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15 October 2010

Online at <https://mpra.ub.uni-muenchen.de/27710/>

MPRA Paper No. 27710, posted 17 Jan 2011 21:11 UTC

Women's Work Participation Since The 1990s In India: Some Theoretical And Empirical Issues.

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I am greatly indebted to Dr. Praveena Kodoth for his various inputs and suggestions.

Abstract:

This paper looks at the issue of “invisibility” of women’s work in the context of the National Sample Surveys and Census in the 1990s. Moreover it critically looks at the System of National Accounts 1993 which is the basis of the National Sample Surveys and Census. It further shows the advantages that Time Use Survey has over the other two in capturing women’s work in a better way and hence recommends its use alongwith National Sample Surveys. Finally it also looks at the trends of the female work force across the 1990s wherein we see a growing concentration of women workers in the lower rungs of the labor market.

Introduction:

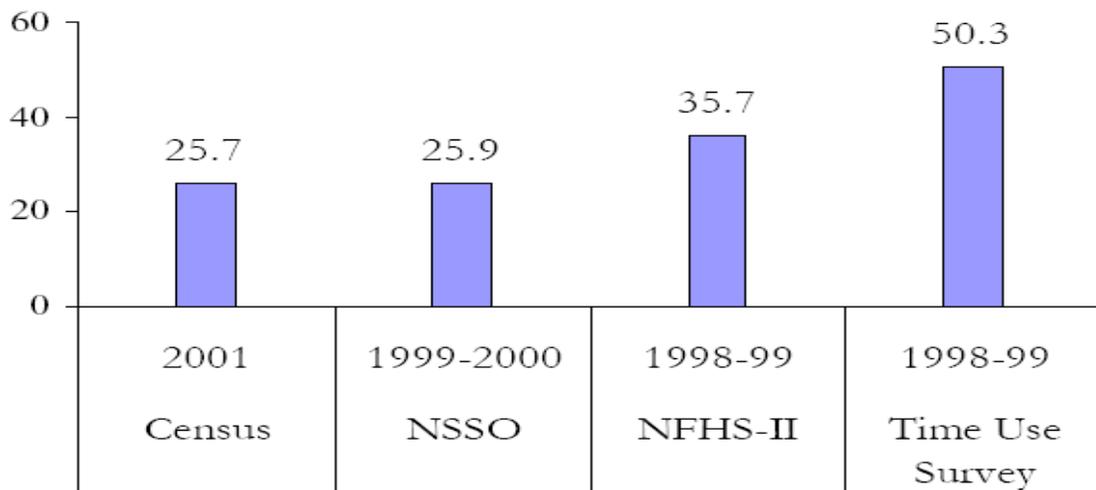
Accurate and reliable statistics are important for any group in a given population for analysing trends and for evolving policies. On the many aspects of life which reflect the development of a society, we have poor data or inadequate coverage. The main drawback of aggregate data is that it often conceals gaps and biases. The missing of women from data or the 'invisibility' of women in data is a reflection of the subordination and undervaluation of women in society. Accurate data is critical for restoring veracity for its own sake in recording social phenomena. Further it also results in a process of re-valuing women's economic role in society and thereby resulting in the framing of correct policies. In the absence of proper data, policies may be framed that might at best fail to improve the lot of women or at worst even worsen it. Problems of unemployment, poverty and destitution are ostensibly the stated concerns of development policy in most third world countries. However these above problems are also gender-specific. Hence for any serious effort to alleviate these conditions and prevent their further aggravation we require a particular focus on the women of poor households. Problems of unemployment, poverty and destitution are ostensibly the stated concerns of development policy in most third world countries. However, there is as yet not enough recognition that these above problems are also gender-specific. For any serious effort to alleviate these conditions and prevent their further aggravation, would require a particular focus on the women of poor households successfully resolve this problem. On the one hand, macro data systems are attuned to treating only remunerative aspects of work as 'work', deriving this concept from advanced economies that have wage work as the dominant form. Transposed to insufficiently industrialised, agrarian economies of the third world where subsistence production or production of survival needs by the household are met by own production and hence do not enter the exchange net work, this basis of what constitutes economic activity, produces serious anomalies. This bypassing of economically relevant activities that are not readily associated with remuneration affects women more seriously because they tend to be more concentrated in this sector. India is one of those developing countries where women's participation in the workforce continues to remain quite low, both in absolute and relative terms. As per the recent estimates, 28.7 percent of women as against 54.7 percent of men participated in workforce in 2004-05. Not simply such low participation, rather a progressive range of factors—to which paid work is considered to be a critical input—make a higher participation desirable. Thus stated otherwise the productive efforts in the society affecting the micro and macro economy and welfare include not only market production but also household non-market production. However, the official statistical system does not fully reflect this. Much-of the work of women, particularly household women which forms a major part of the household non-market production, goes unreported in the accounting framework of the System of National Accounts (SNA). This is partly because of convention and partly because the work which connotes human effort devoted to production of goods and services having utility but does not necessarily generate income by way of marketability and hence poses measurement problems. So it is primarily the contribution of women to the economy and welfare that is made invisible.

Invisibility of Women's Work:

The System of National Accounts (SNA) is defined as a coherent, consistent and integrated set of macro-economic accounts based on a set of internationally agreed concepts, definitions, classifications and accounting rules (Kulshreshta & Singh, 1996). It is followed by the Census as well as National Sample Survey Organisation (NSSO). The latest SNA framework was formulated and released in 2008. It is very much similar to the SNA framework of 1993 which was the basis of the 2001 Census. Prior to it we had the SNA framework of 1968 which was the basis for the 1991 Census.

Looking at Graph 1 below, we can witness a very interesting thing:

Graph 1: Female Workforce Participation Rates in India: Varying Estimates



Source: Jose, 2007

The Female Workforce Participation Rates (FWPR) is different in each survey!² The highest FWPR is given by the 1998-99 Time Use Survey (TUS) and the 1998-99 National Family Health Survey (NFHS) comes second in this respect. And the lowest rate of FWPR is reported by the 2001 Census followed by the 1999-2000 national Sample Survey (NSS). Here one must bear in mind the fact that the NFHS survey is prone to upward biases as it considers women only in the reproductive age group i.e. women between 15-49 years of age and hence this enumeration is not

² These values have been standardized.

considered by the researchers to be correct. This is simply because it leaves out the older women from the survey and workforce participation rates are generally found to be less for older women.

Hence we concentrate on the other three surveys: Census, NSS and TUS. One of the main reasons for the varying estimates is the way “work” is defined by these surveys:

The Census defines work as "any productive work for which remuneration is paid and is market oriented", and 'worker' is a person engaged in 'work'. If a person has worked for a major part of the reference year, he/she is a 'main worker' and if a person has worked for less than half a year, he/she is a marginal worker. On the other hand the NSSO defines a person as a worker if he/she is engaged in any 'economically meaningful activity'. This also includes general activities of women done within the sphere of household activities, such as, looking after livestock, fodder collection, foodgrain processing, etc. Thus 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. Thus it seems that the NSS should capture more of women's work.

Now Indian women are primarily engaged in two kinds of work: one that produces an income and, the other that does not. The former in turn has home-based work and work outside the home. Even within the latter, there are many components that are not 'pure' domestic work like cooking, cleaning, child care but encompass post-harvest processing, livestock maintenance, gathering of fuel, fodder, water and forest produce unpaid family labour in family farm or family enterprise and so on. The economic questions in the Indian Census adopt definitions of work more suitable to advanced industrial economies where work for wages (i.e. market-oriented work) is typically the norm. As mentioned earlier, this is inappropriate for economies like India and the third world in general, where there is a large non-monetised, nonmarket production of a subsistence nature and where women tend to be concentrated in this sector. Even where women are doing work which is market-oriented, the special characteristics of women's work makes such work 'invisible', I as for example, home based piece rate worker. The Census concept of "work" over emphasizes production for exchange and although it does include some non-market production for own consumption such as cultivation where men are also involved it excludes by strange logic other types of production for own consumption such as livestock maintenance (done mostly by women) and hence these figures do not correspond with the non-market output in the national accounts. Krishnaraj (1990) points out that in field studies and in the observed discrepancies between NSS and Census, causes of underestimation of women's productive activity have been identified as arising out of ideological and conceptual biases. She further states “According to the 1981 Census only a little over 13 per cent women are shown as workers, whereas the Report of the National Commission on Self Employed Women *Shram Shakti* (1988) states that 89 per cent of women workers are in the 'unorganised sector'. The ideology that all women are primarily "housewives" and whatever work they do is marginal and secondary to that of men pervades the data system from the formulation of the schedule design to actual data collection and reporting. Conceptually, the multiple roles played by women at different levels of economic life are not perceived because of the definition of work as "for pay or profit".”

The 1991 Census tried to bring in some major improvements which can be summarized as follows:

- 1) A longer reference (12 months) period was used to capture women's seasonal and intermittent work in agriculture and informal sectors.
- 2) In order to identify the status of women in the labour market correctly, the term "seeking work" was replaced by "availability for work if it is available".
- 3) In order to reflect the earning capacity of the self employed, a distinction was made between recipients of incomes and unpaid family workers.
- 4) A gender wise break up of data on "Head of the Household" was included for tabulation.
- 5) The clause "including unpaid work on farm or family enterprise" was inserted in parentheses to the question, "Did you work any time at all in the last year?" in the Individual Slip that classified the population into workers and non workers.

Further special training was also imparted to Census enumerators in the sense that they were specifically told not to accept "household work" as an answer from women respondents before probing the details about their activities. They were also told not to ask direct questions in the exact form as given in the Individual Slip of the Census, but to ask probing questions to get correct information about women' work. In order to help investigators the census authorities made a list of all those activities, which are home based or are usually carried out at home by women. The enumerators were told that if a woman reports as not working, attempts should be made to find out whether she looked for work or was available for work during the last year (Hiraway, 1999). Moreover awareness was spread via mass media to increase awareness among women specifically. But sadly to no avail. The FWPR didn't rise considerably except for a few pockets in the country. Hiraway (1993) and Premi & Raju (1993) pointed out the following reasons for the failure:

- (1) It is very difficult to raise awareness among 400 million odd women about their work status within a very short period of time. Similarly it is very difficult to change the biases of the 1 million investigators regarding women's work.
- (2) In the given Socio-cultural milieu and the levels of literacy, it is not easy to get the right responses from women, even in selected pockets about their work status. For example in the case of Gujarat Kheda district showed a higher workforce participation rate for women thanks to SEWA, an NGO, which worked in this district. However, even in this district, the rate didn't go beyond 30!

In the 32nd Round (1977-78), the NSSO introduced probing questions for the first time for all those respondents who reported activity status code 92 (domestic work) and 93 (domestic work with free collection of goods) as their main activity. These questions tried to find out women's

productive activities as well as their accurate labour market status. Hiraway (1999) points out that in order to capture the data on the strength of the informal sector and the workers engaged in it, Economic Census was conducted for the first time in 1977. This census attempted to capture details of small non-agricultural enterprises in the non-agricultural sector. This first Economic Census was followed by (a) Survey on Unorganised Manufacturing Enterprises 1978-79(NSS 33rd Round) and (b) Survey of Enterprises covering Trade, Hotels and Restaurants, Transport and Services Sector (1979-80). The Second Economic Census was carried out in 1980, and the third in 1990. Both these censuses were followed by Enterprise Surveys in manufacturing, trade, hotels, mining, etc. This Economic Census was conducted during 1998-99 independently by the CSO in collaboration with Directorate of Economic and Statistics of States and Union Territories. It was delinked from the Population Censuses mainly with a view to building up a time series with shorter intervals, which is suitable for unorganised activities. The 55th Round of NSSO covered informal non-agricultural Enterprises (other than industrial categories “mining and quarrying” and “electricity, gas and water supply) during July 1999 – June 2000. In fact, this was an integrated survey on household consumer expenditure, employment – unemployment and informal non-agricultural enterprises. For the purpose of this survey, all unincorporated enterprises, which operate on either proprietary or partnership basis, will be considered to constitute the “informal sector” The informal sector enterprises covered in the 55Round was, however, restricted: It excluded other types of enterprises of the unorganized sector which are owned by either cooperative societies, or by limited companies, or by other types of institutions. There are certain limitations of enterprise surveys. They do not cover several informal workers such as servants, plumbers, and persons engaged in petty services.

Next comes the SNA framework of 1993 SNA wherein the production boundary draws a distinction between goods and services. It includes the production of all goods within the production boundary and the production of all services except personal and domestic services produced for own final consumption within households . For example the services of owner-occupied dwellings and domestic services produced by paid employees who are to be treated as independent un-incorporated enterprises serving households. With regard to own account production of goods by households, the 1993 SNA removed the 1968 SNA limitations which excluded the production of goods not made from primary products, the processing of primary products by those who do not produce them and the production of other goods by households who do not sell any part of them on the market. In simple words this means that goods produced within the households, even though for own final consumption, are included within the production boundary of the system and if non-marketed, have to be evaluated at equivalent market price. These include mining salt, cutting peat, production of baskets and mats, weaving of cloth, production of footwear and pottery etc. It must be noted that all these activities involve a large number of women. However, once again, FWPRs didn't show any considerable improvement in 2001 census and 1999-2000 NSS. There are mainly four reasons for this underestimation:

- 1) Women's work is predominantly seasonal, intermittent and uncertain. Also, they frequently work as unpaid workers on family farms/enterprises or in informal sector activities, which are not properly recorded. Again, their household work and economic

work frequently gets mixed and it is difficult to demarcate between the two at the conceptual level. For example how will you enumerate work when a woman cooks lunch for her family as well as the casual laborers working in the field?

- 2) Secondly, under the prevailing Socio-cultural values in many developing economies women are not expected to involve themselves in paid employment outside the home, and working women are frequently held in low esteem in society. The highest prestige is assigned to conventional domestic work for the family inside the home and the lowest to women's manual work for outsiders. As a result, women tend not to report or under report their work outside the house.
- 3) Due to existing social conditioning women themselves believe many times that their work is not important enough to be recorded as 'work'. For example, a weaver may report himself as a worker, but the female members of the household, who starch the yarn, prepare the loom, etc, may not report as workers.
- 4) Investigators also tend to be biased while reporting women's work. They tend to view women's work as household work and thereby underestimate women's work.

Basically there seems to be underestimation of women's work in 4 sectors: subsistence production, informal paid work, domestic work & voluntary work. Subsistence production or production for self consumption is not marketed, but it cannot be excluded from national income accounts, particularly in a developing economy where subsistence production is significant. Subsistence production in agriculture is covered under national income accounts in many countries now. However, other subsistence production is not included through the SNA 1993 has recommended it. Hiraway (2000) points out that a related issue with respect to subsistence production is to determine the norms for the distinction between the subsistence goods to be covered under the SNA and the subsistence goods not to be covered under the SNA. There is a need to develop such norms systematically. Informal sector is another sector where women's work is underestimated. As we have seen above, the Government of India has worked considerably in this field through Economic Censuses and Informal Sector Surveys. Though these surveys are likely to give better results, the question remains whether they give accurate results because the methodology of data collection may not remove the barriers of netting women's work in statistics. Domestic work is another area of underenumeration as far as women's work is concerned. Although the 1993 SNA has included domestic production of goods, and not services, into SNA and its enumeration as well as the enumeration of the work force engaged in it is a challenge as it is not easy to collect data on the output and workers for this sector mainly because of the definitional problems as well as the likely biases of respondents and investigators. And last we have voluntary work which results in the production of goods and services that are not different from the same produced in the market, the convention was not to include this in the national income accounts as well as in workforce statistics. Voluntary work usually consists of a range of tasks the data for which are not collected through conventional data collection systems. Considering the rising importance of such work in society, the 1993 SNA covered this in the purview national income statistics but its proper enumeration is a big challenge till date.

Time Use Surveys:

Historically speaking, the Time Use Survey technique was first used in the early years of the twentieth century as a means of understanding lifestyle of people, including their social life, on the basis of the pattern of time use by them. These surveys were basically designed to understand that part of life of people for which no information was available from conventional data sources. In the second part of twentieth century, and particularly during the last few decades of the century, however, a need was felt to measure the “invisible” unpaid work of men and women to estimate the contribution of unpaid work to human welfare. This need was first expressed by some feminist groups in industrialized countries in the North, several of these countries depended on time use surveys to estimate the time and value of unpaid work of women. Canada and Great Britain conducted such surveys in the 1960s, and were followed by Norway, Bulgaria, Japan, Finland, Hungary, Austria and others in the 1970s and 1980s (Hiraway, 2000). These countries gradually evolved their concepts and methodology to measure and analyze unpaid work of men and women in their respective data systems. With the emergence of developing countries on the scene, time use surveys have acquired an additional focus. These countries have seen several additional uses of these surveys, in addition to the uses visualized by industrialized countries. These additional uses are netting economic work of the poor (men and women both) and improving thereby the work force/labour force statistics; improving estimates of national income by getting better data on SNA activities, including additional activities into the national accounts system incorporated in the 1993 SNA; and drawing useful policy guidelines for poverty reduction, employment generation and welfare promotion. These countries are gradually evolving suitable concepts, survey methodology, classification of activities, and valuation techniques for their own keeping, in mind their constraints and needs.

The critical issue is that a time use survey can present a complete picture of the society by providing detailed information about how people spend their days on different economic and noneconomic activities. In fact, it is the only survey technique available presently that provides a comprehensive information on how an individual spends his/her time in paid and unpaid activities, on a daily and weekly basis. In other words a time use survey gives us complete information about how an individual spends 24 hours of a day. Time use studies provide data on the following:

- (1) Allocation of time by men and women between SNA, Extended SNA (ESNA) and Non SNA (NSNA) activities.³
- (2) Detailed classification of these activities (up to 3 digits) that provide details about participation of men and women in these activities and time spent on them. The first digit gives

³ By SNA activities we mean activities which fall within the SNA production boundary. ESNA refers to activities which fall outside the SNA production boundary but within the General production boundary like collection of free goods. NSNA refers to activities which fall outside the general production boundary i.e. activities which cannot be delegated to others like sleeping, eating etc.

the primary activities, the second digit shows secondary activities and the third digit portrays trade, business and services.

(3) Context variables in time use surveys provide additional details regarding the time spent on different activities. These variables can be whether the activity was paid or unpaid, location of the activity (inside or outside home), for whom and with whom the activity was done etc.

(4) Background schedules provide useful details about individual and household characteristics of the persons whose time use is reported. This helps us to relate individual characteristics to time use patterns.

The data collection under a time use survey does not have any sociocultural bias as the data is to be collected about how the respondent spends time. Since the data refer to comprehensive information about all the activities conducted by the respondent in the last 24 hours, no activity is likely to be missed out. Another major advantage of time use studies is that it collects data on unpaid activities falling under the General Production Boundary. The information on unpaid work within the household indicates (a) the unequal sharing of unpaid work by men and women, (b) the drudgery of women's work and (c) the control of patriarchy over women – all of which put women in a disadvantageous position in the labour market (Hiraway, 2000). One of the major contributions of time use studies is that they throw light on unpaid extended SNA activities in a society which in turn has implications for poverty, gender equity and human development. This unpaid work or “cooking, cleaning and caring” activities can be defined as those services which contribute to human well being, but which are not exchanged in the market and are not therefore included in national income statistics. Unpaid extended SNA work basically includes (a) household management (cooking, cleaning washing, etc.), (b) “care” activities (taking care of children, elderly people, sick and disabled), (c) production of goods for self consumption (such as stitching clothes, making mats, jams and pickles for family on small scale), (d) other services such as, transporting children etc. as well as servicing and repair house and household durables, home decoration and (e) social work – voluntary work for the community. Though men are observed to be participating in these activities, it is women who are primarily responsible for performing these activities. These activities are essential for human survival as the basic physiological and psychological needs of human beings are met with through these domestic unpaid services. Some of these activities also provide social security to the old, sick and disabled persons. In spite of this contribution, however, these activities do not appear in any conventional statistics of national economies.

Now looking at Table 1 we can easily see that the TUS of 1998-99 captures women's work much better than the NSS of 1999-2000. For Haryana the difference in work participation rates (wpr) for men is 11.1 percent and that for females is a whopping 38.46. For Madhya Pradesh it is 9.27

for males and nearly the double of that for females. As far as Orissa is concerned it is 7.18 for males while an astonishing 32.17 for females. The trend is quite similar for other states.⁴

Table 1: Differences in WPR

States	NSSO 1999-2000		TUS 1998-99		Differences in WPR	
	Male (rural)	Female (rural)	male	female	male	female
Haryana	46.2	17.7	57.3	56.16	11.1	38.46
M.P.	51.2	30.7	60.5	49.43	9.27	18.73
Gujarat	57.1	35.5	60	44.17	2.92	8.67
Orissa	52.7	23.3	59.9	55.47	7.18	32.17
T.N.	56.6	38.1	66.1	50.25	9.5	12.15
Meghalaya	56.6	42	56.2	52.445	0.62	10.45

Source: (Hiraway, 2002)

The clearest trend is that the TUS captures women's work much better than NSS as can be gauged from the high difference in the WPRs.

In Table 2 we look at the Statewise Distribution of Time Spent (in Hours) in SNA Activities by Mode of Payment and Sex [Participants] where we can see that for all the states the percentage of time spent on unpaid activities is far greater for women than men. Though larger numbers of men participate in unpaid SNA activities (though for a very short time) than in paid SNA activities, the time spent by them on unpaid work is, on an average half of the time spent on paid activities. In the case of women, however, the number of women engaged in unpaid SNA work as well as the time spent by them on this work is much higher than the same with respect to paid work. There are wide interstate variations in the numbers of men and women participating and the hours spent by them on paid and unpaid SNA work. To sum up, the share of unpaid SNA work is significant in India in terms of the number of persons engaged in it as well as the time spent by them on such work. If such work is not captured adequately, as is likely under the conventional surveys, the estimates of workforce are likely to be gross underestimations.

⁴ We consider only these six states as the TUS of 1998-99 was conducted only in these states.

Table 2: Statewise Distribution of Time Spent (in Hours) in SNA Activities by Mode of Payment and Sex [Participants]

States	Male			Female		
	Paid	Unpaid	% time on unpaid activities	Paid	Unpaid	% time on unpaid activities
Haryana	33.09	18.12	35.38	4.13	25.34	85.99
M.P.	29.41	23.34	45.25	14.31	15.75	52.40
Gujarat	44.37	14.17	24.21	17.18	13.87	44.67
Orissa	31.25	22.42	41.77	8	18.18	69.44
T.N.	41.42	13.36	24.39	21.8	10.32	32.45
Meghalaya	17.34	35.39	67.12	7.83	25.34	76.39

Source: Hiraway, 2002

Next we have Table 3 which gives us the Percentage Distribution of Workers in Time Use Survey and NSSO by Industrial Categories.

Table 3: Percentage Distribution of Workers in Time Use Survey and NSSO by Industrial Categories

Categories	Industrial Category	TUS 1998-99		NSSO 1999-2000	
		M	F	M	F
Combined States/ all India	Primary	56	79	47	70
	Secondary	14	10	20.20	13.5
	Tertiary	30	11	32.80	16.50

Source: Hiraway, 2002

From this table we should note that

(1) In the case of male workers, the share of the tertiary sector is much higher as per the time use data than in the NSS data; which implies that perhaps men engaged in the tertiary sector are underestimated in the NSSO rounds.

2) In the case of women, however, the time use data give much higher share of women workers in the primary sector than the NSSO does. On an average, the percentage share of women workers in the primary sector is at least 10 percentage points higher than the same under the NSSO 1993-94. This implies that women's work is perhaps underestimated in the NSS rounds in the primary sector. A significant part of women's unpaid and subsistence work in crop farming, animal husbandry, forestry, fishing, collection of water, fuel wood, fruits, etc, is likely to have been missed out by the NSS surveys.

3) In the case of the secondary and tertiary sectors different states present different results, implying that the pattern of underestimation of women's work varies from state to state, depending on the specific situation of the state.

To sum up, the table broadly indicates that women's work is likely to be more underestimated in the primary sector as compared to other sectors, while men's work is likely to be more underestimated in the tertiary sector as compared to other sectors. This is mainly because there is no watertight line between the two sets of activities, in the sense that activities move from the Production Boundary to the General Production Boundary, or vice versa under different situations. For example, food processing, cooking, child care, etc, activities easily enter the market when a family decides to use market services to meet these needs. It has been observed that with economic development more and more domestic services enter the market, increasing the national income and the size of the workforce in the process. Conversely, if for some reasons, some of the market-based services enter the domestic unpaid sphere; there may be a decline in the size of the workforce. For example, if the public expenditure on social sector declines and less medical facilities/services are available, families may organise medical help at home, i.e. they may shift from market services to non-market domestic services. We do not have any time series data on the persons engaged and time spent by them on SNA and extended SNA activities. We are therefore not in a position to check whether the shifts between SNA to extended SNA activities have affected the size of the workforce in the country.

Trends in women's work participation since the 1990s:

Table 4 gives us the overall trends in female work force across the 1990s. Clearly in spite of underestimation both the Usual Principal Status (UPS) and the Usual Principal Subsidiary Status (UPSS) show an increasing trend over the years. In the UPS the total workforce has increased by around 27 % from 1993-94 to 2004-05. The urban female workforce has increased by 49.62% and the rural female workforce has increased by 23.01 %. As far as UPSS is concerned the rates of increase are the increase in total workforce, rural and urban are 22.08 %, 18.58 % and 43.21 % respectively. Thus the increase in female workforce has been more in the UPS than in the UPSS category. Also both urban and female workforce have increased more in the UPS category. Across both the categories the increase in urban female workforce is nearly the double of that in the rural workforce.

Table 4: Trends in female workforce

Category	UPS			UPSS		
	1993-94	1999-00	2004-05	1993-94	1999-00	2004-05
Rural Female	747223	796118	919227	1047390	1030474	1242096
Urban Female	134342	157962	201015	172091	187664	247174
Total	881565	954080	1120242	1219480	1218138	1489270

Source: Neetha, 2008

After this we come to table 5 which gives us the WFPRs in both UPS and UPSS categories for both rural and urban areas. The data show some recovery after a substantial decline in women's participation rate during 1993-94 and 1999-00, to reach the level of 1993-94, though as per principal status the rates have gone much higher than the 1993-94 rates. For females, participation rates show about 3 percentage point improvement over the previous period both for rural and urban areas. The rural-urban disaggregation shows that the rates have improved both in rural and urban areas almost at the same rate for women. However this increased participation rate of women in rural areas was during a period of crisis largely led by agricultural recession. Also a comparison of the participation rates across principal and usual status shows that the increased participation of women both in rural and urban areas is largely accounted by the increase in women workers in the subsidiary category. The increased number of women in subsidiary status especially in rural areas in the context of the agrarian crisis means that women do not have opportunities for long term regular employment. However, to understand this change and its implications one has to analyse the issue at further disaggregate levels.

Table 5: WFPR in NSSO Rounds

Rounds	UPS			UPSS		
	Male	Female	Total	Male	Female	Total
Rural						
1993-94	53.8	23.4	39.0	55.3	32.8	44.4
1999-2000	52.2	23.1	38.0	53.1	29.9	41.7
2004-05	53.5	24.2	39.1	54.6	32.7	43.9
Urban						
1993-94	51.3	12.1	32.7	52.1	15.5	34.7
1999-2000	51.3	11.7	32.4	51.8	13.9	33.7
2004-05	54.1	13.5	34.6	54.9	16.6	36.5

Source: Neetha, 2008

In table 6 we disaggregate Employment status into Self-Employed, Regular Employees and Casual Labor and examine the trends of Percentage Distribution of Employment by Status (UPSS) across the 90s. In the self employed category for rural females there was a decline from 60.8% in 1987-88 to 57.3% in 1999-2000 and thereafter there was a sharp increase by around 6%. Now this sharp increase needs to be seen in the context of the decline by 6% in the casual labor category for the rural females. Maybe these casual laborers shifted to the self employed category. As far as urban females are concerned there has been an increase in the self employed category and a decline in the casual labor category. The situation in regular employees has remained more or less the same for both rural and urban females.

Table 6: Percentage Distribution of Employment by Status {UPSS}

Employment Status and year	Rural		Urban	
	Male	Female	Male	Female
(i) Self-Employed				
1987-88	58.6	60.8	41.7	47.1
1993-94	57.7	58.6	41.7	45.8
1999-2000	55.0	57.3	41.5	45.3
2004 -05	58.1	63.7	44.8	47.7
(ii) Regular Employees				
1987-88	10.0	3.7	43.7	27.5
1993-94	8.5	2.7	42.0	28.4
1999-2000	8.8	3.1	41.7	33.3
2004 -05	9.0	3.7	40.6	35.6
(iii) Casual Labour				
1987-88	31.4	35.5	14.6	25.4
1993-94	33.8	38.7	16.3	25.8
1999-2000	36.2	39.6	16.8	21.4
2004 -05	32.9	32.6	14.6	16.7

Source: Neetha, 2008

We further disaggregate the category of self employed into paid and unpaid work for the rural areas in table 7. Here we can see that that the proportion of own account workers to total self employed has declined from 25.51 % in 1993-94 to 23.19 % in 2004-05. Similarly the proportion of employers to total self employed has decreased from 1.22 % in 1993-94 to 0.8 % in 2004-05. The most interesting feature is that the proportion of unpaid family workers has actually increased from 73.28 % to 76.01 % during the same time period. Thus we can argue that casual labor has been shifting to the unpaid family work sector.

Table 7: Paid & unpaid work in self employment rural areas- UPSS

Category of self employed	1993-94		1999-2000		2004-05	
	No of workers	Proportion to total self employed	No of workers	Proportion to total self employed	No of workers	Proportion to total self employed
Own account worker	156573	25.51	150213	25.44	183483	23.19
Employer	7488	1.22	4310	0.73	6330	0.8
Worked as helper in household enterprise (unpaid family worker)	449771	73.28	435938	73.83	601403	76.01
Total	613771	100	590462	100	791215	100

Source: Neetha, 2008

Similarly we disaggregate the category of self employed into paid and unpaid work for the urban areas in table 8. Here we can see a similar story in the sense that both the proportion of own account workers and employers has declined and that of unpaid family workers has increased across the 1990s.

Table 8: Paid & unpaid work in self employment urban areas- UPSS

Category of self employed	1993-94		1999-2000		2004-05	
	No of workers	Proportion to total self employed	No of workers	Proportion to total self employed	No of workers	Proportion to total self employed
Own account worker	40678	51.61	44793	52.69	58633	49.73
Employer	1551	1.97	1139	1.34	1839	1.56
Worked as helper in h.h. enterprise (unpaid family worker)	36588	46.42	39080	45.97	57430	48.71
Total	78818	100	85012	100	117902	100

Source: Neetha 2008

Now we look at the female employment patterns via sectoral and subsectoral analysis. In table 9 we look at the Distribution of Female workers across various industrial categories- UPSS urban. Here we need to concentrate mainly on agriculture, manufacturing & repair services, construction and community, personal & social services. Agriculture which can again be subdivided into growing of crops, farming of animals and horticulture has seen a slight increase in the absolute number of workers in 2004-05 as compared to 1993-94. However the sectoral share in total female employment or in other words total female employment generated by the sector declined from 24.68% to 17.62 % and then increased to 18.18 % across the 90s. The female share in total employment also shows a similar trend. Next comes manufacturing wherein textiles and garment making is the dominant subsector. Here the sectoral share declined from 27.67 % in 1993-94 to 24.02 % in 1999-00 and then increased to 28.17 % in 20054-05. The female share in total employment also shows a similar trend. Construction has registered a decline in both sectoral share and female share in total employment across the 90s. The interesting thing to notice is that in the community, social and personal services the sectoral share has increased from 29.27 % in 1993-94 to 32.67 % in 2004-05 and similarly the total share in female employment also increased from 30.73 % in 1993-94 to 32.67 % in 2004 – 05.

Table 9: Distribution of Female workers across various industrial categories- UPSS urban

Industrial Category	1993-94			1999-00			2004-05		
	1	2	3	1	2	3	1	2	3
Agriculture, forestry and fishing	42506	24.68	42.24	33029	17.62	39.95	44986	18.18	44.83
Mining and quarrying	1033	0.60	10.95	751	0.40	9.85	494	0.20	5.71
Mfrg & repair services	47669	27.67	22.66	45039	24.02	20.84	69703	28.17	24.63
Electricity, gas and water	516	0.30	6.25	375	0.20	5.79	494	0.20	6.37
Construction	7056	4.10	13.67	9008	4.80	11.94	9393	3.80	10.11
Trade, hotels and restaurants	17381	10.09	9.58	31715	16.92	12.38	30155	12.19	10.61
Transport, storage and communication	2237	1.30	3.45	3378	1.80	4.08	3460	1.40	3.44
Finance, insurance, real estate and business services	3442	2.00	12.02	4692	2.50	12.01	7910	3.20	12.87
Community, social and personal services	50423	29.27	30.73	59489	31.73	32.07	80826	32.67	37.41
Estimated Workers (`00)	172263	100.00	21.02	187476	100.00	19.69	247421	100.00	21.42

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: 1- Absolute number of workers (`00); 2- Sectoral share in total female employment; 3 – Female share in total employment

Next we further disaggregate community, personal and social services in table 10 which gives us the distribution of women workers across various sub sectors of community and personal services. Here we can see that the number of female workers has increased marginally in all the sectors except private households with employed persons where there has been a phenomenal increase in the number of workers across both UPSS and UPS between 1999-00 and 2004-05. As far as the share to total female employment in manufacturing is concerned it has declined for all the sectors save private households with employed persons which actually witnessed a two fold increase between 1999-00 and 2004-05. From the public administration subsector we can easily infer the inability of the government to absorb more women workers.

Table 10: Distribution of women workers across various sub sectors of community and personal services.

Categories	No. of Female Workers (`00)				Share to total female employment in manufacturing			
	UPS		UPSS		UPS		UPSS	
	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05
Public administration and Defence	7266	7639	7319	7662	13.18 (10.74)	9.87 (12.68)	12.30 (10.83)	9.48 (12.76)
Education	19271	24926	21206	28672	34.96 (46.84)	32.21 (45.51)	35.65 (48.45)	35.47 (47.74)
Health and social work	6792	8644	6944	8898	12.32 (37.14)	11.17 (39.45)	11.67 (38.41)	11.01 (40.55)
Other service activities	11373	5628	12573	7415	20.63 (41.46)	7.27 (25.69)	21.14 (44.05)	9.17 (30.57)
Private households with employed persons	9004	24926	9759	26200	16.33 (61.55)	32.21 (75.85)	16.40 (64.11)	32.42 (75.62)
Estimated workers	55129	77391	59489	80826	100.00 (30.45)	100.00 (37.58)	100.00 (32.07)	100.00 (37.63)

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: Figures in parentheses refer to female share in total employment in the given sector

We further disaggregate private households with employed persons in table 11 which gives us the distribution of women workers across various sub sectors of private households with employed persons. From this table we can clearly see a gender division of work in the sense that there are hardly any women workers in categories such as gate keeper and gardener. Moreover there is a slight presence of women workers in categories such as cook and governess only in the subsidiary sector. The majority of the women workers in the urban areas seem to concentrated in the housemaid / servant sector which is not all a positive development because it indicates there have been no structural changes in women's employment over the years.

Tables 12 and 13 show a similar picture in the rural areas.

Table 11: Distribution of Women Workers across various sub sectors of Private Households with Employed Persons.

Categories	No. of Female Workers (`00)				Share to total female employment in manufacturing			
	UPS		UPSS		UPS		UPSS	
	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05
Housemaid/servant	4596	4968	17689	18291	62.5 (100.00)	66.67 (100.00)	70.97 (86.83)	69.81 (87.04)
Cook	0	0	804	742	0 (0.00)	0.00 (0.00)	3.23 (100.00)	2.83 (100.00)
Gardener	0	0	0	0	0 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Gate keeper/chowkidar/ watchman	0	0	0	0	0 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Governess/baby sitter	0	0	603	742	0 (0.00)	0.00 (0.00)	2.42 (100.00)	2.83 (100.00)
Others	2758	2484	5829	6427	37.5 (39.09)	33.33 (36.16)	23.39 (61.97)	24.53 (63.90)
Total estimated workers in the category 'private households with employed persons'	7354	7453	24926	26200	100 (53.29)	100 (53.11)	100 (75.59)	100 (76.23)

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: Figures in parentheses refer to female share in total employment in the given sector

Table 12: Distribution of Female workers across various industrial categories - UPSS rural

Industrial Category	1993-94			1999-00			2004-05		
	1	2	3	1	2	3	1	2	3
Agriculture, forestry and fishing	902850	86.11	39.36	878994	85.30	38.70	1034666	83.22	41.50
Mining and quarrying	4190	0.40	24.17	3091	0.30	20.90	3726	0.30	22.07
Mfrg & repair services	73317	6.99	35.81	78316	7.60	35.49	104336	8.39	37.59
Electricity, gas and water	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00
Construction	9427	0.90	13.56	11335	1.10	11.44	18631	1.50	11.11
Trade, hotels and restaurants	21995	2.10	17.56	20609	2.00	13.45	31052	2.50	14.57
Transport, storage and communication	1047	0.10	2.47	1030	0.10	1.62	2484	0.20	2.89
Finance, insurance, real estate and business services	1047	0.10	12.24	0	0.00	0.00	1242	0.10	7.49
Community, social and personal services	34564	3.30	21.81	37097	3.60	25.02	47200	3.80	29.27
Estimated Workers (`00)	1048437	100.00	35.83	1030474	100.00	34.53	1243338	100.00	36.18

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: 1- Absolute number of workers (`00); 2- Sectoral share in total female employment; 3 – Female share in total employment

Table 13: Distribution of Women Workers across Sub-sectors of community & personal services - rural

Categories	No. of Female Workers (`00)				Share to total female employment in manufacturing			
	UPS		UPSS		UPS		UPSS	
	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05
Public administration and defence	3981	2758	4122	2484	11.90 (11.29)	6.67 (9.99)	11.43 (11.52)	5.26 (9.04)
Education	10350	18385	11335	21116	30.95 (27.25)	44.44 (35.25)	31.43 (29.25)	44.74 (38.42)
Health and social work	3184	4596	3091	4968	9.52 (29.34)	11.11 (29.96)	8.57 (34.57)	10.53 (36.16)
Sewage and refuse disposal, sanitation and similar activities	1092	919	1030	1242	4.76 (40.25)	2.22 (29.95)	2.86 (34.56)	2.63 (36.16)
Activities of membership organisations n.e.c.	0	919	0	1242	0.00 (0.00)	2.22 (14.98)	0.00 (0.00)	2.63 (18.08)
Other service activities	12738	6435	14427	7453	38.10 (29.34)	15.56 (20.97)	40.00 (30.25)	15.79 (24.11)
Private households with employed persons	1592	7354	2061	8695	4.76 (58.68)	17.78 (59.92)	5.71 (69.15)	18.42 (63.28)
Estimated workers	33437	41365	36067	47200	100.00 (22.41)	100.00 (27.52)	100.00 (25.21)	100.00 (30.53)

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: Figures in parentheses refer to female share in total employment in the given sector

Now we turn our attention briefly to TUS data. In table 14, we look at the percentage distribution of participants in only SNA, in Extended SNA and in both of them. The gender difference is striking. While a large proportion of urban and rural men did only SNA, very few urban and rural women belonged to this category. For rural females, while ‘both SNA and extended SNA’ accounted for the largest proportion, in urban areas women engaged in ‘only extended SNA’ constituted the largest share.

Table 14: Percentage distribution of males & females in SNA, ESNA & both.

Rural		Only SNA	Only ESNA	SNA & ESNA	No SNA or ESNA
Combined states	Male	43.8	5.1	40.6	10.5
	Female	2.6	19.1	73.5	4.7
Urban					
Combined States	Male	32.3	9.0	41.7	17.0
	Female	1.7	49.7	41.5	7.1

Source: Time Use Statistics, Unit level data, 1999

What we should note is that a large proportion of women were active in both SNA and extended SNA, unlike men, and that the female-male difference in SNA was much smaller than that in extended SNA.

And finally we have table 15 which gives us the average daily time spent on SNA and Unpaid care work. We can see that women spent a significantly larger proportion of the day in unpaid care work and the male-female difference was very sharp, irrespective of rural/urban difference. In rural areas, women spent about 5.5 hours of the day on unpaid care work while men spent only 1.2 hours of their day on such work. The male –female difference in care work was slightly more in urban areas with women spending about 6.1 hours of their day on unpaid care work and men spending almost the same time as their rural counterparts. These women do a number of activities that help households to save income. But these are not included into the realm of economic activity and thus do not get reflected in work force participation rate. What is important to note in this context more than monetisation of such work is the non-recognition and lack of appreciation of such work which is reflected in the lack of public and social policies.

Table 15: Avg. daily time spent on SNA and Unpaid care work

Categories	Rural				Urban			
	Male		Female		Male		Female	
	Hour/ minute s	Parti . rate	Hour/ minute s	Parti . rate	Hour/ minute s	Parti . rate	Hour/ minute s	Parti . rate
SNA	7.6	84.4	4.4	76.1	8.1	74.0	3.2	43.2
ESNA	1.2	47.7	5.5	92.6	1.1	50.7	6.1	91.2

Source: Time Use Statistics, Unit level data, 1999

Conclusion:

Thus we can clearly see that traditional surveys are quite inadequate for capturing “invisible work” of women and time Use Surveys can play a very important role in rectifying this anomaly. However TUS data is available only for six states. Hence we need to undertake an all India Time Use Survey and then that data can be used in conjunction with NSS and Census data to capture women’s work in a much better way. Moreover looking at the trends of the female workforce across the 1990s we can say that although there has been an increase in the absolute number of women workers they are seemingly concentrated in the lower rungs of the labor market which is a not a healthy sign.

REFERENCES:

- Maithreyi Krishnaraj, 1990, Women's work in the Indian census, *Economic and Political Weekly*, Vol 25 (48) pp 2663-72.
- Indira Hirway and Darshini Mahadevia, 1996. Critique of Gender Development Index: Towards an alternative, *Economic and Political Weekly*, Oct 26, WS 87-96
- Indira Hirway, 2002. Employment and unemployment situation in the 1990s – How good is the NSS data?, *Economic and Political Weekly*, Vol 37 (21), pp 2027-36.
- Indira Hirway, Time use studies: conceptual and methodological issues with reference to Indian the time use survey.
- Indira Hirway, Estimating Work Force Using Time Use Statistics in India and its Implications For Employment Policies
- Indira Hirway , Gender issues in the measurement of paid and unpaid work.
- Jain D. 1996. Valuing Time, *Economic and Political Weekly*, Oct 26. , Vol. 31, No. 43 (Oct. 26, 1996), pp. WS46-WS57
- Neetha. N, 2008, Women's Work in the Post Reform Period: an Exploration of Macro Data
- Singh. G & Kulshreshtha A.C. , 1996, Domestic Product by Gender in the Framework of 1993 SNA, *Economic and Political Weekly*, December 21, 1996, pp 3330-3334.
- Sen G & Sen C, 1985, Women's Domestic Work and economic Activity, *Economic and Political Weekly*, Vol 20 (17), WS 49-56.
- Jose S, 2007, Women, Paid Work and Empowerment in India: A Review of Evidence and Issues.
- Razavi S, May 2007, The Return to Social Policy and the Persistent Neglect of Unpaid Care, *Development and Change*, volume 38, number 3.
- Pillai N & Palriwala R, March 2008, The Political and Social Economy of Care: India Research Report 2, UNRISD Report.
- Neetha. N & Palriwala R, June 2009, Paid Care Workers in India: Domestic Workers and Anganwadi Workers, India Research Report 4, UNRISD Report.