ACCOUNTING OF WORK BY USING TIME USE DATA

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Abstract : Accounting the informal sector and the household work by the unpaid workers are a major issues in front of the academic community. Women constitute almost half of the population and so their participation in social, political, household and economic activities is necessary for the development of mankind. The equality of women with men would remain a myth till the women become self-reliant. Present study tries to explain the reasons for the invisibility of women in a household production framework. Moreover, the study tries to highlight an important methodology to account the informal work on the basis of time. The study is based on primary data collected from 120 households from Olavanna grama panchayath, Nadapuram Grama Panchyathas and Kozhikode municipality of Kozhikode, northern district of Kerala, a southern state of India. With the assumption of homogeneity in male, female division of work, study took random method for sample selection from each Strata. Olavanna grama panchyath and Kozhikode Corporation basically more urbanized places compared to Nadapuram. The analysis unveils an important matter that domestic work burden is the main hindrance of female invisibility. Those women who are economically politically and socially visible also face the problem of domestic work burden due to the gendered division of work.

Index Terms - **female invisibility, Time Use survey, accounting informal work, SNA, Extended SNA, work.**

I. INTRODUCTION

Analysing the invisibility of women seems to be an important area of research recently. Women constitute almost half of the population and so their participation in social, political, household and economic activities is necessary for the development of mankind. The equality of women with men would remain a myth till the women become self-reliant. Present study tries to explain the reasons for the invisibility of women and develop a new method of accounting the informal work by using time use survey data. Economic empowerment is considered to be a major factor which is responsible for political and social visibility. Through women reservation in local bodies and the setting up of Kudumbasree mission women are somewhat visible in socially and politically, though not in a qualitative aspect, but still economic visibility is a myth. It is argued that the major hurdle in female economic, social and political participation is the gendered division of job. In this context, the purpose of the present study is to expose the extent of gendered division of labour by using time use survey and to give a suitable explanation for female invisibility. The objective of the study is to analyse the invisibility issue of women by using a new method.

Unpaid domestic work affects the time for leisure, market work, social work and political participation of women and in turn the overall wellbeing of women community while the benefits of the involvement in household production activity is a major element in the welfare of the household members and there by the entire human community. Women perform subsistence and livelihood activities or engage in micro-enterprises and generate income for the household, but their informal activities do not reduce their unpaid work; in fact they continue to perform both the unpaid domestic and paid market work (Sharma & Devi, 2014).The role played by women in the care sector pre-dominantly their reproductive work (bearing, rearing, nurturing children and household maintenance) falls outside the national accounting system.

The women perform roles which are not statistically counted as economic and hence not monetarily valued. The valuation of the unpaid work is necessary to improve the well-being of women, children and their families. Valuing unpaid work makes it possible to compare the value of labour services in the market economy with those engaged in household production. Unpaid work performed by women in and around their homes should be valued to improve the conditions of these unpaid workers and to support policy creation and implementation. If the amount of unpaid work were known, the impact of governmental policy

changes could be better measured. The invisibility of women is better understood by studying the time use pattern of male and female. Official data collection technique in India is not incorporated the time utilization pattern and hence the reasons for female invisibility is not fully understood. Present study tries to unveil the reasons for women invisibility by time use data.

The study tries to measure the gender difference in time utilization for different activities including social economic, political and household sector.   The main objective of the study is to find out the extent of actual involvement of the household members in different activities and highlight the gender difference in time utilization pattern. Moreover, the study tries to analyse the reasons for the low level of visibility of females in social, political and economic activities.

The initial efforts of conducting time use survey in India go back to as early as 1970s. In 1983, the National Council of Applied Economic Research (NCAER) conducted a time-allocation study on a sub-sample of Employment and Unemployment Survey conducted in the 38th Round (1983) of the National Sample Survey Organisation (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. The study found that in India male on an average spend only 45.6 per cent of their time on work (paid and unpaid) while that of female was 53.3 per cent. Hirway and Jose(2011) through a comparison of labour statistics and time use survey details of India shows that time use survey has built in advantage that led to improved estimates and understanding of the work force.

II. GENDER DIFFERENCE IN TIME UTILIZATION

This section analyses the economic, social political invisibility by using time use survey. Before analysing the time use data it is better to analyse the activity status of the sample population under study by using the traditional method of data collection. The data collected from 120 households from Olavanna grama panchayath, Nadapuram Grama Panchyathas and Kozhikode municipality of Kozhikode, northern district of Kerala, a southern state of India. With the assumption of homogeneity in male female division of work, study took random method for sample selection from each Strata. Olavanna grama panchyath and Kozhikode Corporation basically more urbanized places compared to Nadapuram.

TABLE :1

GENDER DIFFERENCE IN ACTIVITY STATUS DISAGREGATED

(Working age)Percent

Activities	Male	Female
Self employed owner	24.4	8.9
Self employed worker	2.2	.0
Self employed unpaid family worker	4.4	14.3
Regular salaried organized	8.9	5.4
Regular salaried unorganized	15.6	16.1
5.Casual(Manual)	33.3	1.8
6.Casual Nonmanual	.0	5.4
8.10Unemployed	.0	8.9
9.Student	4.4	10.7
10.Attending domestic duties	.0	25.0
11.Pensioner/living from savings	4.4	1.8
12.Not able to work	.0	1.8
13Others	2.2	.0

Source: Primary data

TABLE:2

GENDER DIFFERENE IN ACTIVITY STATUS COMBINED

Percentage

Activity status	Male	Female
Employed	80.0	43.3
Unemployed	.0	13.3
Student	4.0	10.0
Domestic duties	.0	23.3
Others	16.0	10.0

Source: Primary data

Table 1 & 2 shows a clear gender difference in the case of activity status. Among male, 80 percent reported that they are employed, while that of female it is only 43.3 per cent. In which 14.3 per cent of the female employed are unpaid family worker. This percentage was only 4.4 in the case of male. This is somewhat similar in the case of NSSO data. More strikingly, 23.3 per cent of women are reported that their activity status is only doing domestic works, while that per cent was zero in the case of male. Along with this 13.3 per cent of the female community is reported to be unemployed. The unemployed rate among male is negligible, this is also in conformity with the NSSO data

TABLE: 3

GENDER DIFFERENCE IN TIME USED FOR DIFFERENT ACTIVITIES

(Percentage of time used for different activities per day average)

Activities	Total	Male	Female
crop farming kitchen gardening	1.997219	4.071141	0.266667
animal husbandry	1.927696	0.833681	2.84058
forestry, fishing, horticulture, gardening	0.448742	0.472419	0.428986
collection of fruit water plants storing hunting etc	0.037922	0	0.069565
Construction	3.046391	6.697235	0
Manufacturing	1.643282	3.23746	0.313043
trade and business	2.003539	4.404613	0
Service	7.603337	9.629012	5.913043
household maintance and shopping for own household	15.38996	4.30735	24.63768
care for children ,the sick, elderly and disabled persons for own household	2.648211	1.639572	3.489855
Learning	6.983946	7.253022	6.75942
social and cultural activities mass media etc	8.842119	9.517855	8.278261
personal care and self maintance	47.20642	47.24191	47.17681
community service and	0.669953	1.167153	0.255072

help to other household			

Source: Primary data

TABLE.4

GENDER DIFFENCE IN DIVISION OF TIME FOR MARKET WORK, DOMESTIC WORK AND LEISURE

ACTIOVITIES	TOTAL	MALE	FEMALE
SNA	18.70813	29.34556	9.831884
Extended SNA	18.03817	5.946922	28.12754
NON-SNA	63.70244	65.17994	62.46957

Source: Primary data

The time use data (table 3) gives a clear picture of gender difference in activity status. The activity which is measured by using the traditional method is not able to provide the depth of gender difference in activates or it fails to explain the gendered division of activities. It is evident that there is a clear difference in the utilization of time for various purposes. Table 4, shows that 18.7 per cent of time is utilized by the total community for market work, in which the contribution of male community is very high. Out of the total time for male community, 29.34 per cent they are utilizing for market work, while that percentage for the female community is only 9.83 per cent. But more strikingly, in the case of non-remunerative work (extended SNA) women spend 28.12 per cent of their entire time per day. Women community is spending 37.54 per cent of their total time for work (market work plus domestic work). And majority of their work is not for their personal gain, but for the welfare of their family. While comparing this with the male community, they spend 34.82 per cent of their time for both markets work and domestic work in which majority is for market work. From this it is very much clear that as far as work is concerned, women are working (economically invisible), but their contribution is not included in SNA and hence majority work is unpaid, that is the reason for the economic invisibility of female.

While analysing the time use data in a detailed manner, it is found that due to the engagement of women in domestic work like household maintenance and care work, their involvement in social activities are negligible, when compared with male. Both male and female spend somewhat similar parentage of time for personal care and leisure. But community and social help, and the entertainment, male gets more time when compared with female. This data clearly pointed out the relevance of the reduction of household work for increasing social, economic and political participation of women.

TABLE .5

GENDER DIFFENCE IN DIVISION OF TIME FOR MARKET WORK, DOMESTIC WORK AND LEISURE FOR EMPLOYED

ACTIOVITIES	TOTAL	FEMALE	MALE
SNA	30.45034	21.66132	36.16319
Extended SNA	13.99411	24.62607	7.083333
NON-SNA	56.07113	54.24679	57.25694

Source: Primary data

In this juncture it is interesting to analyse the time use pattern of employed male and female. Table 5 shows that in the case of employed (those who are entered market work) also, gender difference in domestic work is very clear. On an average an employed female spend 24.62 per cent of their time (at about 6 hours/ day) for household work. Whereas an employed male spend only 7.08 per cent of their time on household work and care work. In which, majority time is for shopping for own houses.

TABLE 6

GENDER DIFFERENCE IN TIME USED FOR DIFFERENT ACTIVITIES OF EMPLOYED

(Percentage of time used for different activities per day average)

Activities	Total	Male	Female
crop farming kitchen gardening	2.95665	4.670139	0.320513
animal husbandry	3.209175	1.041667	6.543803
forestry, fishing, horticulture, gardening	0.515572	0.503472	0.534188
collection of fruit water plants storing hunting etc	0	0	0
Construction	5.071549	8.368056	0
Manufacturing	2.704125	4.045139	0.641026
trade and business	3.335438	5.503472	0
Service	12.65783	12.03125	13.62179
household maintance and shopping for own household	12.21591	5.104167	23.15705
care for children ,the sick, elderly and disabled persons for own household	1.778199	1.979167	1.469017
Learning	0.105219	0.173611	0
social and cultural activities mass media etc	8.249158	9.010417	7.077991
personal care and self maintance	47.23274	47.27431	47.1688
community service and help to other household	0.484007	0.798611	0

Source: Primary data

TABLE :7

GENDER DIFFERENCE IN THE SHARE OF LABOUR FORCE AND THE SHARE OF TIME SPENT BY THE EMPLLYED FOR DIFFERENT ACTIVITIES

Activity	Percentage of individual to total individuals		Percentage of time to total time	
	Male	Female	Male	Female
Primary	31.37255	46.15385	17.18668	34.15717
Secondary	29.41176	3.846154	34.32546	2.959455
Tertiary	39.21569	46.15385	48.48786	62.88843
TOTAL	100	100	100	100

Source : Primary data

Out of total male members who were interviewed 31.37 per cent are engaged in primary activities, 29.41 per cent are engaged in secondary activities and 39.21 per cent are engaged in tertiary activities. But most strikingly it is seen that share of total work time spent on primary activities by these 31.37 per cent of male community is only 17.18 per cent, whereas 29.41 per cent of male community is spending 34.32 per cent of total work time on secondary activities and 39.21 per cent of male community who are engaged in tertiary activities are spending 48.48 per cent of total work time by the male community for tertiary activities. This shows that among male, majority of work time is for tertiary activities; whereas the time spend on primary activities are very low, though the number of persons engaged in primary activities are not so low. This explains one part of the reasons of higher share of tertiary sector in national income contribution. The quality and quantity of labour time spend on tertiary sector is higher when compared to the other two sectors. This analysis will provide some more insight in the macro level policy implementation.

In the case of employed female, 46.15 per cent of individuals engaged in primary sector, spending 34.15 per cent of the total female labour time. Only 2.95 per cent of the total employed females work time is invested in secondary sector and 62.88 per cent of the employed females time is in the tertiary sector whereas the percentage of females engaged in tertiary activity is only 48.48. This analysis clearly shows that the quantity of time spent on the tertiary sector is very high when compared to primary and secondary sector. The work participation of female is very low if we use the traditional way of definition of work, but if we add the actual working time of female, their real contribution is very high (it is more than their male counterpart).

TABLE :8

GENDER DIFFERENCE IN THE SHARE OF TIME SPENT BY THE EMPLOYED FOR DIFFERENT WORK ACTIVITIES

	Male	Female
Primary	14.37197	15.98409
Secondary	28.70387	1.384898
Tertiary	40.54686	29.42908
Household	16.37955	53.2031

Source: Primary data

Table:8 clearly shows the gendered division of labour especially among employed. Those female who are reported to be engaged in market work spent 53 per cent of their total work time (market work plus domestic work) for domestic work whereas male it is only 16.37 per cent. As it is already seen that majority of female are invisible form market work, - those who are reportedly visible- they spent majority of their time on domestic work. This is having serious policy implication that in Kerala, though GDI,HDI women literacy rate etc are very high women are invisible in economic social and political sphere. The development has not done much change in the domestic responsibilities of female, whether they are educated, employed or politically powerful or socially involved. While analysing the time utilization pattern of students, it is evident that female student spent on an average 2.1 hour per day on household work, whereas a male student spent only half an hour for this. And within the household work, the structure reveals the extend of gendered division of household work. Majority of male member's time for domestic work is for shopping for household purpose, whereas, female it is for cooking washing and cleaning purpose. This kind of domestic work itself make the female to be tied up in the household and the male engaged in shopping and other activities will get more socialization time.

111. Conclusion

It can be concluded that the accounting of the unpaid work of female along with the informal work which is accounted by NAS, can be well documented by using time use survey data. This method will help to find out the total time used by different persons in different activities. The time use survey analysis will be helpful in accounting the time spent by male and female in formal and informal employment. It not only helps to identify the invisibility issue but also provide a good understanding of the total time spent on different areas by the society. From the analysis, it is evident that female economic invisibility issue can be solved only by reducing the domestic work burden of female. Without identifying the real issue, the government policies will result in vain.

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