Valuation of unpaid household work of rural women: A case study of Ghazipur district of Uttar Pradesh

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Abstract: Women considerably contribute to a large part of an economy through their productive work but their works are not recognized due to the inadequate definition of 'economic activity, used in the national income accounting. A major section of the invisible work performed by rural women remains unidentified, undefined, and unpaid. Since the definition of economics is bounded by the market framework, much of the non-market work performed by women remain invisible and has consequently caused the market devaluation of women's work. Present primary data-based study on Ghazipur district of Uttar Pradesh studies the valuation of paid and unpaid household activities of rural women by Market replacement cost method. The study finds that the total average time spent on unpaid SNA and Extended SNA activities by non-working women is almost double the time spent by working women. The daily and monthly wages for unpaid household activities work for the non-working woman is about 28.34 per cent higher than a working woman under the market replacement generalist approach. In the study specialist approach is found to be better and more realistic than the general approach.

Keywords: Valuation, Unpaid household work, Rural women, Time use survey, Workload

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1 Introduction

Women though significant and dynamic agents in the Indian financial system but their involvement in different economic activities is very low as compared to men. Most of the women are primarily engaged in non-economic activities (these activities are productive but not included in national GDP). Women's contributions to economic activities are neither properly recorded nor recognized and they remain invisible (missing women) in the national records. Due to various definitional, conceptual and methodological problems, the restricted definition of economic activities and gender blindness of development policy, women contribution to economic and non-economic activities has not been quantified much and also not captured by statistical methods (Mayanglambam 2012).

Census of India (2011) defines 'Work' as participation in any economically productive activity (may be physical and/or mental) with or without compensation, wages or profit. Work involves not only actual work but also includes effective supervision and direction of work. It even includes part-time help or unpaid work on a farm, family enterprise or in any other economic activity. It means that work implies any productive work for which remuneration is paid and is market-oriented and 'worker[1]' is a person engaged in 'work'. A person has worked for a major part of the reference year, (i.e. six months or more during the last one year preceding the date of enumeration) he/she is a 'main worker' and if a person has worked for less than half a year (i.e. in the last one year preceding the date of enumeration), he/she is a marginal worker.

On the other hand, the NSSO defines a person as a 'worker'[2] if he/she is engaged in any 'economically meaningful activity' including 'main activities'[3] of women done within the field of household activities, such as fodder collection, food grain processing, looking after livestock, and household maintenance etc. Hence the census investigator asks a respondent whether he/she is a worker or not and the NSS investigator enquires about the type of activity the person is engaged in. Therefore, it seems that the NSS captures more of women's work. Labour force surveys[4] or household-based surveys afford to evaluations of the employed and unemployed persons in the economy by collecting data from sample households that are representative of the population. Most of the literature claims that labour force surveys tend to undervalue or not document appropriately the workforce and labour force, especially women workers, and do not provide appropriate information about the characteristics of these workers (Indira Hirway 2002; VaskarSaha 2003; Jacques Charmes 2004; Indira Hirway and Jacques Charmes 2006; Duncan Ironmonger 2008; Devaki Jain 2008). Hirway and Charmes (2006)

claim that time-use surveys which collect comprehensive information of the activities done by men and women provide better estimations of the labour force particularly the female workers. Labour force surveys do not provide proper information or underestimate about labour force due to not being able to estimate the total System of National Accounts (SNA) work, particularly informal and subsistence work. The United Nations system of national accounts (UNSNA 1993) definition provides an effective principle to help differentiate between work and other activities such as leisure time and personal care,

and between production and consumption. Primarily, SNA boundaries incorporated only the production of goods and services that be marketed.

The SNA 1993 production boundary continues to keep other forms of processing out such as preparation of meals as well as services such as household's maintenance, and care of family members (Mukharjee, 2011). In extended SNA, production boundary will take into account Household maintenance, Management and shopping for own Household, childcare, and other such activities. The problems with the NSS definition are (1) the processing of goods for personal use and services such as meal preparation, child care, and household maintenance are excluded from the definition of economic activities, and (2) contradiction between its definition of economic activities and the labour force. The activities status 'attended domestic duties' such as poultry, dairy, and kitchen production for own use is excluded. Martha Alter Chen (2004), Indira Hirway & Sunny Jose (2011) have described the heterogeneous nature of informal work which arises from differences in technology, productivity, wages and remuneration, location of work, and terms of work, and so on. Hirway (2008) finds that unpaid work burden tends to control women work participation, their mobility and their choice of work in the labour market.

Countries like Canada, Australia, Japan and the Netherlands have tried to determine the monetary valuation of women's unpaid work. The problem of unpaid work is affected by the nature of work of women such as cooking, cleaning, care of children and elder person, and animal husbandry etc (Mayanglambam, 2012). Despite the participation in productive activities, women are kept aside from the financial system; also carry the dual burden of responsibilities because of their traditional customs and economic conditions. The present study aims to cover the role of rural women in economic and non-economic activities in depth. It also attempts to measure the valuation of women work in the study area. The study is classified like this. Section 2 throws light upon the Literature review, section 3 studies the Time

use survey in India, section 4 deals with Data and Research Methodology, section 5 analyses Empirical Results and discussion and section 6 concludes the study.

2- Literature review

According to UNDP, Human development report (1995) *"Every country has made progress in developing women's capabilities, but women and men still live in an unequal world"*. Many studies (Cowan, 1983 and Strasser, 1982) highlight subsistence household work which was conducted by both men and women for the requirement of survival at the beginning of the 19th century. Gerstel & Gross (1987) observe that gradually household subsistence work has been converted into paid work for men in the labour market and unpaid for women in the home. Oakley (1980) finds that women's work particularly unpaid work is usually given less importance than men work. Most of the studies (Larson, 1990, Soederback, 1988a) treat household work as a modality for assessment and show that household work or unpaid work is not included in the concept of work. Household work is not considered as work in major studies. Since the 1970s feminist theory and research in the field of social science begin to give attention to women's household unpaid work. Barnett & Baruch (1988), Berk (1988), Cowan (1987), Googins (1991) Hartmann (1987) and Hochschild (1989) find that in women and men participation in household work consistently, women are accountable for most of the unpaid work in the home. Numerous studies explain the major inequities between women and men in the division of domestic work. Delphy (1984) finds that exploitation of women domestic work lies not in the work itself but in the circumstances under which the work is performed, domestic work is unpaid and unremunerated because it is done for others. Pleck (1977 and 1985) in his studies on working women' experience of household work observes the stresses of managing the demands of both paid work and unpaid work in the home.

James (1995), Nelson (1996) and Waring (1999) point out that women work is neither appropriately recorded nor recognized and it remains invisible (missing) in both national statistics and economic terms. Ravindram (2010) also finds that women work and their contribution to the economy is either undervalued or outrightly dismissed. Indira Hirway and Jacques Charmes (2006) in their studies examine at the conceptual level and find the reason, how time-use data can add to the information provided by the conventional data on the workforce. Hirway and Jose (2011) find that due to inadequacy in the usual labour force surveys, time-use surveys are advocated for the correct estimation of labour force participation. Therefore, adopting time-use surveys, and asking for more follow-up and probing questions to those engaged in these activities can give a better estimation of their work participation in

economic activities. In Gary S. Becker (1965) monetary valuation of unpaid work, data is collected using a time-use approach which provides an inclusive explanation of the lifestyle of individuals, in terms of how they spend their time in different human activities. Time-use statistics mainly contain data on time spent by individuals.

3- Time use survey in India

The initial efforts of conducting a time use survey in India was made in the 1970s. Indira Hirway and Jacques Charmes (2006) compare two sets of data on the Indian workforce, namely the 1999–2000 employment–unemployment survey of the National Sample Survey Organization (NSSO; 2000) and the 1998–99 pilot Indian Time Use Survey(TUS)[5] by Government of India (2000) to illustrate how a TUS can provide improved estimates and better information on the workforce and particularly women participation in the workforce in a developing country. National Council of Applied Economic Research (1983) conducted a time-allocation study on a sub-sample of Employment and Unemployment Survey of 38th Round of NSSO. A pilot survey on time-use was also conducted by the Directorate of Economics & Statistics, Government of Tamil Nadu during 1996. The Central Statistical Organisation (CSO), Government of India conducted a time use survey in 1998-1999. This pilot survey was conducted in six states viz., Kerala, Meghalaya, Haryana, Madhya Pradesh, Orissa and Gujarat. TUS in 1998 – 1999 was mainly conducted with a view: (i) to assess the contribution of the women & men in the national economy through unpaid household work (ii) to study the gender discrimination in household activities and (iii) to study the weekly average time spent in different types of activities according to various background characteristics like age, sex, place of residence, level of education and economic activity status.

4 -Data and Research Methodology

To capture the time allocation by different women on different activities per day Concurrent method[6] and Recall method[7] (S.D. Mayanglambam, 2012) have been used in the study. Educational backwardness and respondents' unwillingness to answer a long questionnaire interview schedule are the factors that the personal communication skill to extract out the inner idea of the respondent has been used. Variation of time spent by the woman in different activities is classified like this (i) Normal day[8] (ii) Abnormal day[9] and (iii) Variant day[10]. An attempt has been made to capture different methods of payment i.e. (i) cash (ii) kind and (iii) both, the multiple work[11] and actual time[12] in minutes. The household time use survey was conducted two times during the year 2017, that is from March to April (harvesting time) and July to August (sowing time).

Time allocation on different activities by different respondents per day is calculated based on the primary survey. This is a study of female work participation and its valuation in rural areas of the Deokali block of Ghazipur district in Uttar Pradesh. The in-depth study with certain limitations is based on a field survey of a specific area, so it has been restricted to approximately 200 households. 100 working and 100 non-working women have been selected to examine their working time in different paid and unpaid works. Time use makes no distinction between human efforts (one hour) worked in harsh and comfortable circumstances. Seasonality is also an important factor. Women and men time differ substantially whether it is harvest time, sowing time, offseason, etc. The market wage rate for paid work varies a lot based on the nature of work and the availability of labour in the unorganized sector.

4.1 -The Indian classification of time use activities

The study attempts to determine the average time spent on market and non-market activities within the production boundary defined in the System of National Accounts (SNA) 1993. All the activities have been categorized into three parts SNA[13], Extended SNA[14] and Non-SNA[15].

I-   **SNA** *(Productive and Economic Activities that fall within the production boundary of the 1993 UNSNA)* I.   Primary production activities II. Secondary activities III. Trade, business and services

II-   **Extended SNA Activities (**productive *but non-economic activities which fall into the general production boundary of UNSNA)*   IV.   Household   maintenance, management and shopping for own households V. Care for children, the sick, elderly and disabled for own household VI. Community services and help to other households.

III-   **Non-SNA Activities** *(non-productive activities which fall outside the SNA and non-SNA and which cannot be delegated to anybody else)* VII. Learning VIII. Social and cultural activities, mass media etc. IX. Personal care and self-maintenance.

4.2 - Methods of Valuation of Unpaid Work

Valuation of unpaid work can be broadly divided into two categories, namely, the input method or a wage-based valuation and the second output method[16] or product-based valuation (Hirway, I, 2005). In the study, the input method (commonly used method in the valuation of unpaid work) has been used for the valuation of unpaid household paid and unpaid activities of working and non-working women in the study area. Under the input method, the value of unpaid work at the individual level is computed by multiplying the time spent by the person on

unpaid work with an appropriate wage rate. At the aggregate level, the total time spent on unpaid work is multiplied by a set of appropriate wage rates (Hirway I., 2005). The input method is classified into the following two general approaches (i) Market replacement cost approach[17] and (ii) Opportunity cost[18](difficult in the calculation). Market replacement cost approach i.e. wage paid to a person who produces a similar service in the market is based on the market compensation of the worker engaged in the same type of activity in the household production for own consumption. The market replacement cost approach is categorized into (i) the Generalist approach (ii) the Specialist approach. The generalist cost approach applies to the total amount of unproductive work, the mean wages of employed persons who perform similar work in the local market. The specialist wage rates of different specialized activities are comparable with the relevant domestic activities (Kim and Moon 2001, Fukami 2000, Mikami 2000, Goldschmidt, Clermont and Pagnossin – Aligisakis 1995).

5- Empirical Results and discussion

5.1- Distribution of time in different activities of working and non-working women

A large part of the household activities like collection of fuel, fetching of water and agriculture-related work is included in the SNA as productive work. Table 1.1 shows the classification of activities into SNA household activities (1) Paid SNA[19] and (2) unpaid SNA[20]. Unpaid SNA work refers to unpaid productive work performed inside and outside the household for example working on their agricultural field, arranging fodder for their animals etc. Household maintenance, management and shopping for own households and care of children and elder person for own household type activities are categorized as extended SNA. These activities are productive but not calculated as economic activities. Non-SNA activities are not included in national accounts and cannot be delegated to anybody else. Non-SNA activities are personal activities like sleeping, eating, grooming, watching T.V. listening radio, gossiping etc.

Table-1.1

Distribution of the time spent on the SNA and Extended SNA Activities per day of working women

Category	S.N.	Major Activities	Average time spent (in minutes)	Average time spent (in hours)	Average per women time spent (in hours)	Average per women time spent in (%)
Paid SNA	(I)	Primary production activities	17010	283.5	2.83	
	(II)	Secondary activities	9140	152.33	1.52	
	(III)	Trade, business and services	21610	360.16	3.60	
Total hours spent in paid SNA					**7.95**	**33.13**
Extended SNA	(IV)	Household maintenance, management and shopping for own households	21415	356.91	3.56	
	(V)	Care for children, the sick, elderly and disabled for own household	16325	272.08	2.72	
	(VI)	Community services and help to other households	840	14.00	0.14	
Total hours spent in Extended SNA					**6.42**	**26.75**
Non-SNA	(VII	Learning	2820	47.00	0.47	
	(VIII)	Social and cultural activities, mass media,	9160	152.66	1.52	
	(IX)	Personal care and self-maintenance	46320	772.00	7.72	
Total hours spent in Non-SNA					**9.71**	**40.46**

Source: Calculated by authors

Table 1.1 shows that the working woman spends 2.83 hours on average in primary production activities, 1.52 hours in secondary activities and 3.6 hours in trade business and service-related activities. In Extended SNA (IV, V, VI) activities on average, she spends 3.56 hours on household maintenance, management and shopping for her household. She spends 2.72 hours on the care of children and elder persons and .14 hours on community services. In the case of non-SNA (VII, VIII, IX) activities on average, the working woman spends only 0.47 hours in learning activities, 1.52 hours in social and cultural activities (marriage ceremony, and other religious and social rituals) and 7.72 hours in personal care and self-maintenance. Thus, on

average, a working woman spends 7.95 hours (33.13 per cent) on paid SNA activities, 6.42 hours (26.75 per cent) on extended SNA activities and 9.71 hours (40.46 per cent) on Non-SNA activities in a day.

Table 1.2

Distribution of the time spent on the SNA and Extended SNA Activities per day

non-working women

Category	S.N.	Activities	Average time spent (in minutes)	Average time spent (in hours)	Average per women time spent (in hours)	Average per women time spent in (%)
Unpaid SNA	(I)	Primary production activities	30030	500.5	5.00	
	(II)	Secondary activities	00	00		
	(III)	Trade, business and services	00	00		
Total hours spent in unpaid SNA					**5:00**	**20.8**
Extended SNA	(IV)	Household maintenance, management and shopping for own households	29650	494.16	4.94	
	(V)	Care for children, the sick, elderly and disabled for own household	22450	374.16	3.74	
	(VI)	Community services and help to other households	1720	28.66	0.28	
Total hours spent in Extended SNA					**8.96**	**36.21**
Non-SNA	(VII)	Learning	2290	38.16	0.38	
	(VIII)	Social and cultural activities, mass media	9790	163.16	1.63	
	(IX)	Personal care and self-maintenance	48510	808.5	8.08	
Total hours spent in Non-SNA					**10.09**	**42.04**

Source: Calculated by Authors

Table 1.2 shows the distribution of time spent by non-working women in different activities in one day. In primary production activities on average, 5.0 hours are spent by non-working

women, however, not a single woman is working in secondary and tertiary activities. In Extended SNA related activities on average, she spends 4.94 hours on household maintenance, management and shopping for her household, 3.74 hours on the care of children and elder person and .28 hours on community services. In the case of non-SNA activities on average, she spends .38 hours on learning, 1.63 hours on social and cultural activities and 8.08 hours on personal care and self-maintenance. The maximum 8.08 hours of average time is spent on personal care and 4.94 hours in household maintenance.   Thus, on average, a non-working woman spends 5 hours (20.8 per cent) on unpaid SNA activities, 8.96 hours (36.21 per cent) on extended SNA activities and 10.09 hours (42.04 per cent) on Non-SNA activities in a day.

5.2 - Estimation of the market replacement cost (Generalist) Approach

The replacement (generalist) approach is based on the wages of housekeepers or domestic paid workers. The generalist approach applies to the total amount of unpaid productive work, the mean wages of employed persons (including housekeeper, cooks, and cleaners employed by the private households and establishment, and nursery workers among others) who perform similar works. The formula for the valuation of unpaid work under the replacement cost generalist approach is as follows.

Value= time spent for aggregate unpaid work $*$ wage rate of a domestic worker or housekeeper

In the study area, a domestic worker works for 8 hours per day and earns around Rs. 1600 in a month (based on a primary survey). The hourly and daily wage rate of the domestic worker is calculated as Rs. 6.6 and Rs.53.33 respectively (Table A.1).

5.2.1- Valuation of Extended SNA by working women

The value of the work of a working woman is 6.42 hours on unpaid household activities and care of children and elder person per day. The daily and monthly wage rate of the domestic worker is calculated as Rs. 42.37 and Rs. 1271.1respectively (Table A.1.1).

5.2.2- Valuation of Extended SNA by non-working women

The daily and monthly wage rate of a non-working woman for 8.96 hours per day is calculated as Rs. 59.13 and Rs. 1773.9 respectively (Table A.1.2).

5.2.3- Valuation of total unpaid work (unpaid SNA and Extended SNA) by non-working women

Total unpaid work (unpaid SNA+ Extended SNA) of a non-working woman is 13.96 hours per day. The daily and monthly wage rate of a non-working woman is calculated as Rs. 92.97 and Rs. 2789 respectively (Table A.1.3).

The work of housekeepers is equal to the work of domestic workers. However, many domestic workers do not perform the task of cooking and care for children and elders. The work of a domestic worker cannot be equivalent to the work that is performed by the housewife. She performs the work of cooking as well as all the other activities, in addition to paid work outside the house. Hence it would not be appropriate to undertake the valuation of women's work by using the wages paid to the domestic worker (S.D. Mayanglambam,2012).

Thus, it is found that in the Generalist approach valuation of Extended SNA comes as Rs.42.37 daily and Rs. 1271 monthly for a working woman, for a non-working woman this value is Rs. 59.13 daily and Rs. 1773.9 monthly respectively. Valuation of unpaid SNA and Extended SNA comes as Rs. 92.97 daily and Rs. 2789 monthly for non-working woman. The monthly value of Extended SNA for a non-working woman is 39.57 per cent greater than working woman due to larger work hours.

5.3 - Estimation of the market replacement cost (Generalist) approach by Uttar Pradesh government minimum wage rate (Uttar Pradesh Minimum wage (from 1st April 2017 to 30 September 2017)

Based on the Uttar Pradesh Government minimum wage Act, the wage rate for unskilled workers will be Rs. 7400.48 The domestic worker wage per day is calculated as Rs. 246.68(Table A.2).

5.3.1- Valuation of unpaid household activities and care of children and elder person (Extended SNA) by working women (Generalist approach: Uttar Pradesh government minimum wage rate)

The hourly, daily and monthly wage rate of a working woman for Extended SNA is calculated as Rs.30.83, Rs.197.92 and Rs. 5937.85 respectively (Table A.2.1).

5.3.2- Valuation of (Extended SNA) by non-working women (Generalist approach: Uttar Pradesh government minimum wage rate)

The hourly, daily and monthly wage rate of a non-working woman for Extended SNA is calculated as Rs.30.83, Rs.276.23 and Rs. 8286.9 respectively (Table A.2.2).

5.3.3- Valuation of total unpaid work (Unpaid SNA and Extended SNA) by non-working women (Generalist approach: Uttar Pradesh government minimum wage rate)

The unpaid work of a non-working woman is 13.96 hours per day. The daily and monthly wage rate of a non-working woman for Unpaid SNA and Extended SNA is calculated as Rs.   Rs. 430.38 and Rs.12911.4 respectively (Table A.2.3).

Thus, it is found that in the Generalist approach (Uttar Pradesh government minimum wage rate) valuation of Extended SNA comes as Rs.197.92 daily and Rs. 5937.85 monthly for a working woman, for a non-working woman this value is Rs.276.23 daily and Rs. 8286.9 monthly respectively. Valuation of unpaid SNA and Extended SNA comes as Rs. 430.38 daily and Rs. 12911.4 monthly for non-working woman. The monthly value of Extended SNA for a non-working woman is 39.56 per cent greater than working woman due to larger work hours.

5.4 -Valuation of unpaid work by the specialist approach

The specialist approach assigns different categories of unpaid productive work to the wages of employed persons who perform work of similar nature. The occupational remuneration corresponding to the respective types of unpaid work is used under the replacement cost method specialist approach. Table 1.3 shows the corresponding occupation and wages to the respective type of unpaid work. The average hourly wage rate of the above-paid activities is calculated as Rs.19.03 (Table A.3).

Table 1.3

Occupation and wages corresponding to the respective type of unpaid work

S.N.	Type of activities	Corresponding occupation	Wages/salary* (Rs. Per month)	Wages/salary(Rs. per hour) **
1	Cooking	Student cook (MDM)	1000	4.16
2	Cleaning	Building cleaner or sweeper (safaikarmi)	7400	30.83
3	Laundry	laundryman (washerwomen)	6000	25
4	Sewing and knitting	Tailor/sewing machine operator (ladies tailor)	6500	27.08
5	Childcare	Kinder garden teacher (private caretaker)	3500	14.58
6	Elderly nursing care	Nurse assistant or female health worker (Aagnwadi)	3750	15.62
7	Cultivator	agriculture labour (average of agriculture labor respondents)	3833	15.97
8	Total Activities		31,983	**133.24**

Source: calculated by authors, *Prevailing market wage rate in the study area, ** column(iv)/240

Note: 1 wage and salaries used in this table have been taken by primary survey

Note- 2 The periods spent on various activities are not equal, though only 8 hours per day is taken for the calculation of the value of the working hours of workers.

5.4.1- Valuation of Extended SNA by working women (specialist approach)

The unpaid value of a working woman for 6.42 hours on **Extended SNA** is calculated as Rs. 122.17 per day and Rs. 3665.1 per month (Table A.3.1).

5.4.2- Valuation of Extended SNA by non-working women (specialist approach)

The unpaid value of a non-working woman for 8.96 hours on **Extended SNA** is calculated as Rs. 170.51 per day and Rs.5115.3 per month (Table A.3.2).

5.4.3 -Valuation of total unpaid work (Unpaid SNA and Extended SNA) by non-working women (specialist approach)
The value of total unpaid SNA and extended SNA work of a non-working woman for 13.96 hours is calculated as Rs.265.66 per day and Rs. 7969.8 per month (Table A.3.3).

Thus, it is found that in the Specialist approach valuation of Extended SNA comes as Rs.122.17 daily and Rs. 3665.1 monthly for a working woman, for a non-working woman this value is Rs. 170.51 daily and Rs. 5115.3 monthly respectively. Valuation of unpaid SNA and Extended SNA comes as Rs. 265.66 daily and Rs. 7969.8 monthly for non-working woman. The monthly value of Extended SNA for a non-working woman is 39.57 per cent greater than working woman due to larger work hours.

5.5- Estimation of the market replacement cost (specialist) approach by Uttar Pradesh government minimum wage rate (Uttar Pradesh Minimum wage (from 1st April 2017 to 30 September 2017)

The work has been divided into three different categories by the Uttar Pradesh government based on skilled, semi-skilled and unskilled activities. Table 1.4 shows the occupation and wage rate corresponding to the respective type of unpaid work by the U.P. Government minimum wage rate. The government has also fixed the minimum wage rate for unskilled workers as Rs. 7400.48 per month, for semi-skilled workers Rs. 8140.51 per month and for skilled workers Rs.9118.66 per month. The average hourly wage rate of the above-paid activities is calculated as Rs.31.21 (Table A.4).

Table 1.4

Occupation and wage rate corresponding to the respective type of unpaid work by U.P. Government minimum wage rate

S.N.	Type of activities	Category of workers	Wages/salary (Rs. per month)	Wages/salary(Rs. per hour) *
1	cooking	unskilled	7400.48	30.83
2	Cleaning	unskilled	7400.48	30.83
3	laundry	unskilled	7400.48	30.83
4	Sewing and knitting	Semi-skilled	8140.50	33.91
5	Childcare	unskilled	7400.48	30.83
6	Elderly nursing care	unskilled	7400.48	30.83
7	Agriculture labour	unskilled	7400.48	30.83
8	Casual labour	unskilled	7400.48	30.83
9	**Total Activities**		59943.86	**249.72**

Source: *calculated by authors

5.5.1- Valuation of Extended SNA by working women through Replacement specialist cost

Replacement specialist cost = time spent on specific work x wage rate of specialist

The value of extended SNA work of a working woman for 6.42 hours is calculated as Rs. 200.36 per day and Rs. 6011.05 per month (Table A.4.1).

5.5.2-Valuation of Extended SNA by non-working women through Replacement specialist cost

The value of extended SNA work of a non-working woman for 8.96 hours is calculated as Rs. 279.64 per day and Rs. 8389.24 per month (Table A.4.2).

5.5.3- Valuation of unpaid work (Unpaid SNA and Extended SNA) by non-working women through Replacement specialist cost

The value of total unpaid SNA and extended SNA work of a non-working woman for 13.96 hours is calculated as Rs.435.69 per day and Rs.13070.74 per month (Table A.4.3).

Thus, it is found that in the Specialist approach (Uttar Pradesh government minimum wage rate) valuation of Extended SNA comes as Rs. 200.36 per day and Rs. 6011.05 per month for a working woman, for a non-working woman this value is Rs. 279.64 per day and Rs. 8389.24 per month respectively. Valuation of unpaid SNA and Extended SNA comes as Rs.435.69 per day and Rs.13070.74 per month for non-working woman. The monthly value of Extended SNA for a non-working woman is 39.57 per cent greater than working woman due to larger work hours.

6 - Conclusion and Policy implications

The present study thus finds that the total average time spent on unpaid SNA and Extended SNA activities by non-working women is almost double than of the time spent by working women. The daily and monthly wages for unpaid household activities work for a non-working woman is about 39.56 per cent higher than a working woman under the market replacement generalist approach. The daily and monthly wages for Extended SNA for a non-working woman is about 39.57 per cent higher than a working woman under market replacement specialist approach. The daily and monthly wage rate for Extended SNA for non-working women under *specialist approach* is found to be 188.36 per cent higher than generalist approach. The daily and monthly wage rate for total unpaid work (unpaid SNA+ unpaid Extended SNA) of non-working women under *the* specialist approach is found to be 185.76 per cent higher than *the* generalist approach. Daily and monthly wages for activities under

unpaid household work, (Extended SNA) for non-working woman are found to be 39.09 per cent higher than the respective wages of a working woman under the market replacement generalist approach (U.P. government minimum wage rate). Daily and monthly wages for activities under unpaid household work, (Extended SNA) for non-working woman are found to be 39.56 per cent higher than the respective wages of a working woman under the market replacement specialist approach (U.P. government minimum wage rate). A large gap is found between the prevailing market wage rate in Deokali block and the Uttar Pradesh government prescribed minimum wage. Thus, in the study specialist approach is found to be better and more realistic than the general approach. The output of the study could be significant for decision-makers in providing valuable information about the role of women in economic and non-economic activities and to suggest feasible gender development policies and addressing the issues of valuation of household unpaid work.

Notes:

1- *several changes were introduced in the 1991, 2001 and 2011 Censuses to improve this data collection. Using a new definition of ''worker,'' the 2001 Census put a special accent on accumulating information on unpaid economic work on farms, family enterprises and in the informal sector.*

2- *The NSSO also has tried insistently to collect correct data on the workforce. In 1972–73, NSSO introduced the concepts of the worker based on usual status, current weekly status, and daily status of employment.*

3- *In 1977–78, the NSSO first introduced a question for all those respondents who reported activity status code 92 (domestic work) and 93 (domestic work with free collection) as their main activity.*

4- *This labour force survey uses a person as to its unit of classification, and it applies priority major time criteria to record workers. Also, this labour force survey records subsistence work – like production of primary products for own consumption, including collection of fruits and vegetables – as ''economic activity.''*

5- *The pilot Indian Time Use Survey (Government of India 2000) did not use the essential context variables, as a consequence, it is unable to provide exact estimates of informal workers in the economy.*

6- *Concurrent method-Entire activities of female respondents over the current 24-hour period through time diary.*

7- *Recall method-Entire activities of the female respondent of the previous 24- hour period (one-day recall method).*

8- *Normal day- implies a day of fixed routine.*

9- *Abnormal day- On an abnormal day, the working hours of different activities are disturbed. There are allocation and reallocation of time on different activities. Such as the arrival of the guest, illness of family members, etc.*

10- *Variant day- A day in which there is a planned deviation from the fixed routine. Such as shopping, visit relatives, family and friends.*

11- *Multiple activities- researcher has also tried to capture, multitasking nature of women that are doing more than one work for the activities at the same time. For example, cooking and care for children, sewing and listening to the radio etc.*

12- *Actual time spent (minutes): the researcher has captured the working time in minutes to trace the actual time which is spent by the respondents.*

13- *SNA activities are those activities that fall within the production boundary of the UNSNA.*

14- *Extended SNA activities are activities falling outside the SNA Production Boundary but within the General Production Boundary, consisting mainly of unpaid services.*

15- *Non-SNA activities are not included in national accounts but are contained under the general production boundary. They include all delegable production of services not covered under the national income accounts.*

16- *Output Method: Under the output method, the value of unpaid work is calculated by multiplying the units of output with the wage rate per unit of output.*

17- *Replacement wage rate i.e. the wage paid to a person who produces a similar service in the market*

18- *The opportunity cost, the wages by the persons engaged in unpaid work are calculated based on the age, education and qualification of domestic workers.*

19- *Paid SNA refers to all remunerated work activities*

20- *Unpaid SNA includes all non-remunerated work activities*

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Appendix

Table A.1

> *Wages per day is Rs.53.33 = Rs. 1600/30*
>
> *The wage per hour is Rs. 6.6 = Rs. 53.33/8 hrs.*

Table A.1.1

> *Wage per day 6.42 hours*Rs.6.6 = Rs. 42.37*
>
> *Wage per month Rs. 42.37 * 30= Rs. 1271.1*

Table A.1.2

> *The value of the work of a non-working woman for 8.96 hours per day will be Rs. 59.13 = 8.96 hours * Rs.6.6*
>
> *per month it will be Rs. 1773.9 = Rs. 59.13* 30*

Table A.1.3

> *Wage per day will be Rs.92.97 =13.96 hours *Rs.6.66*
>
> *The wage per month will be Rs. 2789= Rs. 92.97* 30days*

Table A.2

> *Basic Daily Minimum wage Rs. 5750 +V.D.A .(1650.80) and Rs.7400.48/30 = Rs. 246.68*

Table A.2.1

> *The wage per hour will be Rs. 246.68 /8 hrs. = Rs. 30.83*
>
> *The daily wage will be Rs. 197.92 =6.42 hours *Rs.30.83*
>
> *Wage per month will be Rs.5937.85= Rs. 197.92 * 30days*

Table A.2.2

> *Domestic workers' wages per day Rs.246.66= Rs.7400/30*
>
> *wage per hour Rs. 30.83= Rs. 246.66 /8 hrs.*
>
> *wage per day will be Rs. 276.23 = Rs 8.96 hours * Rs. 30.83*
>
> *per month=W Rs. 276.23*30 days= Rs. 8286.9*

Table A.2.3

> *13.96 hours* Rs.30.83 = Rs. 430.38 wage per day*
>
> *wage per month = Rs. 430.38 * 30days = Rs. 12911.4*

Table A.3

> *Rs. 133.24/7 = Rs.19.03 wage per hour.*

Table A.3.1

*Market Replacement specialist cost = time spent on specific work * wage rate of specialist*

*6.42 hours * Rs. 19.03 = Rs.122.17wage per day*

*Rs. 122.17 * 30 days = Rs. 3,665.1 per month*

Table A.3.2

*8.96 hours * Rs. 19.03 = Rs.170.51 wage per day*

*Rs.170.51 * 30 days = Rs. 5115.3 wage per month*

Table A.3.3

*13.96 hours * Rs.19.03 = Rs.265.66 wage per day*

*Rs. 265.66 * 30 days = Rs. 7969.8 wage per month*

Table A.4

Unskilled workers basic minimum wage will be Rs.7400.48 = 5750 + 1650.80 V.D.A.

Semi-skilled workers basic minimum wage Rs. 8140.51= Rs. 6325 + 1815.15 V.D.

Skilled workers basic minimum wage Rs.9118.6= Rs. 7085 + 2033.66 V.D. A

The average hourly wage rate will be Rs.249.72 /8 =Rs. 31.21.

Table A.4.1

*wage per day Rs. 200.36= 6.42 hours * Rs. 31.21*

*wage per Rs. Month 200.36 * 30 days = Rs. 6011.046 wage per month*

Table A.4.2

*wage per day 8.96 hours * Rs. 31.21 = Rs. 279.64*

*wage per day Rs.279.64 * 30 days = Rs. 8389.24 wage per month.*

Table A.4.3

*wage per day 13.96 hours * Rs.31.21 = Rs. 435.69 wage per day*

*wage per day Rs. 435.69 * 30 days = Rs.13070.74 wage per month*

*****