

**Economic and Social Council**Distr.: General  
10 April 2024

English only

**Economic Commission for Europe**

## Conference of European Statisticians

## Group of Experts on National Accounts

## Twenty-third session

Geneva, 23-25 April 2024

Item 2 (b) of the provisional agenda

**Towards the 2025 System of National Accounts:****Well-being and sustainability****Measuring the Value of Unpaid Household Work in Bangladesh****Prepared by Asian Development Bank<sup>1</sup>***Summary*

This study investigates the value of unpaid household work in Bangladesh, aligning with the System of National Accounts (SNA) 2008 and the International Labor Organization's (ILO) work framework. It focuses on estimating unpaid labor input to own-use production work of services, covering areas like household management, nutrition, clothing, care, and transport. Utilizing up-to-date data sources, the study sheds light on the overlooked dimension of unpaid household service work. Findings reveal stark gender disparities, with women carrying out a disproportionate share of unpaid work at lower replacement wages compared to men. The estimated value of unpaid domestic and care work constitutes 21% of Bangladesh's GDP in 2021, underscoring its significant economic impact, with women contributing 18% of the GDP compared to 2% for men. This highlights the persistent gender gap in unpaid work, necessitating efforts to promote gender equality and inclusive economic development.

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## I. Introduction

1. Economic statistics aim to measure overall economic production and productivity, encompassing national accounts and employment measures. However, in most countries, the contribution of unpaid productive activities such as household work is often excluded. Valuing such activities carried out by household poses several conceptual and measurement challenges. Firstly, there is the task of defining and identifying the scope of household activities, as well as the population coverage and age of the service provider (e.g., whether the activities of children engaged in work need to be measured). Secondly, there is the challenge of accounting for multitasking (e.g., caring for a child while simultaneously cleaning the house or washing the dishes). Thirdly, the compiler needs to address issue of overlap between household service work and leisure (e.g., gardening being considered a chore for some and leisure for others). Finally, there is the question of identifying suitable ‘market prices’ to value such services.

2. The System of National Accounts (SNA) 2008 defines economic production as “activity carried out under the control and responsibility of an institutional unit that uses inputs of labor, capital, and goods and services to produce outputs of goods or services”. However, the production boundary in the SNA covers only the following:

- The production of all goods or services that are supplied to units other than their producers, or intended to be so supplied, including the production of goods or services used up in the process of producing such goods or services;
- The own-account production of all goods that are retained by their producers for their own final consumption or gross capital formation;
- The own-account production of knowledge-capturing products that are retained by their producers for their own final consumption or gross capital formation but excluding (by convention) such products produced by households for their own use;
- The own-account production of housing services by owner occupiers; and,
- The production of domestic and personal services by employing paid domestic staff.

3. Citing the ILO work framework and its relationship to the 2008 SNA (ILO, 2013), the more restrictive SNA production boundary encompasses own-account production of goods, employment work, unpaid trainee work (i.e., without pay but with the intention to acquire work experience), volunteer work in market and non-market units (i.e., non-compulsory work done for others without pay), volunteer work in households to produce goods, and other work activities (i.e., unpaid work mandated by a court or similar authority). On the other hand, it excludes own-use production of services for household’s own final use (except housing services produced by owner-occupiers) and volunteer work for the production of services.

4. Despite these challenges and limitations, numerous studies have been conducted to measure the value of unpaid work in Bangladesh. Khatun, Khan, Pervin and Jahan (2015) used the replacement cost method and found that the value of unpaid work was equivalent to 76.8% of GDP in FY 2013-14. Efroymson, Biswas and Ruma (2007) employed three different methods for valuing unpaid work, including (1) using the wage of a day laborer for most tasks, and the wages of nurses, tutor, and income for sewing clothes for some specialized tasks; (2) using a single wage rate for cooking per person per month for one meal a day (200 taka per month) and then generalized for 45 tasks; and, (3) using government salary to calculate women’s work (mid-range government wage of 10,000 taka per month). Based on these three methods, the value of women’s unpaid work is USD 69.8 Billion, USD 81.93 Billion, and USD 91.0 Billion, respectively.

5. The importance of valuing unpaid domestic and care work in Bangladesh has also gained traction under the comprehensive Gender Equality Strategy of the Bangladesh government’s (2021) 8th 5-year Plan. The Plan specifically aims to address Sustainable Development Goal Indicator 5.4.1, which focuses on the proportion of time spent on unpaid care and domestic work by both men and women. Its objectives are to decrease women’s unpaid domestic and care work from 25% to 20% of total time and raise men’s involvement from 3.3% to 10% by 2025. These targets are motivated in part by the findings from the Time

Use Survey (TUS) conducted by the Bangladesh Bureau of Statistics (BBS) in 2021, which revealed that, on the average, women in Bangladesh spend around seven times more time on unpaid domestic and care work than men.

6. Given such significance of unravelling the value of unpaid work to economy and society, this paper aims to contribute to the existing literature by utilizing updated data from Labor Force Survey (LFS) and Time Use Survey (TUS) to provide more accurate and comprehensive estimates of the value of unpaid domestic and care work in Bangladesh. The paper is thus organized as follows: the next section details on the methodological approaches on valuing unpaid domestic and care work; Section 3 discusses the valuation exercise and the resulting estimates; and finally, Section 4 concludes.

## II. Methodology

7. Determining the overall economic value of an activity requires information on the time allocated to it and its unit price. Establishing the appropriate unit value for unpaid care work poses a challenge, prompting a recourse to the literature on time use to tackle this issue and identify suitable methodologies. These methodologies are commonly classified into two categories: input-based and output-based.

8. The output-based approach assesses the cost of procuring a comparable unpaid domestic and care service in the market—such as an hour of daycare provided by a center—and applies the price of equivalent market alternatives to nonmarket goods and services. However, this approach encounters conceptual limitations in delineating the output of unpaid household work, particularly in areas like childcare. Moreover, it encounters difficulties in sourcing pertinent data reflecting market prices for outputs of similar quality and quantity to those generated by unpaid household work.

9. In contrast, the input-based approach focuses on quantifying and valuing the labor inputs involved in unpaid domestic and care work. Extensive, nationally representative surveys like the Time Use Surveys provide reliable estimates of the time dedicated to unpaid work within households, encompassing both childcare and eldercare. Subsequently, this approach appraises the time estimates against prevailing market wage rates for individuals engaged in analogous activities within the labor market, adhering to the third-person criterion.

10. Under the input-based approach, the literature further identified two common methods on imputing wages rates which are the opportunity cost method and replacement cost method. The following section will detail on these two methods along with some country examples.

### A. Approaches on Imputation of Wage Rates under the Input Approach

11. The method for imputing wage rates is critical on the valuation and subsequent comparisons between paid and own-use production work of services. Two main approaches are currently taken namely opportunity cost method and replacement cost method.

#### 1. Opportunity Cost Method

12. The opportunity cost method values the housework being done using a person's wage rate on the labor market (i.e., the market income forgone due to spending time on unpaid household activities). This assumes that the time spent in one sector is at the expense of time spent in another. The premise of this approach is that engaging in own-use production work of services would mean giving up time spent for other activities that could be done instead, together with the monetary and non-monetary benefits that come arise from the latter (UNECE, 2017). Two estimation methods fall under the opportunity cost method: gross opportunity cost (before tax) and net opportunity cost (after tax).

13. Gross opportunity cost values unpaid work by estimating the potential earnings members of the household would forgo when they undertake unpaid household work instead of paid jobs. This assumes that the value of time spent on unpaid household work is

equivalent to the potential earnings that could be obtained elsewhere. When workers give up paid work in order to perform unpaid work, the value per hour of unpaid work is equal to the workers' individual marginal hourly wage in the labor market. This implies that an hour of paid market work is given up for doing an extra hour of unpaid work (Australia Bureau of Statistics [ABS], 2014).

14. On the other hand, net opportunity cost refines the gross opportunity cost as it tries to estimate the true opportunity cost of undertaking unpaid work using the most realistic net wage rate. Net wage rate in this case refers to the after tax remuneration received by the worker. The logic behind the approach is that the individual performing unpaid work will value these tasks based on the net benefit of working in paid work given this "adjusted" hourly wage rate (ABS, 2014).

15. Both gross opportunity cost and net opportunity cost face several conceptual and measurement challenges for estimation. For gross opportunity cost, these include 1) the inaccurate representation of gross opportunity cost approach on the choices individuals make between paid and unpaid work (i.e. limited choice in the short run regarding the hours they have to work), 2) gross opportunity cost approach is weak when considering patterns of labor force participation other than rigid-fixed hours working week, 3) significant differences in valuation based on who performs the task (i.e. due to wage gap), and 4) lack of equivalent market wage for unemployed. Under net opportunity cost, the main concern is measuring other factors in determining net wages. Some examples include how to account for tax rebates and social security benefits and work-related expenses individual workers' pay for their paid work (e.g. professional association subscriptions, transportation costs).

## 2. Replacement Cost Method

16. The replacement cost method uses the market wage rates from similar paid work occupations to value total housework time. The assumption is that as households decide to perform housework themselves, they save money. The amount of money saved (i.e., value of household doing the work) is the cost of paying for the same services in the market or engaging someone else (outside the household) to perform the activity. Under the replacement cost approach, there are two more approaches which can be used, namely the specialist method and generalist method.

17. The replacement cost specialist method values the time spent on each type of household activity by matching them with the hourly earnings of people employed in similar occupations. This implies that there are differences in wage rates across activities, as workers in different occupations are assumed to take on different activities. For example, different wage rates are required between childcare activities and food preparation activities. In this method, the wage of a cook in a restaurant is used to value food preparation activities.

18. A major issue with the replacement cost specialist method is that working conditions and productivity of the "replacement worker" will differ significantly from the unpaid household worker due to economies of scale or availability of expensive equipment in business operations (e.g. using wages of professional chefs for household cooking). The relationship between household productivity and market productivity could determine if the contribution of unpaid work to GDP is underestimated or overestimated. If households and market producers are equally productive (i.e., having similar average output per hour), this method will undervalue unpaid work contribution by ignoring non-labor input contribution. If households are more productive, underestimation will occur because households will undertake more work in a given time than what a "replacement worker" would. If households are less productive than market participants (i.e., access to less capital or technology), results will be overstated as they will be calculated by multiplying market wages by longer hours than what an individual in the market would typically take to complete the same volume of work. In addition, it is unlikely that market replacements are available for all household activities to be valued (UNECE, 2017; ABS, 2014).

19. The replacement cost generalist method uses the wage rate of a general housekeeper to value own-use production work. It appears that this method is most appropriate given the working conditions of a general housekeeper is similar for many activities (or almost similar)

as those faced by unpaid household worker; and a general housekeeper is more likely to undertake majority of the tasks done in the household. However, there are still household productive tasks that a general housekeeper may not carry out and applying a single wage rate may lead to errors in valuations.

20. The hybrid method is recently developed where valuation of household activities uses the generalist method, and then for specialist method for more complex tasks such as childcare and adult care. Mexico, Canada, and Australia explored implementation this approach.

21. Table 1 summarizes the methods for imputing average hourly wages, along with their respective advantages and disadvantages, as well as the countries that have adopted them. It can be inferred that countries have increasingly adopted a hybrid approach for imputing wages, particularly with the replacement cost method.

Table 1  
**Methods for imputing average hourly wage rate**

Method	Advantages	Disadvantages	Country practices
Opportunity Cost	Consistent with economic theory on individual labor-leisure choice, this method accounts for a household member's implicit valuation of time as expressed in terms of forgone market earnings. (Seel, 2000)	Criticisms of this method include significant differences in valuation based on who performs the task (i.e. due to wage gap), lack of equivalent market wage for unemployed, the assumption that people can always choose whether to spend an extra hour on paid work or on another activity, and tendency to focus measurement on household production instead of what they might potentially produce on the market.	<p><b>Australia:</b>  <i>Gross opportunity cost:</i> gross opportunity cost rates are based on the economy-wide average occupational weekly ordinary time earnings divided by the corresponding hours paid for, for males, females, and persons.</p> <p><i>Net opportunity cost:</i> Data sources used for this method are average weekly ordinary time earnings and hours worked, taxation and Medicare levy rates, and employer-on costs (superannuation contributions and fringe benefits).</p> <p><b>Canada:</b>  <i>Gross opportunity cost:</i> annual average gross wage rate (both full-time and part-time) by sex, age group and province of residence are applied to the annual hours of unpaid household work.</p> <p><i>Net opportunity cost:</i> annual average gross wage rate (both full-time and part-time) by sex, age group and province of residence are applied to the annual hours of unpaid household work and effective tax rates, by age group, sex and province of residence.</p>
Replacement Cost - Specialist	The “replacement worker” represents the more accurate (i.e. specialized) skillset required to undertake unpaid household activities than a general housekeeper. For example, wages of carpenters can be used to estimate the wage of minor household repairs.	Working conditions and productivity of the “replacement worker” will differ significantly from the unpaid household worker. In addition, it is unlikely that market replacements are available for all household activities to be valued.	<p><b>Australia:</b>                      The selection of occupation wage rates used follows two criteria:                      1.) Occupations chosen were those that would experience increase in demand when a particular unpaid work was transferred to the market;                      2.) Among the occupations selected in the first criteria, only those viewed as most similar to the unpaid work activities under consideration were picked.</p> <p>If selection process results in a group of occupations being matched to an unpaid work activity, a weighted average of the earnings for each occupation within the group was calculated, utilizing weights derived from the TUS activity data.</p>

Method	Advantages	Disadvantages	Country practices
Replacement Cost - Generalist	This approach seems appropriate because (1) working conditions for many activities, if not identical, are similar to those encountered by the producer of own-use production work of services, and (2) a general housekeeper is more likely to undertake the majority of tasks typically performed in a household.	Some household productive tasks may be unsuitable for a housekeeper, and applying a single wage rate could result in inaccurate valuations.	<p><b>Australia:</b> Wage rates were based on domestic housekeeper's wage rate.</p> <p><b>Bangladesh:</b> Given that on average, women spend six hours a day in cooking, the wage rate for cooking for bachelors in a joint living arrangement (200 taka per person per month for one meal a day) is used. This rate is applied to 45 different unpaid tasks women undertake each day (Efroymsen, Biswas and Ruma, 2007).</p>
Hybrid	It makes the replacement cost approach more refined as it attempts to better represent the "outsourcing" of workers by households to complete activities categorized as household work.		<p><b>Canada:</b> The value of unpaid household work is computed as the average wage rates of equivalent specific occupations related to the household activities being performed in the market multiplied to the annual hours of unpaid household work.</p> <p>Similarly, for the generalist approach the average wage rates of equivalent general laborer or service provider in the market is multiplied to the annual hours of unpaid household work to obtain the value of unpaid household work.</p> <p><b>Ecuador:</b> Average hourly wage of the occupations of "cleaners and domestic assistants" (generalist method) was assigned to those activities normally carried out by hired domestic staff.</p> <p>Average wages of the rest of the occupations to which activities that are not typical of domestic service (specialist salary) such as mid-level professionals in health, finance and administration, legal, social, cultural, accounting, personal care workers, construction officials and workers excluding electricians, workers specializing in electricity and electronics technology.</p> <p><b>Colombia:</b> The value of unpaid domestic and care work is estimated as the total hours dedicated by the population aged 10 years and over multiplied by the hourly income of workers using generalist wage for domestic worker, butler, cleaner, household cleaner, cleaning, domestic work, house cleaning.</p>

Method	Advantages	Disadvantages	Country practices
			<p>Specialist wage is based on the average hourly income of people who are dedicated to occupations comparable to each of the CSEC functionalities.</p> <p><b>Republic of Korea:</b>                      The value of unpaid work is estimated as the average hourly wage for a worker who performs similar tasks multiplied with the hourly wage rate by the number of hours spent by the household member in a given month.</p> <p>The simplest approach applies a generalist wage (such as that of a domestic worker or a paid caregiver who carries out various household tasks including caregiving). Alternatively, a vector of wage rates of specialists such as a cook, preschool teacher, or home health aide can be applied. This exercise generates a lower and upper bound estimates of the value of unpaid care labor.</p>



## B. Data sources

### 1. 2021 Time Use Survey

22. The Inter-Secretariat Working Group on National Accounts emphasized that it is considered best practice to collect data from a time use survey to estimate the labor input component of unpaid household services (ISWGNA WS.3). The Bangladesh Bureau of Statistics (BBS) conducted the Time Use Survey (TUS) in 2012 and 2021 to collect and analyze how men and women spend their time on different activities. Consequently, it provided the needed data for the analysis of unpaid and domestic work in Bangladesh, and at the same time to come up with evidence on progress toward national goals and global commitments such as the Sustainable Development Goals (SDGs). For the 2021 survey, two data collection instruments were utilized in this survey: a household level questionnaire and a time diary which covers each household member aged 15 years and above. The reference period for activities is 24 hours and time reference of 4AM to 4AM of the previous day.

23. Activities documented in the 2021 TUS are aligned with the International Classification of Activities for Time Use Statistics 2016 (ICATUS 2016), allowing for cross-country analysis of time use statistics. It comprises of a three-level hierarchical classification (i.e. major divisions, divisions, and groups) covering all activities undertaken by the general population over the course of a day's 24-hour cycle. The table below presents the major divisions used in the 2021 TUS:

Table 2

#### Major divisions used in the 2021 Time Use Survey

Major division	Activity
1	Employment and related activities
2	Production of goods for own final use
3	Unpaid domestic services for household and family members
4	Unpaid caregiving services for household and family members
5	Unpaid volunteer, trainee and other unpaid work
6	Learning
7	Socializing and communication, community participation and religious practice
8	Culture, leisure, mass-media and sports practices
9	Self-care and maintenance

24. Findings can be categorized by sex and selected age group (i.e., 15-17, 18-24, 25-59, and 60+). The TUS covered all administrative divisions in Bangladesh. However, results are only shown by urban/rural classification. Primary data was collected from January 24 to April 12, 2021, using face-to-face interview method. The government imposed an eight-day lockdown starting April 14, 2021, which falls after the survey period. Nevertheless, behavioral pattern reflected in the 2021 time use survey will be affected by limited movements during the COVID-19 pandemic. For instance, men spent generally shorter time doing household work during the pandemic compared to 2012. Meanwhile, the time spent by women on unpaid domestic and care work in 2021 is in between the average of the time spent by employed and unemployed women in 2012. The stark difference between the number of hours spent by women vis-à-vis men widened. Women spent seven times longer hours in unpaid domestic and care work than men during the pandemic, compared to around 2.5-5.2 times in 2012. Subsequent time use surveys will shed light on the changes in patterns before, during, and after the shock, especially on its implication on women's participation in paid and unpaid work.

Table 3  
Average time spent per day (in hours) in doing household\* work, by sex

Time use surveys	Employed Male	Unemployed male	Employed Female	Unemployed Female
2012	1.4	1.2	3.6	6.2
2021	0.8		5.9	

Note: \*The 2012 Time Use Survey defines household work as the type of unpaid household-based activity usually performed by household members (e.g., providing unpaid domestic services for own final use within household and providing unpaid caregiving services to household members).

Sources: Bangladesh Bureau of Statistics 2012 and 2021 Time Use Surveys

## 2. 2022 Labor Force Survey

25. The Labor Force Survey (LFS) in Bangladesh has been implemented with 4 to 5 years intervals since 1980. BBS has recently conducted its LFS in 2022 which provides a picture of its labor market through its quarterly data on employment, unemployment, employment by industry and occupation, job status, informal employment, the youth labor force, labor force participation rates, long-term unemployment, literacy, vocational training among the working-age population, average weekly working hours, monthly earnings, migration costs, and functional difficulties associated with employment. Data was collected in the 1st Quarter (January-March), 2nd Quarter (April-June), 3rd Quarter (July-September), and 4th Quarter (October-December).

26. Bangladesh Standard Classification of Occupations (BSCO) 2020 was derived from the International Standard Classification of Occupations (ISCO) 2008. While the BSCO is available until the 6-digit sub-unit groups, the wage rate is available at the four-digit level. The table below presents the major groups used in the 2022 LFS:

Table 4  
Major groups used in the 2022 Labor Force Survey

Major group	Occupation
1	Managers
2	Professionals
3	Technicians and associate professionals
4	Clerical support workers
5	Service and sales workers
6	Skilled Agricultural, Forestry and Fisheries workers
7	Craft and related trade workers
8	Plant and machine operators and assemblers
9	Elementary occupations
10	Other occupations

27. Since the timing of the labor force survey does not coincide with the time use survey, the average hourly wage was back casted to 2021 using the wage rate index. This monthly index measures the trend of nominal wages of low paid skilled and unskilled labor in different sectors of the economy (BBS, 2022). Indices are based on gross wage and salaries of 44 occupational groups, separated by gender, with 2010-11 as current base year.

## 3. Other data sources

28. The satellite account for own-use production work of services extends the boundaries of production, consumption, and capital formation beyond the conventional SNA definition (UNECE, 2017). The UNECE guide recommends a simplified household satellite account by

using the traditional supply and use tables and adding information on the number of hours in own-use production work of services vis-à-vis paid work through the time use survey. A further extension of the production boundary implies separating intermediate input for each own-use production work of services from the final consumption expenditure of households. The output of the own-use production work of services can be calculated as the sum of intermediate consumption, other taxes less subsidies on production, consumption of fixed capital of household durables related to this unpaid service, imputed mixed income, and imputed return to capital. The full sequence of accounts can be prepared by combining the own-use production work of services with the SNA household sector accounts.

29. The latest supply and use tables of Bangladesh was prepared in 2011. Moreover, asset information needed for the computation of consumption of fixed capital is scarce. Given these limitations, the current initiative is focused on the estimation of labor input of unpaid domestic and care work. The remaining components of the satellite accounts will be prepared as soon as new information becomes available.

30. The time use and labor force surveys will be used to calculate unpaid domestic and care work at the national level and by sex. The UNECE guide recommends disaggregating estimates of own-use production work of services by sex, age, and household composition. However, household composition is not available in the latest surveys of the BBS. Lastly, the availability of the time use survey facilitates the compilation of the input approach.

### III. Results and Discussion

31. The preliminary step in valuing unpaid domestic and care work in Bangladesh is bridging the time use survey with the labor force survey. The three-level hierarchical classification in time-use is matched with the four-digit occupation code that corresponds with the functions needed to accomplish the given activity. The equivalent occupations were limited to production of services rather than production of goods. For activities that involve simple tasks, a generalist approach was adopted assigning either the occupation of the domestic housekeeper/help or domestic cleaner and helper. For some activities, a combination of generalist and specialist occupations were identified. For activities that involve complex task, the lower-skilled variant of the specialist occupation were considered.

32. After the mapping exercise, the average hourly wage of the corresponding occupation will be estimated. The mean, median, and standard deviation will be compared for each occupation to assess the sensitivity of the valuation. The imputed compensation for labor input in 2021 is then computed as the product of the total number of hours spent per activity (average number of hours multiplied by the 2021 population and the time-use survey participation rate) and the average hourly wage of the corresponding occupations in 2022, adjusted by the ration of the wage rate index of 2021 and the wage rate index of 2022). Below is the simplified estimation template used for computing the valuation.

Table 5  
Simplified estimation template

Time Use Survey 3-digit group code and description (1)	Bangladesh Standard Occupation 4-digit code and description (2)	Average time spent (in hours) on specific activity category		Average hourly wage in the equivalent occupation		Valuation of unpaid domestic and care work		
		Male (3)	Female (4)	Male (5)	Female (6)	Male (7) = (3)*(5)*2021 male population* TUS participation rate of male	Female (8) = (4)*(6)*2021 male population* TUS participation rate of female	Total (9) = (7) + (8)
Activity 311								
...								
Activity 490								
<b>TOTAL</b>								

33. Table 6 below presents the average time spent on unpaid domestic and care work activities in Bangladesh for 2021. This paper will show the application of the methodology using published information or data from the Time Use and Labor Force Surveys. A more refined estimates using the microdata of surveys will be published after the conclusion of the technical assistance project to the Bangladesh Bureau of Statistics.

34. The activities are aggregated at the 2-digit ICATUS group code. The data shows that the bulk of women's time in unpaid domestic work is devoted to food and meal preparation (1,208 hours in 2021), followed by childcare and instruction (420 hours), and cleaning and maintaining their dwelling and surroundings (237 hours). Conversely, men spent the most time on shopping for their own household and family members (62 hours in 2021), followed by childcare and instruction (58 hours) and traveling, transporting, or accompanying goods or persons for household and family members (44 hours).

Table 6

**Average time spent (hour) on unpaid domestic and care work activities (ICATUS 2-digit level), by sex**

ICATUS Code	Description	TUS 2021			Annual (2021)	
		Women	Men	Total	Women	Men
31	Food and meals management and preparation	3.31	0.1	1.91	1208	37
32	Cleaning and maintaining of own dwelling and surrounding	0.65	0.04	0.39	237	15
33	Do-it-yourself decoration, maintenance and repair	0.11	0.11	0.11	40	40
34	Care and maintenance of textiles and footwear	0.45	0.03	0.26	164	11
35	Household management for own final use	0.01	0.02	0.01	4	7
36	Pet care	-	-	-	-	-
37	Shopping for own household and family members	0.03	0.17	0.1	11	62
38	Travelling, moving, transporting or accompanying goods or persons related to unpaid domestic services for household and	0.07	0.12	0.09	26	44
39	Other unpaid domestic services for household and family members	-	-	-	-	-
41	Childcare and Instruction	1.15	0.16	0.71	420	58
42	Care for dependent adults	0.03	0.01	0.02	11	4
43	Help to non-dependent adult's household members	0.02	0.01	0.01	7	4
44	Travelling and accompanying goods or persons related to unpaid caregiving services for household members	0.05	0.02	0.04	18	7
49	Other activities related to unpaid caregiving services for household members	-	-	-	-	-
	<b>TOTAL</b>	<b>5.88</b>	<b>0.79</b>	<b>3.65</b>	<b>2146</b>	<b>288</b>

Source: Time Use Survey 2021 (BBS, 2023)

35. The average hourly wages, as summarized in Table 7, are based on the published estimates of the Bangladesh Labor Force Survey for the replacement jobs mapped with unpaid domestic and care work activities. Interestingly, these replacement wages also provide valuable insights into the existing gender wage disparities in the country's labor market.

36. Firstly, it is evident that men tend to receive higher average hourly wages than women across most ICATUS categories. For instance, men earn approximately twice as much as women in activities such as travelling and accompanying goods or persons related to unpaid caregiving services for household members (ICATUS 44), household management for own final use (ICATUS 35), and even in food and meals management and preparation (ICATUS 31). There are also certain activities where women's wages are significantly lower compared to men. For instance, in do-it-yourself decoration, maintenance, and repair (ICATUS 33), care for dependent adults (ICATUS 42), and help to non-dependent adult's household members (ICATUS 43), women's average wages are just a third of men's wages. This suggests that there is a gender wage gap favoring men in these specific tasks.

37. Conversely, there are a few activities where women earn average hourly wages comparable to those of men. Notably, in the categories of shopping for own household and family members (ICATUS 37) and other activities related to unpaid caregiving services of household members (ICATUS 49), women's wages are nearly on par with those of men.

Table 7

**Average Hourly Wages in Taka of Unpaid Domestic and Care Work Activities (ICATUS 2-digit level) by sex, Bangladesh, 2021**

ICATUS Code	Description	Men	Women
31	Food and meals management and preparation	253	114
32	Cleaning and maintaining of own dwelling and surrounding	80	66
33	Do-it-yourself decoration, maintenance and repair	588	130
34	Care and maintenance of textiles and footwear	124	70
35	Household management for own final use	554	244
36	Pet care	118	-
37	Shopping for own household and family members	147	144
38	Travelling, moving, transporting or accompanying goods or persons related to unpaid domestic services for household and family member	595	208
39	Other unpaid domestic services for household and family members	-	-
41	Childcare and Instruction	105	79
42	Care for dependent adults	126	37
43	Help to non-dependent adult's household members	113	35

Source: Authors' Calculation

38. Given the number of hours spent on unpaid household work and the average hourly wages earned by workers in related jobs, the preliminary results of the valuation of unpaid domestic and care work for Bangladesh have been obtained and summarized in Table 8 below. Estimates suggest that the value of women's unpaid domestic and care work accounted for about 18% of Bangladesh's GDP in 2021, which is around eight times higher than their male counterparts. A large proportion of this is attributed to activities related to food and meal management and preparation, childcare and instruction, and cleaning and maintaining one's dwelling and surroundings. As noted earlier in the discussion on the average time spent by women on unpaid household work, these three activities are also the main ones in which women spend the most time, on average.

39. Conversely, much of the value of men's unpaid household work stems from activities such as do-it-yourself decoration, maintenance, and repair; as well as traveling, transporting, or accompanying goods or persons related to unpaid domestic household and family members. Moreover, for the male subgroup, we observed that the ranking of these activities based on the value of work rendered no longer aligns with the ranking observed in the average time they spend on each activity.

Table 8  
**Value of Unpaid Domestic and Care Work Activities (ICATUS 2-digit level) in hundred million Taka by Sex, Bangladesh, 2021**

ICATUS Code	Description	Men	Women	All
31	Food and meals management and preparation	82	4,169	4,251
32	Cleaning and maintaining of own dwelling and surrounding	10	476	486
33	Do-it-yourself decoration, maintenance and repair	209	158	367
34	Care and maintenance of textiles and footwear	12	345	357
35	Household management for own final use	36	27	63
36	Pet care	-	-	-
37	Shopping for own household and family members	81	48	129
38	Travelling, moving, transporting or accompanying goods or persons related to unpaid domestic services for household and family members	231	160	391
39	Other unpaid domestic services for household and family members	-	-	-
41	Childcare and Instruction	54	997	1,051
42	Care for dependent adults	4	12	16
43	Help to non-dependent adult's household members	4	8	11
44	Travelling and accompanying goods or persons related to unpaid caregiving services for household members	31	101	132
49	Other activities related to unpaid caregiving services for household members	-	-	-
	<b>TOTAL</b>	<b>754</b>	<b>6,501</b>	<b>7,255</b>
	<b>GDP 2021</b>			<b>35,302</b>
	<i>Value of unpaid work as % of GDP</i>	<i>2%</i>	<i>18%</i>	<i>21%</i>

Source: Authors' calculations

#### IV. Conclusion

40. The valuation of unpaid domestic and care work in Bangladesh represents a significant step towards understanding and recognizing the economic contributions of households, particularly women, to the national economy. Through a thorough mapping exercise, bridging the time use survey with the labor force survey and use of more updated data, the preliminary results offer valuable insights into the distribution of unpaid work and its economic implications. The findings reveal stark gender disparities, with women disproportionately shouldering the burden of unpaid domestic and care work. Despite spending significantly more time on these activities, the study also noted that the replacement wages of women are often lower compared to men, which echoes the underlying gender wage gaps in the labor market. However, the analysis also highlights areas where women's wages are comparable to those of men.

41. Finally, the estimated value of unpaid domestic and care work, amounting to about 21% of Bangladesh's GDP in 2021, underscores the substantial economic impact of these activities. Women accounted much of such contribution with the value of their unpaid household work being equivalent to 18% of the country's GDP. Although still contributing to the economy, men's unpaid work is however comparatively lower in value (2%) and is primarily derived from tasks such as home maintenance and transportation. This stark disparity in the GDP shares of unpaid work between men and women underscores the persistent gender gap in unpaid household work, not only in Bangladesh but also globally. Efforts to address this gap are therefore crucial for advancing gender equality and fostering inclusive economic development.

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