VALUATION OF THE CONTRIBUTIONS OF A HOUSEWIFE: A COMPARATIVE SEARCH FOR URBAN AND RURAL FAMILIES

Priyanka Sankhee*

ABSTRACT

As a result of their productive work, women make important contributions to the economy; nevertheless, their contributions are often disregarded in the accounting of national income since accounting has an inadequate description of what it entails. The work that rural and urban women undertake behind the scenes is often not recognized, which leads to it being underestimated and disrespected. As a result of the constraints that the market places on the idea of accounting, the market undervalues the work that is done by women. This is because the majority of the work that women do outside of the market goes unrecognized. This study compiles primary data from the Jodhpur area of Rajasthan in order to quantify the dollar value of unpaid labor done by rural and urban women on a daily, monthly, and annually basis and to compare this number. The data for this study comes from the region of Jodhpur. A calculation is made to determine both the extent of the unpaid labor and the level of degree.

KEYWORDS: Accounting, Value, Unpaid Household Work, Household Work, Womenfolk.

Introduction

Despite being significant and active participants in the Indian economic system, women's engagement in the different financial activities is much lower than that of men's in India. Underreported and undervalued are women's economic contributions, which continue to be "missing women" in official statistics.

According to the 2011 Census of India, work is any financial activity (mental or physical) carried out for profit, compensation, or no compensation at all. Work in a family, on a farm, or in any financial endeavor paid or unpaid is all covered. An individual who is actively involved in work known as workers. Work, broadly defined as any productive activity for which compensation is earned and which is focused on meeting market demands. [1]

But in the eyes of the NSSO, one is seen to be "working" if they engage in any "financially meaningful activity," which include the "main activities" that women do around the home. As such, the NSS investigator will query about the respondent's activities, whereas the census investigator will ask about the respondent's employment status. Labour force surveys and household-based surveys, which collect information from statistically representative home samples, may be used to evaluate the employed and the unemployed. According to a number of scholars, labour force surveys undervalue the labour force overall, especially women workers. [2], [3]

According to Hirway and Charmes (2006) [4], time-use surveys that collect copious amounts of data on men's and women's activities may provide more accurate estimates of the labour power, particularly for woman workers.

^{*} Research Scholar, Jai Narain Vyas University, Jodhpur, Rajasthan, India.

Other sorts of handling, such as food preparation, as well as services like cleaning and family care, remain beyond the scope of the SNA 1993 innovation boundary (Mukharjee, 2011) [5]. Grocery shopping, child care, housekeeping, and other related jobs will all be included in the production bounds of the extended SNA. The NSS definition has two primary problems: (1) it excludes services like meal preparation, child care, and housekeeping, or it defines financial activities in a way that conflicts with the definition of the labour force; and (2) it does not include the processing of products for personal use. 'Attended home tasks' includes several exclusions, such growing food for oneself, such as chickens, dairy products, and kitchen vegetables.

An amount of nations, counting the Netherlands, Australia, Canada, and Japan, have attempted to impose a cost on women's unpaid labour. Unpaid labour that disproportionately affects women includes cooking, cleaning, tending to children and the elderly, cooking, caring for animals, etc (Mayanglambam, 2012) [6]. Examining rural and urban women's involvement in financial and non-financial domains is the aim of this study. Additionally, it seeks to evaluate the economic value placed on women's contributions. This is how the research is categorized. Section 2 provides background information on the literature, Section 3 discusses the research methodology, Section 4 examines the results and discussion, Section 5 wraps up the study.

Literature Review

It's true that many nations have made strides in empowering women, yet gender inequality persists across the globe, as stated by the United Nations Development Programme in its Human Development Report (1995) [7]. Subsistence home labor, performed by both men and women in the early nineteenth century, was emphasized by several studies (Cowan, 1983; Strasser, 1982) [8], [9]. Gerstel and Gross (1987) [10] note that throughout time, unpaid domestic labor performed by women has been replaced by paid labor in the labor market. According to Oakley (1980) [11], women's labor, especially unpaid labor, is often valued less than men's work. Household labor or unpaid labor is not included in the definition of work, as shown by the majority of research (Larson, 1990; Soederback, 1988a) [12], [13]. Housework is not counted as "work" in academic literature. Since the 1970s, feminist philosophy and social science studies have focused on women's unpaid domestic labor. Women are responsible for the majority of unpaid labor in the home. Many research have shed light on why women still undertake a disproportionate share of housework compared to males. Delphy (1984) [14] concludes that the exploitation of women in domestic labor stems not from the nature of the job itself but rather from the fact that it is done without payment or recognition. Pleck (1977, 1985) [15], [16] observed the strains working women face in juggling the responsibilities of paid and unpaid domestic labor.

The contributions of women to the economy are not properly documented or acknowledged. Women's economic contributions are either devalued or ignored, according to Ravindram's (2010) [17] research. Time-use data may supplement the information offered by traditional statistics on the labor force, as explored by Indira Hirway and Jacques Charmes (2006) [18]. Time-use surveys are recommended by Hirway and Jose (2011) [19] for accurately estimating labor force participation since conventional labor force surveys are inadequate. Adopting time-use surveys and asking additional follow-up and probing questions to persons engaged in these activities may provide a more accurate estimate of their economic engagement. In Gary S. Becker's (1965) [20] monetary assessment of unpaid labor, he uses a time-use technique to gather data, which explains how people use their time across a wide range of human endeavors. Individuals' time usage habits are the primary focus of time-use statistics.

Research Methodology

Most of the empirical studies on women's unpaid work highlights that value of unpaid work is high for urban region as compared to rural region. Besides, the studies mention that measuring value of unpaid work of urban housewives and rural housewives would be an appropriate valuation. It clarifies that the economic valuation of unpaid work of urban and rural housewives may yield the full-fledged economic value of women's unpaid work and their economic contribution to household income and national output. With this background, the present study surveys the urban women and rural women as a sample respondent to appraise the economic value of women's unpaid work in Jodhpur district.

The different methods of economic valuation of unpaid work are: (i) replacement value method, (ii) opportunity value method, (iii) labor input method or input method (iv) output method and (v) pay equity method. Among this, the replacement value method and opportunity value method are widely used by various studies. But, various studies mention that the replacement value method is the apt method for measuring unpaid work as compared to opportunity value method.

But Economists argue for the opportunity cost method as economic valuation of women's unpaid work gives the higher value than other methods. That is, opportunity cost approach computes the market wage rate according to their educational, technical and other qualification. In reality, there is no opportunity for all the housewives to substitute their unpaid work time for paid work according to their educational attainments. Based on the above justifications and relevance, the replacement method is adopted to measure the economic value of women's unpaid work in rural and urban regions.

In order to identify the various unpaid work and its monetary value, we arranged focus group discussions with rural and urban housewives and servant maids of the Jodhpur district before conducting the data collection. At the time of pilot study, we gathered information on per day wage for household work for fixation of unpaid work. On an average, the rural and urban people have mentioned per day wage for household work at Rs.1800 and Rs.2400 respectively for eight hours. Based on this, the unpaid work for both regions is computed and compared.

Results and Discussion

The study is done on 240 women from which 120 women were from urban area and 120 from rural area. The present section examines the accounting of women's unpaid work and respondents' and their family members' perception about the women's unpaid work.

Average Value of Household Works done Per Day

The value is computed for the household for both rural and urban households.

From the field survey, it is found that Rs.1800 is the salary in rural area for eight hours of household works and it is Rs.2400 in urban region per day. Given this, the present study has computed the monetary value of the household work for the time consumed. The salary is converted into minutes and values for unpaid work for house works are given in the table 1 and the comparison for urban and rural women respondents is given in figure 1.

The total monetary value per day for house works is Rs.1018.8 and it is high for urban region (Rs.1105.2) as towards rural region (Rs.932.4). Since the salary is high in the urban region, the value registered is high even though the time involved at work is high for rural region. As found in the time consumption, the value for cooking, serving, and washing vessels and fetching water is high as towards the other listed house works.

Table 1: Average Value of Household Works done Per Day by the Surveyed Women Respondents (Value in Rs.)

S. No.	Details	Rural	Urban	Total
		(n=120)	(n=120)	(N=240)
1.	Fetching Water	75.6	90.0	82.8
		(8.1)	(8.1)	(8.1)
2.	Cooking	483.6	555.6	519.6
		(51.9)	(50.3)	(51.0)
3.	Serving Food	98.4	109.2	104.4
		(10.5)	(9.9)	(10.2)
4.	Washing Vessels	96.0	112.8	104.4
		(10.3)	(10.2)	(10.2)
5.	Washing cloth	46.8	85.2	66.0
		(5.0)	(7.7)	(6.5)
6.	Cleaning House	50.4	69.6	60.0
		(5.4)	(6.3)	(5.9)
7.	Purchasing or Shopping	39.6	51.6	50.4
		(4.2)	(5.7)	(5.0)
8.	Gardening	19.2	15.6	16.8
		(2.0)	(1.4)	(1.7)
9.	House Repair	24.0	4.8	14.4
		(2.6)	(0.5)	(1.4)
Overall		932.4	1105.2	1018.8
		(100)	(100)	(100)

Source: Computed

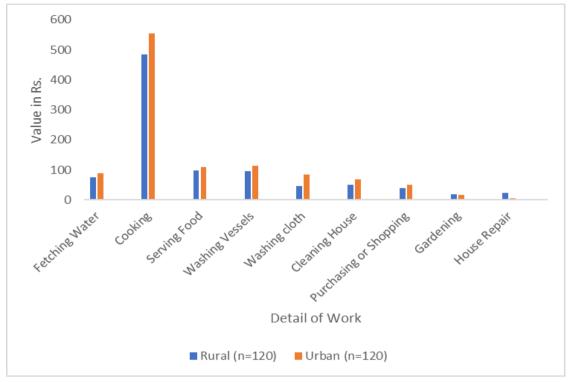


Figure 1: Comparative Value of Household Works done Per Day by the Rural and Urban Women Respondents

Average Value of Child and Aged Care Works done Per Day

The average value of child and aged care works done per day by the surveyed women respondents is given in the table 2 and the comparison for rural and urban women respondents is given in figure 2. The child care works are bathing, feeding, preparing kids to school, taking kids to school, teaching and training to kids, refreshing kids, taking kids to park and taking care of aged. The average value registered for child and aged care work is Rs.310.8 wherein it is Rs.434.4 for urban women respondents and Rs.188.4 for rural households. The value registered is high for preparing kids to school (25.4%) and other works requires comparatively less time and value also registered accordingly.

Between the regions, the value for urban respondents for taking care of kids in all respects is high, but for the rural respondents the value is high for preparing kids to school (31.1%). Thus, the urban household spent more time for the kids since they admit their kids in convents wherein more works are given to kids and parents also spend more time with them. Regard to rural households, they spend less time and the education also gives lesser scope for the rural people. However, it is important for the rural people to spend more time with their kids and the time spend for them alone can change them to higher level.

S. No.	Details	Rural	Urban	Total	
		(n=120)	(n=120)	(N=240)	
1.	Bath and Feeding	30.0 (15.9)	75.6 (17.3)	52.8 (16.9)	
2.	Preparing Kids to School	58.8 (31.1)	99.6 (22.9)	79.2 (25.4)	
3.	Taking Kids to School	15.6 (8.0)	55.2 (12.6)	34.8 (11.2)	
4.	Teaching and Training to School	10.8	90.0	50.4 (16.3)	

Table 2: Average Value of Child and Aged Care Works done Per Day by the Surveyed Women Respondents (Value in Rs.)

5.	Refreshing Kids	36.0	55.2	45.6
		(19.0)	(12.6)	(14.6)
6.	Taking Kids to Park	-	34.8	18.0
	-		(8.0)	(5.6)
7.	Taking Care of Aged	37.2	25.2	31.2
		(20.0)	(5.8)	(10.1)
Overall		188.4	434.4	310.8
		(100)	(100)	(100)

Source: Computed

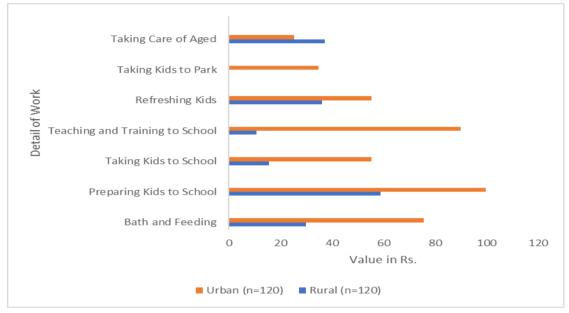


Figure 2: Comparative Value of Child and Aged Care Works done Per Day by the Rural and Urban Women Respondents

Average Value of Other Works done Per Day

The other works are tailoring, managing domestic works, collecting feed for animals, supervising agricultural lands, working in agricultural lands and collecting fuel.

Table 3: Average Value of Other Works done Per Day by the Surveyed Respondents (Value in Rs.)

S. No.	Details	Rural	Urban	Total
		(n=120)	(n=120)	(N=240)
1.	Tailoring	10.8	80.4	45.6
		(6.9)	(100)	(37.7)
2.	Managing Domestic Animals	46.8	-	24.0
		(29.1)		(19.5)
3.	Collecting Feed for Animals	24.0	-	12.0
		(14.2)		(10.1)
4.	Supervising Agri. Lands	16.8	-	8.4
		(10.5)		(7.0)
5.	Working in Agri. Lands	40.8	-	20.4
		(25.5)		(17.1)
6.	Collect Fuel	20.4	-	10.8
		(12.8)		(8.6)
	Total	162.0	80.4	121.2
		(100)	(100)	(100)

Source: Computed

Note: Figures in Parentheses denote percentages to the Column Total

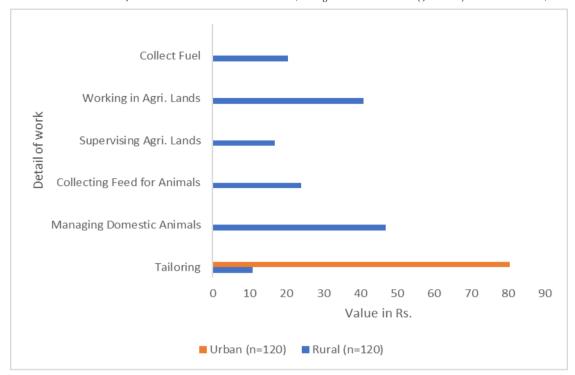


Figure 3: Comparative Value of Other Works done Per Day by the Rural and Urban Women Respondents

Since the time devoted to the other works are too low, the average value for the other unpaid work per day is also registered at lower level. For the rural respondents, it is Rs.162.0 and Rs.80.4 per day. Even though the rural people involve in agricultural works, the time spent is less as they assist their husband at agricultural work and the value has registered at lower level. Agricultural is the major occupation in the rural area and they have devoted their life for the same. It is to appreciate that the female respondents involve in agricultural work for producing valuable food for the human being.

Monetary Value of Different Components of Unpaid Work in Rural and Urban Regions

The value of rural and urban women's unpaid labor in the research region was compared using a one-way analysis of variance model. Housework, caregiving, and other forms of unpaid labor are all distinct categories. Housework, caregiving, and other forms of unpaid labor are all treated as independent variables in a One-Way Analysis of Variance. However, regions are treated separately from other variables. The research area's regions' dependent parameter fluctuation has been analyzed.

All types of volunteer activity have significant One-way ANOVA model 'F' values. Analysis further confirms that there is statistically significant variance in the monetary value of housekeeping (1167.936), monetary value of care work (1438.5), and monetary value of other unpaid labor (983.928). Both the sum and the mean sum of squares are statistically significant, which is supportive of the appropriateness model and the test's dependability (Table 4 and Table 5).

Table 4; One-way ANOVA: Variation in Monetary Value of different Components of Unpaid Work and comparison between rural and urban region

Parameters		N	Mean	Std.	Std. Error	
					Deviation	
House	Rural		120	27956.40	4693.5196	428.4576
Work	Urban		120	33148.80	3348.4926	305.6742
	Total		240	30552.60	4829.0452	311.7136
	Model Fixed Effects				4076.8572	263.16
		Random Effects				2596.2

Care Work	Rural		120	5624.40	2659.5842	242.7856
	Urban		120	13050.0	6937.1124	633.2688
	Total		240	9337.20	6428.4948	414.9576
	Model Fixed Effects				5253.4232	339.1070
	Random Effects					3712.800
Other	Rural		120	4837.2	2516.6496	229.7376
Works	Urban		120	2400.00	1536.1196	140.2279
	Total		240	3618.6	2412.386	155.7188
	Model	Fixed Effects			2084.848	134.5764
		Random Effects				1218.600

Source: Calculated

Housework

Table 5: Results of One-way ANOVA: Variation in Monetary Value of different Components of Unpaid Work and Comparison between Rural and Urban Region

i	Parameters	Sum of Squares	df	Mean Square	F	Sig.
House	Between Groups	134805088.80	1	134805088.80	1167.94*	.000
Work	Within Groups	109881720.00	238	461687.90		
	Total	244686808.80	239			
Care	Between Groups	275697676.80	1	275697676.80	1438.50*	.000
Work	Within Groups	182456476.80	238	766623.852		
	Total	458154153.60	239			
Other	Between Groups	29699719.20	1	29699719.20	938.928*	.000
Works	Within Groups	28735819.20	238	120738.736		
	Total	58435538.40	239			

Source: Calculated

Average monetary value of housework per month in the study regions is Rs.30552, Rs.27948 for rural region and Rs.33144 for urban region, respectively. Variation between rural and urban regions is Rs.5196 per month and this variation is twofold higher than the difference between study area and urban area. Major reason for the variation in monetary value of housework between urban and rural is the differences in market rate for the unpaid work related to the housework in both regions. In case of urban regions, most of the households are using housekeeping workers to maintain the day-to-day housework. Therefore, in urban area there is much demand for housekeeping service and gives more monetary value for housework. In rural areas, all the household works are frequently done by the housewives and there is no need for housekeeping and other types of servants. It leads less value to the monetary value of housework in the rural region.

Care Work

Average monetary value of care work per month in the study regions is Rs.9336, Rs.5616 for rural region and Rs.13044 for urban region, respectively. The difference between rural and urban regions is Rs.7428 per month. Similar to variation in household work, the variation between rural and urban is twofold higher than the difference between study area and urban area i.e. Rs.3720. Major reasons for the variation are as follows: (i) In rural area, no. of care takers is low as compared to urban area. The aged people are able to do their daily necessities by their own due to their health condition. But in urban areas, the aged population are facing ageing diseases, communicable and non-communicable disease. (ii) The children in rural area are managed by the elder members of the family and sometimes the parents brought them in to the work place and taking care of the children. It is just opposite in urban areas, it is not having the elderly members in the family due to nuclear family system and the female members of the family need to spent time on taking care of children. (iii) The cost for care work is substantially high in urban work as compared to the rural regions. Therefore, there is variation in monetary value of care work in between rural and urban regions in the study area.

Other Works

Average monetary value of other work per month in the study regions is Rs.3612, Rs.4836 for rural region and Rs.2400 for urban region, respectively. The difference between rural and urban regions is Rs.2400 per month. The monetary value of care work in rural region is equal to the double the amount of the monetary value of other works in urban region. Unpaid household works other than house work

and care work is high in rural areas than the urban regions. The household of urban region is concentrating only on house related unpaid work. Whereas in rural areas, the female members of the family are involving in agricultural and agricultural allied activities also. Thus, there is wide difference in monetary value of other unpaid works between the urban and rural households of the study region.

In total, average monetary value of housework per month in the study regions is Rs.30552, Rs.27948 for rural region and Rs.33144 for urban region, respectively. Variation between rural and urban regions is Rs.5196 per month and this variation is twofold higher than the difference between study area and urban area. Major reason for the variation in monetary value of housework between urban and rural is the differences in market rate for the unpaid work related to the housework in both regions. Average monetary value of care work per month in the study regions is Rs.9336, Rs.5616 for rural region and Rs.13044 for urban region, respectively. The difference between rural and urban regions is Rs.7428 per month. Major reasons for the variation are as follows: (i) In rural area, the aged people are able to do their daily necessities by their own due to their health condition. (ii) The children in rural area are managed by the elder members of the family and by keeping them in working place. (iii) The cost for care work in urban area.

Average monetary value of other work per month in the study regions is Rs.3612, Rs.4836 for rural region and Rs.2400 for urban region, respectively. The difference between rural and urban regions is Rs.2400 per month. The household of urban region is concentrating only on house related unpaid work. Whereas in rural areas, the female members of the family are involving in agricultural and agricultural allied activities also.

Sum of Squares and Mean Squares both show considerable variance between categories, verifying that various aspects of unpaid labor in the research area have distinct monetary values. In addition, differences between and within groups may be understood via the use of the Sum and Mean Squared Distinction statistics. Finally, it demonstrates that the monetary worth of various aspects of unpaid labor varies throughout urban and rural areas, within regions, and across the research area.

Women's Unaccounted Economic Contributions to Household Income in Rural and Urban Regions

The monetary value of women's unaccounted economic contribution to household income through their unpaid work may varies between urban and rural areas. Total monetary value of unpaid work is considered as unaccounted economic contribution to household income and treated as dependent variable and urban and rural regions are the explanatory variables differentiating the women's unaccounted economic contributions to household income.

Table 6: One-way ANOVA: Variation in Unaccounted Economic Contributions to Household Income and comparison between rural and urban region

	Details	N	Mean	Std. Deviation	Std. Error
Rural		120	38421.600	8234.8522	751.7360
Urban		120	48598.800	7331.8148	669.3000
Total		240	43510.200	9302.2596	600.4584
Model	Fixed Effects			7796.4208	503.2568
	Random Effects				5088.600

Source: Calculated

Women's unrecorded contributions to household income in the study area were analyzed using a one-way analysis of variance model. Total monetary value of unpaid labor is regarded as the dependent variable in the One-way ANOVA model, with urban and rural areas serving as the explanatory factors. The research area's regions' dependent parameter variations has been analyzed.

The calculated 'F' value of the One-way ANOVA model is 1226.68 and found significant at 5 per cent level. The result of the analysis reveals that the average value of women's unaccounted economic contributions through their unpaid to the household income is Rs.43500 in the study area as a whole, Rs.48588 for urban area and Rs.38412 for rural area, respectively. It clearly conveys that there is wide variation in unaccounted economic contributions to household income between rural and urban region. The actual difference is Rs.10176 between urban and rural regions and it is Rs.5088 between study area's average and urban region's average. The difference between rural and urban is equal to absolutely two times of the above mentioned comparison. Also, both the sum of squares and the mean sum of squares are statistically significant, which provides further support for the validity of

the test and the appropriateness model. Further, they are confirming the variation in unaccounted economic contributions to household income between the regions, within the region and study area as whole (Table 6 and 7).

Table 7: Results of One-way ANOVA:
Variation in Unaccounted Economic Contributions to Household Income

Details	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	517876999.200	1	517876999.200	1226.868*	.000
Within Groups	100462734.000	238	422112.328		
Total	618339733.200	239			

Source: Calculated

Note: * represent significance at 5 per cent level

Important reasons for the variation in women's unaccounted economic contributions to household income between urban and rural regions are as follows:

- The market rates of household works are quite high in urban areas as compared to rural area due to huge demand in urban regions.
- The social, economic and demographic status of the urban and rural households are different in many dimensions and differentiate the total monetary value of women's unpaid work.
- In urban regions, due to the nuclear family setup there is no way to share the household work and it is inverse in rural regions and it differentiates total monetary value of women's unpaid work.
- In the study region, there is variation in women's unaccounted economic contributions to household income between rural and urban regions. The result of the analysis reveals that the average value of women's unaccounted economic contributions through their unpaid to the household income is Rs.43500 in the study area as a whole, Rs.48588 for urban area and Rs.38412 for rural area, respectively.

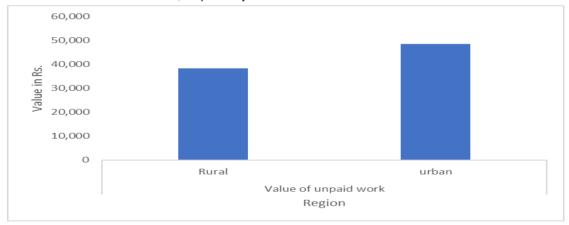


Figure 4: Comparative Value of Unpaid Work done by Rural and Urban Women

Conclusion

It clearly conveys that there is wide variation in unaccounted economic contributions to household income between rural and urban region. Important reasons for the variation in women's unaccounted economic contributions to household income between urban and rural regions are (i) the market rates of household works in urban and rural regions, (ii) the social, economic and demographic status of the urban and rural households, (iii) family structure and sharing of unpaid household work among the female members of the family.

As a whole, the monetary expectation for the unpaid work is high for the urban respondents while rural respondents do not have such computation in their mind on the unpaid works. Still the rural people fail to think their huge task of completing their unpaid works and to convert the same into monetary value. Thus, it is important for the rural households to consider the unpaid work and to give the much importance for them by sharing their unpaid works.

References

- Census of India, (2011). Primary Census Abstract. Office of the Registrar General and Census Commissioner. India. New Delhi.
- 2. NSSO, (2000). Employment Situation in India 1999–2000a. New Delhi: Ministry of Statistics and Programme Implementation, Government of India.
- 3. National Sample Survey Organization (1978). Employment Situation in India 1977–8. New Delhi: Ministry of Statistics and Programme Implementation, Government of India.
- 4. Hirway, Indira and Jacques charmes. (2006). Estimating and understanding informal employment through time-use studies. paper presented at the 19th meeting of the expert group on informal sector statistics (Delhi group).
- 5. Mukherjee, A (2011). Exploring Inter-State Variations of Rural Women's Both paid and unpaid Work in India. The Indian Journal of Labour Financials, Vol 55, No 3, pp 371–92.
- 6. Mayanglambam, S.D. (2012). Value of Manipuri Tribal women's work. The Indian journal of labor financials, Vol.55, No.3.
- 7. UNDP (1995). Human Development Report 1995. Oxford University Press, Delhi.
- 8. Cowan, R. S. (1983). More work for mother. The ironies of household technology from the open hearth the microwave. New York: Basic books.
- 9. Strasser, S. (1982). Never done-A history of American housework. New York: Pantheon.
- 10. Gerstel, N. and Gross, H. E. (1987). Part II: Introduction. (In N. Gerstel & H. E. Gross (Eels.), Families and work (pp 153-161) Philadelphia: Temple University.
- 11. Oakley, A. (1980). Prologue: Reflections on the study of household labour. Women and household labour. Beverly Hills, CA: Sage, 7-14.
- 12. Larson, K. B. (1990). Activity pattern and life changes in people with depression. American Journal of Occupational Therapy. 44, 902-906.
- 13. Söderback, I. (1988a). A housework-based assessment of intellectual functions in patients with acquired brain damage. Development and value of an occupational therapy method. Scandinavian journal of rehabilitation medicine, 20(2), 57-69.
- 14. Delphy, C. (1984). Close to home: A materialist analysis of women's oppression. The University of Massachusetts Press, Amherst.
- 15. Pleck, J H. (1977). The work-family role system. Social Problems, 24, 417-427.
- 16. Pleck, J. H. (1985) Working wives/working husbands Beverly Hills. CA: Sage.
- 17. Raveendran, G. (2010). Contribution of Women to the National Economy. ILO Asia- Pacific Working Paper Series, International Labour Organization, New Delhi.
- 18. Hirway, Indira and Jacques charmes. (2006). Estimating and understanding informal employment through time-use studies. paper presented at the 19th meeting of the expert group on informal sector statistics (Delhi group).
- 19. Hirway, Indira and Jose, S. (2011). Understanding women's work using time-use statistics: The case of India. Feminist Economics, 17(4), 67-92.
- 20. Becker, G.S. (1965). A theory of the allocation of time. The Economic Journal, 75(299), 493-517.

