unpaid		How many days in a month do you do this work? (Day)	Does anybody help you to accomplish this work? If 2, go to 9	If help, who does it normally?	Who do you think should be responsible to do this work?	How do your male family members look at this work?	How do your society members look at this work?	Do you do any other work at the same time?
					What is the monthly payment for the activity in column 1 and daily time spent in column 2 (Tk.) [If paid, skip 5]	Employment status	If you or your neighbour hires someone to do the job instead of doing it by yourself or your neighbour, how much would you have to pay monthly for this work for the assigned time daily? (Tk.)	If someone wishes to pay you for all unpaid work you do daily, how much are you willing to accept per month for this work, considering the type of work, your education, age and time spent for the work (Tk.)							
		1	2	3	4.1	4.2	5.1	5.2	6	7	8	9	10	11	12
01															
02															
03															

(Appendix 2 contd.)

[4.2] Employment Status Code	[7] Code	[8] Code	[9], [10] & [11] Code	[12] Code
Regular paid employee = 1 Employer = 2 Self-employed (agriculture) = 3 Self-employed (non-agriculture) = 4 Unpaid family worker = 5 Irregular/casual paid worker = 6 Day labour (agriculture) = 7 Day labour (non-agriculture) = 8 Domestic worker = 9 Recipient = 99 Others (please specify)	Yes = 1 No = 2	Line no. from HH roster for HH member Outsider in exchange of money = 99 Outsider without money = 89 Others (please specify)	Only women should do = 1 Only men should do = 2 Both men and women should do = 3	Yes = 1 No = 2

(Appendix 2 contd.)

Section E.2.1 [If the above female member is involved in paid works]

[Last 1 year] For how many days per month were you involved in income-earning activity? [Day]	On a typical working day, how many hours do you spend on income-earning activity? [Hours]	[Last 1 year] What is your average income per month from this activity? [Tk.]	For activities with daily income – on a typical working day, do you receive any payment in kind in general? If yes, enter the amount in money terms? [Tk./Day]
1	2	3	4
☐☐	☐☐		

If the female is involved in paid works, go to Section G.2 (skip F.1) after completion of Section E.2.1

Section F.1 Opportunity cost and cross-check [If the above female is not involved in paid work]

1. Do you like to be involved in paid works? 1 = Yes 2 = No [Go to the next section] ☐			**Cross-check with anyone** 1 = Other household member 2 = Rural knowledgeable person 3 = Industrial/working sector Others (please mention)		
If yes, what type of work do you like to be involved in? 1 = Full-time 2 = Part-time	If yes, which occupation is suitable for you depending on age, education and scope of jobs in your region? [Occupation Code]	Payment of those suitable works (Tk./Month)	5 (Check column 4)		
			Checked by	Name and Phone	Tk./Month
2	3	4	5.1	5.2	5.3
☐	☐☐		☐		

(Appendix 2 contd.)

Ask the female head who is present at time of interview

Note:
If F.1 (1) is no, go to G.1 (01)
If F.1 (1) is yes, go to G.1 (02)

Section G: Additional Questions [Answer(s) can be more than one]

G.1 For those who are involved in only unpaid work

Sl.	Question	List of Code	Code
01	Why you do not like to be involved in paid work? [Involved in only unpaid work and do not want to be involved in paid work] Go to 3	Do not have financial need = 1 Prefer to give time to family rather than get involved in income-generating work = 2 There is nobody in the family to take care of children and aged people = 3 Family does not like = 4 Work is not available/available work is not suitable to be involved = 5 Involved in family business = 6 Others (please mention)	☐ ☐ ☐
02	You like to be involved in paid work, what are the reasons for not being involved in paid work? Go to 3	To maintain family work = 1 No permission from family members = 2 Take care of old/sick person = 3 Lack of available/suitable jobs = 4 Involved in family business = 5 Pregnancy/to take care of the children = 6 Others (please mention)	☐ ☐ ☐

(Appendix 2 contd.)

Sl.	Question	List of Code	Code
03	What are the benefits of being involved in only unpaid works?	Can maintain family work properly = 1 Can take care of the children properly = 2 Can take care of the family members = 3 Social acceptability = 4 Others (please mention)	☐ ☐ ☐
04	What are the problems to be involved in full-time unpaid work?	Underestimation within the family and society = 1 Suffer from inferiority complex = 2 Insolvency in the family = 3 Enough idle time and suffer from boredom = 4 Others (please mention)	☐ ☐ ☐

(Appendix 2 contd.)

G.2 For those who are involved in paid work

Sl.	Question	List of Code	Code
01	What are the positive effects of your involvement in paid works?	Can support the family = 1 Earn respect from family and society = 2 Receive more affection from family members = 3 Can practice rights within the family and society = 4 Others (please mention)	☐ ☐ ☐
02	What are the negative effects of being involved in paid works?	Cannot give adequate time to family = 1 Cannot take care of child and old family members = 2 Do not have enough rest = 3 Society does not look at with respect = 4 Others (please mention)	☐ ☐ ☐
03	How easy would it be for you to spend the income without asking other HH members?	Can spend myself all alone without any restriction = 1 Need to discuss with family members = 2 Need to ask family members = 3 Cannot even give opinion in spending money = 4 Others (please mention)	☐

Time after completion of the interview of all female members: Hour ☐☐ - Min ☐☐

How many female members in this family are of age 15 years and above? ☐

Thank You

A large part of economic activities undertaken by women in Bangladesh including household chores, care and agriculture work remain unaccounted for. This is due to limitations of conventional measures such as gross domestic product (GDP) that primarily considers goods and services produced for markets. As a result, wrong signals are transmitted to policymakers whose allocative and distributional decisions are then influenced by this.

The CPD-MJF study applied time use survey technique to understand time use patterns of 8,320 women and 5,334 men in 5,670 households across the 64 districts of Bangladesh. This study contributes several new findings that have implications for the System of National Accounts (SNA).

- Time spent per day on non-SNA activities by a female member in a household is about three times higher than that by a male member.
- On an average, on a typical day, a woman works for about 7.7 hours on non-SNA activities undertaking 12.1 non-SNA tasks, while a man works for about 2.5 hours and does 2.7 non-SNA tasks.
- The estimated value of women's unpaid non-SNA activities was equivalent to 76.8 per cent of Bangladesh's GDP in FY2013-14 based on the replacement cost method and 87.2 per cent of GDP based on the willingness to accept method.

It is hoped that, by recognising women's real contribution to the economy, policymakers and relevant stakeholders will be motivated to play a more proactive role to advance women's position in different spheres of socio-economic life in Bangladesh.

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