Measuring the Value of Unpaid Household Work in Bangladesh

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Outline

1. Introduction
2. Methodology
3. Results and Discussion
4. Conclusion
Introduction

• Economic statistics often overlook unpaid household work, presenting challenges like defining household activities and determining suitable market prices.

• The SNA 2008 defines economic production within boundaries, including goods and services for external use and certain domestic services.

• The SNA production boundary encompasses various types of unpaid work but excludes own-use production for household consumption.
Introduction

• Studies in Bangladesh value unpaid work using methods like replacement cost and wage rates, showing significant contributions to GDP.

• Bangladesh's government aims to reduce gender disparities in unpaid work by 2025, with targets set for decreasing women’s time spent and increasing men’s involvement.

• This paper aims to contribute to the existing literature by using updated data from the Labor Force Survey (LFS) and Time Use Survey (TUS) to improve estimates of unpaid domestic and care work value in Bangladesh.
Methodology

valuation based on the inputs needed to produce the services, namely, labor inputs, consumption of fixed capital consumption, net indirect taxes and intermediate consumption

Approaches to wage estimation

INPUT APPROACH

OUTPUT APPROACH

OPPORTUNITY COST APPROACH

REPLACEMENT APPROACH

HYBRID APPROACH
Methodology

Opportunity Cost Approach

Values the housework being done using a person’s wage rate on the labor market (i.e., the market income foregone due to spending time on unpaid household activities)

Assumption: time spent in one sector is at the expense of time spent in the other
Methodology

Replacement Cost Approach

Uses the market wage rates from similar paid work occupations to value total housework time

Assumption: 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.

Two approaches: specialist method and generalist method
Methodology

Hybrid Approach

Valuation of household activities uses the generalist method, and then for specialist method for more complex tasks, such as childcare and adult care.

Assumption: Household members and housekeepers may or may not be equally efficient in carrying out domestic tasks.

• For instance, A housekeeper may clean more efficiently than a household member multitasking with childcare, but may sacrifice thoroughness for speed.

It attempts to better represent the actual outside employment a household would get in to complete activities categorized as household work.
Data Sources

**2021 Time Use Survey**

- The Bangladesh Bureau of Statistics conducted the Time Use Survey (TUS) in 2012 and 2021.
- The 2021 TUS used household questionnaires and time diaries, aligning activities with the International Classification of Activities for Time Use Statistics 2016 (ICATUS 2016) for cross-country comparisons.

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

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

**2021 Time Use Survey**

- The 2021 TUS categorized findings by sex and age group, covering all administrative divisions in Bangladesh and collecting primary data through face-to-face interviews from January 24 to April 12, 2021.

- Men spent less time on household work compared to 2012, while women spent significantly more time on unpaid domestic and care work, indicating a widening gender disparity.

### Average time spent per day (in hours) in doing household* work, by sex.

<table>
<thead>
<tr>
<th>Time use surveys</th>
<th>Employed Male</th>
<th>Unemployed Male</th>
<th>Employed Female</th>
<th>Unemployed Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>1.4</td>
<td>1.2</td>
<td>3.6</td>
<td>6.2</td>
</tr>
<tr>
<td>2021</td>
<td>0.8</td>
<td></td>
<td>5.9</td>
<td></td>
</tr>
</tbody>
</table>

*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
Data Sources

2022 Labor Force Survey

- The Labor Force Survey (LFS) in Bangladesh is conducted every 4 to 5 years since 1980.
- Derived from the International Standard Classification of Occupations (ISCO) 2008, the Bangladesh Standard Classification of Occupations (BSCO) 2020 provides detailed occupational categories, thus facilitating in-depth analysis of labor market trends.

<table>
<thead>
<tr>
<th>Major group</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Managers</td>
</tr>
<tr>
<td>2</td>
<td>Professionals</td>
</tr>
<tr>
<td>3</td>
<td>Technicians and associate professionals</td>
</tr>
<tr>
<td>4</td>
<td>Clerical support workers</td>
</tr>
<tr>
<td>5</td>
<td>Service and sales workers</td>
</tr>
<tr>
<td>6</td>
<td>Skilled Agricultural, Forestry and Fisheries workers</td>
</tr>
<tr>
<td>7</td>
<td>Craft and related trade workers</td>
</tr>
<tr>
<td>8</td>
<td>Plant and machine operators and assemblers</td>
</tr>
<tr>
<td>9</td>
<td>Elementary occupations</td>
</tr>
<tr>
<td>10</td>
<td>Other occupations</td>
</tr>
</tbody>
</table>
Data Sources

**Some considerations**

- Study considered the economically active population group (aged 15 years old and above).
- The average hourly wage for 2021 was estimated by backcasting LFS data using the wage rate index, which tracks nominal wages of low paid skilled and unskilled labor in various sectors, based on gross wage and salaries of 44 occupational groups separated by gender (base year: 2010-11).
- Latest Supply and Use Tables of Bangladesh was prepared in 2011.
- 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.
Results and Discussion

- Preliminary step involves linking the TUS with the LFS, mapping activities to corresponding occupations and estimating average hourly wages for each occupation.
- The estimation process calculates imputed compensation by multiplying total hours spent per activity by average hourly wages adjusted for wage rate indices, providing a simplified template for valuation.

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

- Women primarily dedicate their time to food preparation (1,208 hours), childcare (420 hours), and cleaning (237 hours), while men predominantly engage in household shopping (62 hours), childcare (58 hours), and transportation for household members (44 hours).

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

Source: Time Use Survey 2021 (BBS, 2023)
Results and Discussion

• Men generally earn higher wages than women across various activities, with some tasks showing significant gender wage gaps.
• Women's wages closely align with men's in specific activities like shopping for own household and family members (ICATUS 37) and other activities related to unpaid caregiving services for household members (ICATUS 49).
Results and Discussion

• Women's contributions accounted for approximately 18% of the GDP in 2021, significantly surpassing those of men (2%).

• Women's unpaid work value is primarily driven by activities like food preparation, childcare, and cleaning, while men's contributions largely come from tasks such as maintenance and transportation.

Source: Authors' Calculation
Conclusions

- The preliminary valuation of unpaid domestic and care work in Bangladesh sheds light on women's substantial economic contributions, revealing stark gender disparities and emphasizing the need for gender equality initiatives.

- Despite spending significantly more time on unpaid work, women often earn lower replacement wages compared to men, reflecting underlying gender wage gaps.

- The estimated value of unpaid work, equivalent to about 21% of Bangladesh's GDP in 2021, underscores its significant economic impact, with women contributing disproportionately more than men.
Thank you.