

## Beyond the Gross Domestic Product: Integration of Unpaid Work of Women into National Accounts

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### Abstract:

*This research paper explores how and why unpaid work is excluded from national income metrics. Unpaid work, which involves domestic and care work, remains excluded from the System of National Accounts' (SNA) Production Boundary; this leads to incomplete economic indicators. This study critically examines the SNA framework, highlighting its limitations in capturing non-market activities and their economic value. Through a socio-economic approach, the paper deeply studies methodologies such as the opportunity cost method, replacement cost method, and time-use surveys to measure and value unpaid work. To avoid underestimation or overestimation of these services, we reviewed extensive literature on various theories and case studies trying to include unpaid work in national accounts. The findings of the paper highlight the importance of unpaid work and its contribution to societal welfare and male-female equality. The paper proposes expanding the SNA production boundary to include unpaid work in the GDP.*

**Keywords:** System of National Accounts, Production Boundary, Unpaid Work, Gross Domestic Product.

### 1. Introduction:

This research paper focuses on finding where unpaid work fits within the System of National Accounts (SNA) and the general production boundaries. It examines how unpaid work such as cleaning and cooking, child care, elder care, and volunteer work is defined, measured, and given value in economic terms. These activities, though essential, are often not counted in traditional economic measures such as GDP. The paper will look into the SNA methods, why the current boundaries are set, and how these boundaries affect the recognition of unpaid work. It will also discuss the implications of this

exclusion for policy and economic understanding and consider changes to better include unpaid work.

The System of National Accounts (SNA) is a global standard for measuring economic activity. It defines the production boundary for activities included in the Gross Domestic Product (GDP). The SNA involves accounts for goods and services, production, income, spending, capital, financial, and international transactions. Goods and services accounts are estimated based on transactions, i.e., the SNA records goods when their economic ownership changes. Output value is usually estimated at market value at the factory

gate. This is a common issue for unpaid work since production and consumption of such work happen at the same time.

Moreover, these services are not transacted in market, so naturally the do not make it in the production boundary of the SNA.

That is why, the SNA's production boundary has been critiqued for excluding various forms of unpaid work, such as household labor and caregiving, from its calculations. Unpaid work, despite its significant economic value and contribution to well-being, remains largely invisible in national accounts, leading to incomplete economic indicators and potentially skewed policy decisions.

## 2. Objectives:

- a. This research paper mainly aims to understand why the Social Accounting Framework (SNA) does not include unpaid work. We will investigate the criteria that SNA uses to include economic activities in national accounts and why it leaves out unpaid household and care work.
- b. We also plan to look at different ways to measure and value unpaid work, considering their pros and cons and how they might be included in national accounts. We'll review methods like opportunity cost, replacement cost, and time-use surveys to find the best way to reflect the economic value of unpaid work.
- c. Furthermore, we will analyze how unpaid work fits within the SNA's production boundary and the general production boundary to better understand its economic and social importance. Our goal is to advocate for a broader view of economic activity, recognizing all forms of

labor's contributions to national and global economies.

## 3. Methods:

This research work employs secondary data sources to conduct its analysis. A systematic review of scholarly articles, books, and reports was conducted to gain insights into the theoretical foundations of Social Network Analysis (SNA). Additionally, the economic and social implications of unpaid work were explored. Furthermore, the criticisms of current economic accounting practices were examined by reviewing the existing literature. This research paper collected data from academic databases, peer-reviewed articles, and accessed books. Moreover, the synthesis of reports from international organizations such as the United Nations and the Organization for Economic Co-operation and Development (OECD) and the review of publications from feminist economics perspectives were undertaken. The literature review sought to comprehend the reasons behind the current production boundaries and the methods for valuing unpaid work. It also addressed the debates surrounding the inclusion of unpaid labor in national accounts.

## 4. Theoretical framework:

Let's delve into the Theoretical Framework, which forms the bedrock of comprehending the conceptual foundations of the System of National Accounts (SNA), the production boundary, and the general production boundary. Within these frameworks, we'll also explore the classification and significance of unpaid work.

In the System of National Accounts (SNA) "Production Boundary" determines which activities are included

(and excluded) in the calculation of Gross Domestic Product (GDP). According to the SNA, for an activity to be included within the production boundary, it must involve the production of goods or services that are supplied to entities other than the producers themselves or intended for barter or self-consumption.

The Unpaid work whether domestic or caregiving services do not get included in the System of national accounts. The 19th International Conference on Labor Statisticians (ICLS-19) was conducted at Geneva in 2013. The committee suggested inclusion of unpaid work which is used to produce 'goods' for own use. These products are not exchanged in market, but they are valued at market prices. The ICLS-19 endorsed measurement of all types of work, including unpaid work. Despite the recommendations, Indian statistics traditionally excludes most forms of unpaid work, particularly those related to household production and caregiving, arguing that these activities do not involve market transactions.

Moreover, the unpaid "services" are completely excluded from the production boundary of the SNA. The general production boundary proposes an expansion of the SNA framework to include a wider array of non-market activities, particularly unpaid services. This expanded boundary recognizes that unpaid work, such as caregiving, household maintenance, and volunteer services, contributes significantly to societal well-being and economic sustainability. The rationale behind broadening the production boundary lies in acknowledging the economic value of these activities, promoting a more holistic understanding of economic production, and enhancing the comparability of national accounts.

## 5. The Concept and Types of Unpaid Work:

Unpaid domestic and care work refers to activities and labor performed within households or for family members without any financial compensation. This work is essential for the well-being of individuals and communities. It contributes significantly to the economy, and it is often undervalued and not accounted for in traditional economic measures like GDP. The burden of unpaid domestic and care work is disproportionately carried by women and girls worldwide, contributing to gender inequalities in employment, wages, and leisure time.

### 5.1. Categories of Unpaid Domestic and Care Work:

- a. Household Maintenance: Activities involved in managing and maintaining a household's day-to-day operations. These tasks are essential for creating a functional and comfortable living environment.
  - Cleaning and tidying (e.g., sweeping, mopping, dusting)
  - Laundry (washing, ironing, and arranging clothes)
  - Meal preparation and cooking
  - Washing utensils
  - Home repairs and maintenance
  - Gardening and yard work
  - Managing household supplies and shopping for groceries
- b. Caregiving for Family Members: Providing care and support to children, the elderly, the sick, and people with disabilities or special needs. This category encompasses both physical care and emotional support.
  - Childcare (feeding, bathing, and supervising children)

- Helping children with homework and educational activities
- Caring for elderly family members (assistance with mobility, personal care)
- Nursing and caring for ill or disabled family members
- c. Management and Organization: Tasks related to the planning and organization of household and family activities. This often involves managing schedules, finances, and planning for family needs.
  - Budgeting and managing household finances
  - Planning family events and gathering
  - Organizing appointments (medical, educational, etc.)
  - Coordinating transportation for family members
- d. Community Services: Voluntary activities performed for the benefit of the community or extended family members without pay.
  - Participating in community cleaning and beautification projects
  - Volunteering for local schools, shelters, or non-profit organizations
  - Providing care or assistance to neighbors or extended family

The recognition of unpaid domestic and care work is crucial for understanding its impact on economic development, social welfare, and gender equality. Advocacy for the acknowledgment and valuation of this work has led to policy discussions and reforms in some countries, focusing on support measures like care credits towards pensions, access to social security, and the promotion of shared domestic responsibilities among all genders.

**6. Unpaid work within the framework of SNA**

The SNA defines 2 boundaries: 1. The production boundary and 2. The general production boundary. Our research focuses on the gap between these two boundaries; the diagram below defines the production of goods for own use and even the goods produced out of volunteer work to be included in the production boundary. This will be calculated in the gross domestic product (GDP). But the services are excluded. The general production boundary mentions these services.

**Figure 1. Forms of Work and Their Inclusion in National Accounts:**

Intended destination of production	For own final use		For use by others				
	Own-use production work		Employment (work for pay or profit)	Unpaid trainee work	Other work activities	Volunteer work	
Forms of work	of services	of goods				In market and non-market units	In households producing
	Relation to 2008 SNA	Activities within the SNA production boundary					goods
	Activities inside the SNA General production boundary						

**Sources:** International Labor Organization (ILO), 19th ICLS Resolution (2013), based on the 2008 System of National Accounts (SNA). [www.ilo.org](http://www.ilo.org).

This diagram presents a structured framework to divide various forms of work on the basis of two dimensions: whether it's for personal consumption or for others and its relation with the 2008 System of National Accounts (SNA), which defines what constitutes national income statistics, such as GDP.

On the left side, it illustrates own-use production, which involves individuals creating goods or services for their own household's needs, such as cooking, cleaning, or gardening. While these activities are genuine forms of work, they are excluded from the SNA production boundary, meaning they are not included in GDP calculations.

In the middle section, it categorizes forms like paid employment, unpaid trainee work, and other economic activities performed for others. These activities are considered within the SNA production boundary, thereby contributing to national accounts.

On the right side, volunteer work is presented. It can be conducted through organizations or directly for households. Although unpaid, it is recognized as a productive activity and placed within the broader production framework, but outside the core SNA boundary. The left side of the diagram is our target work of research.

#### **7. Implication of excluding Unpaid Services from the System of National Accounts:**

- a. Inaccurate Welfare Policies: Excluding unpaid work from economic indicators leads to policy blind spots, particularly in areas such as social welfare, labor market policies, and gender equality initiatives.

- b. Inefficient Resource Allocation: Without recognizing the value of unpaid work, governments may allocate resources inefficiently, neglecting sectors and populations most in need of support.

- c. Aggravating Gender Inequalities: The exclusion of unpaid work from economic metrics exacerbates social inequalities, especially gender inequalities, by failing to acknowledge and value the contributions of caregivers and household workers.

- d. Ignoring the Economic Contributions of women: The domestic and care work has immense economic significance. Apart from the monetary value of these services, they form as the foundation on which all the employment is dependent.

#### **8. How to include unpaid Work in the SNA?**

Unpaid work plays an important role in economic production and societal welfare. If we measure and value unpaid work, it could change how we view economic output and labor markets. Economists have developed ways to put a value on unpaid work. These include the opportunity cost method, the replacement cost method, and the input-output method. These methods aim to estimate how much unpaid work is worth in money terms. They suggest that unpaid work makes up a large part of actual economic output.

Several methodologies have been proposed and implemented to measure and value unpaid work, each with its advantages and challenges:

- a. Opportunity Cost Method: Valuing unpaid work by the income a person could have earned if they had spent

- the same amount of time working in a paid job. While this method acknowledges the economic value of time, it may overvalue unpaid work in high-income brackets and undervalue it in low-income brackets.
- b. Replacement Cost Method: Estimating the cost of replacing unpaid work with paid services, such as hiring a childcare provider or a professional cleaner. This approach provides a tangible value for unpaid work but may not fully capture the personal and societal value of care work.
- c. Input-Output Method: Using input-output tables to estimate the economic value of goods and services produced through unpaid work. This comprehensive method considers the wider economic impacts but is complex and data intensive.

All these methods have their own pros and cons, they are not without criticism. It is also not one size fits all. Some economies are better off if they use opportunity cost method, others with input-output method. In case of Indian Economy, replacement method is most suggestive. India is a developing country, much of the economy is informal and many sectors still unorganized. In such case, opportunity method can overestimate the value of unpaid work. Similarly, the input-output method might underestimate the monetary value of care work.

#### 9. Recommendations:

To include unpaid work in national accounts, a fundamental reevaluation of the SNA production boundary is necessary. This adjustment would involve expanding the definition of economic activity, broadening the scope of what is considered economic activity to include non-market

transactions, especially those related to household production and caregiving. Other ways would be integrating time-use surveys as a standard measure across countries to quantify the amount of time spent on unpaid work, thereby facilitating its valuation and inclusion in national accounts. Lastly, developing a satellite account that operates alongside the standard national accounts will help. Satellite accounts are like proxies for the value of unmeasured work; they allow a more flexible integration of this data into economic analyses without altering the core structure of the SNA.

#### 10. Conclusion:

This research paper underscores the substantial economic and social importance of unpaid work. It critically examines the current limitations of the Social Accounting Framework (SNA) and proposes innovative methodologies for its inclusion and valuation. Unpaid work plays a significant role in contributing to economic and societal welfare, yet it remains largely overlooked within conventional economic accounting systems. By expanding the SNA's production boundary to encompass unpaid work and adopting appropriate measurement and valuation techniques, we can gain a more accurate and comprehensive understanding of economic activity. International initiatives and case studies provide compelling evidence of the practicality and advantages of recognizing unpaid work within national accounts.

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