

The Value Of Time Use Studies
in gendering policy and programme #

by

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SECTION I

Time Use Studies in General

There is a growing body of literature which emphasizes the importance of time as a measure, and its special relevance for understanding women's work, women's roles and contributions³:

The Time Use Studies [TUS] along with other measures and values that women have unpacked are steps in the process of reconceptualization of inequality and discrimination, or unravelling the gender knot.⁴ At the core is the issue of the valuation of women as a subset of all social stratifications. Women's roles, and allocations determined not only by biology, but the interpretation of the biological role, provide us with a key to open these fundamental assumptions and precepts. The TUS have helped to open concepts of the household (the discrimination within as well as the diversity of the household), issues of unpaid work and its intersection with paid work; as well as revealed child labour etc.

One of the quests of the women's movement starting as far back as at the end of the 19th century with the labor movement,⁵ coming all the way through to every freedom struggle and the struggles in the international institutions such as the UN, was to give value to women's non-monetized work. There were movements in the west called *wages for house work* and also a negation of such movements saying that it was absurd to give wages for what was obviously the allocated role for women – domestic work. Or as I argued at that time, when women's economic, gainful activity was not being paid, how can we ask for pay for household chores?

There is the much used example that if a man employed a domestic help then the national income would go up because she would be paid a wage. But if his wife did it, then the national income came down and such other arguments were presented.

³ *Care Work – The quest for security*, Edited by Mary Daly, International Labour Organisation, 2001; *Gender and Human Development*, UNDP (1995) *Human Development Report*, Oxford University Press, New York.

⁴ Allan G. Johnson, "The Gender Knot: Unraveling Our Patriarchal Legacy", Temple University Press 1997

⁵ Devaki Jain, *Women, Development and the UN – A Sixty-Year Quest for Equality and Justice*, (Bloomington, Indiana University Press, 2005)

However, today there is a tilt towards monetary valuation of anything, whether it is a manufactured produce or a service or a human being, and that recognition by money gives value to that item. Further, by neglecting certain areas of time contribution, we may be neglecting a value, which later, if it for example disappears, we would not be able to anticipate that loss, for example Lourdes Beneria⁶ has shown that with the change in roles of men and women, more women are getting into wage work, their earlier care work time, sometimes adds on to a double burden or had not been factored in the economic planning by offering either facilities or picking up that care work and institutionalizing it. Its invisibility is also a risk. By giving it a monetized value, it might remain?. The idea of caring for the elders and the children and for the disabled through institutions has not been as successful as through what can be called human love. Yet, unless that is given a value, it may be exchanged.

Time Use Studies [TUS] can play a crucial role in this area, to reveal the nature of non-monetized activity, so that a monetized value can be integrated into the national account. But that of course is not the only role that is being discussed here. In fact Time itself should be a measure of value, not only money⁷. And since women spend more time on all activities than men, as the study that will be described later in this paper will illustrate, hierarchically they are of greater value than men, if measured by time. There are so many hierarchies embedded in the social sciences, sometime vocabulary, sometimes in categorization, that beating those down itself would add to women's value^{8/9}

Time use can also be most useful in monitoring impact. Which is as much an aspect of macro economic policy as any other. There could be a format, which would derive whether the policy is effective, appropriate, etc. See appendix of a small survey in a district in Karnataka*

However there are problematques – eg. there is a close connection between valuation of **all** women's work and the measurement of labour force. But the tricky question is what is the cut off point for any meaningful measure of labour force participation? It seems to us that the cut off point would depend on the purpose for which the data is to be used.

It is possible to suggest that if the information/data is required for employment, planning and promotion then income would provide the most meaningful basis of identification even of underemployment, unemployment rather than hours of work or subsistence production for self-consumption. From the point of view of those who are seeking employment that is seeking income, remuneration, means of livelihood, the attachment of payment to work may make the difference between work and employment. However, we

⁶ Lourdes Beneria, Shifting the Risk: New Employment Patterns, Informalization, and Women's Work International Journal of Politics, Culture, and Society, Issue Volume 15, Number 1 / September, 2001

⁷ Devaki Jain: Cultural Diversity and University Norm, -Title of presentation: Valuing Women-signals from ground, presented for the University of Maryland June 1st 2001.

⁸ Devaki Jain: Women's Participation in the History of Ideas: The Importance of Reconstructing Knowledge, National Institute for Advanced Studies, Indian Institute of Science, Feb 6th meeting

⁹ Ibid: Development Theory and Practice Insights Emerging from Women's Experience -A Note, EPW, Vol XXV. No.27, July 7,1990.

tentatively suggest that valuating women's work is linked to but not the same as measuring labour force or unemployment/employment figures. All women's work yields an output but all women's work does not provide any income to the employed.

However, if the data is being collected in order to analyse the factors affecting labour supply including constraints faced by specific sets of populating then labour force identification may have to use more sensitive concepts and measures including the time profile of individuals as revealed in Section 3. Also if the data is being used to study trends not only in the aggregate but in terms of effect of sectoral growth, introduction of technology, various other inputs on labour utilization it is extremely important to notify every person who is working even for self-consumption. Otherwise displacement, transfer of opportunity between sets of people on the basis of class, sex or age will neither be identified nor quantified and therefore it would be a quiet death by invisibility.

The issues of valuation runs through all these points but would require a different module not only of measurement through time spent but also valuation. Time itself can be used as a valuator.

Recasting the national accounts to include women's unpaid activities, I think would require not only TUS but other tools, such as the Philippine Experience¹⁰. Philippines has the lowest GDP per capita in that region and the lowest HDI, but the highest Gender Empowerment Measure (GEM), a measure which focuses on the participation of women in political and economic decision-making as well as power over economic resources¹¹.

At the same time, the country is one of four (with Canada, Ghana, and India) cited as good-practice case studies in the development of gender-sensitive indicators in a reference manual for governments and other stakeholders prepared for the Commonwealth Secretariat in 1999¹². It is not coincidental that a majority of the high level personnel in the Philippine Statistical System are women. In short, if ever there was a list of developing countries that could be in the forefront of women's visibility-raising activities, the Philippines would have to be included in it.

Scarcely two years after the world conference on women in Beijing 1995, the National Statistical Coordination Board (NSCB) proposed to construct satellite accounts which, first, identified the distribution by sex of the economy in accordance with the SNA production boundary, then identified, measured and included unpaid housework services of those labor force, also by sex, and finally included the unpaid work of those not in the labor force – those not considered economically active in the SNA¹. The NSCB decided to start using data generated from previous TUS toward removing the cloak of invisibility of unpaid labor as far as the economy was concerned.

¹⁰ Solita Collas-Monsod, *Professor of Economics, University of the Philippines : Integrating Unpaid Work Into Macroeconomic, A Short History and the Philippine Experience, Presented at International Seminar on Mainstreaming Time Use Survey in the National Statistical System in India, 24-25, May 2007*

¹¹ UNDP, *Human Development Report 2006*

¹² Tony Beck, *Using Gender-Sensitive Indicators: A Reference Manual for Governments and Other Stakeholders, Commonwealth Secretariat, 1999*

Some of the statements most commonly made, some of the areas usually demarcated to reform in female labour force measurement and analysis are – under enumeration, inadequate attention to unpaid family labour, home production and household work; and the relationships between these.

Some of the reasons given for this situation are poor conceptualization of female work styles, mistaken perception of female economic roles by respondents and interviewers. Amongst the tools suggested for correcting this situation are recording of activities in various ways of detailed specification/identification, criteria for groupings/classifications; ways of measuring them for instance through time, apart from money and units of output and so on.

SECTION II

The ISST Time Use Study¹³

Several attempts have been made in India to engage with TUS , both as national time use studies and pilot smaller samples.¹⁴ One of the earliest was a study , the Institute of Social Studies Trust¹⁵ , undertook in six villages of India (1976-77)¹⁶. The hypothesis on the basis of which this study was taken was that female work participation in India was enumerated because of the nature of female work. The primary objective of the study was to test the hypothesis. A second objective was to try to identify the various determinants of female labour supply and a third was to re-group productive and non productive activities and define gainful activity on the basis of evidence.

This pilot study drew attention to several phenomena which till then had not received visibility in India: such as that

- the methodology used to net the female worker was flawed
- amongst the poorest, as notified by land ownership , the women had higher work participation rates than the men
- in certain social customs, precluded women\ from undertaking outside home waged work, but their economic contributions were as great as the women of other regions
- children especially the girl child was a 14 hour or more worker in poor households
- in a poor landless or asset less household, merely adding an asset, such as a buffalo adds to the hours of work and so on

¹³ Devaki Jain, “The Houshold Trap. Report on A Field Survey of Female Activity Patterns”, *Tyranny of the Household Investigative Essays on Women’s Work*, eds, Devaki Jain, Nirmala Banerjee, Shakti Books, 1985, New Delhi, pp215-248; Devaki Jain and Malini Chand*, “Report On A Time Allocation Study --- Its Methodological ImplicationS “ prepared for Technical Seminar on WOMEN’S WORK AND EMPLOYMENT, ISST, 9-11 April 1982; Jain Devaki: “Valuing Work: Time as a Measure” *Economic and Political Weekly*, Vol. XXXI, No. 43, October 25, 1996

¹⁴ Indira Hirway and Jacques Charmes, “Estimating and Understanding Informal Employment Through Time Use Studies”, 11th & 12th May 2006, New Delhi, India

¹⁵ <http://www.isst-india.org>

¹⁶ Funded by the Indian Council of Social Science Research and in collaboration with the Central Statistical Organization and the NSSO

Clusters of three villages were selected in two districts representing two agro- climatic characteristics – millet farming in Rajasthan and wet paddy cultivation in West Bengal. Three villages were selected as being a min. Sample for attempting an estimate for the District. Districts were chosen on the basis of relative backwardness in terms of unemployment rates within the two states; the tehsils were chosen to reflect “rural ness”, - as remote as possible from towns, roads, access: the villages were selected to cluster around one nucleus NSSO village from the 27th round sample. An additional criterion was introduced to capture variations that may emerge from ethnicity and /or religion. Thus, one of the sample villages in Rajasthan is 100 percent tribal; and one in west Bengal is almost 100 percent Muslim.

A pilot study was conducted in one village in Bholpur District, Muluk ¹⁷. Five households were selected on the basis of economic class (landless, middle and rich peasant) were surveyed for 2 months, with five visits, each of two consecutive days. The findings of this survey provided the basis for the stratification plan for the longer 12 months survey.

A census of households was conducted by the survey team with the help of the NSSO field staff in both regions, using the usual method. A 15 percent sample of the household population in each village was selected with the sample being weighted in favour of poor households (proxy for economic class being land holding).The total sample size was 127 households, of which 52 were from Rajasthan villages and 75 from West Bengal villages.

The mode of investigation was observation and not recall. Each Investigation elected household was observed on two consecutive days, when the activities of every member of age 5 and above were recorded for a period of 15 hours, 6.00 a. m to 9.00 a.m. Clearly observation was not continuous since the investigators needed time for physiological needs. Such small gaps in observation were filled by questioning through recall. The frequency of observation of each sampled household was once in two months i.e., six times using the 52-week cycle.

Though for testing under – enumeration hypothesis, only the intensive observed - activity recording and regrouping survey results are useful, the results of the data obtained from the usual questionnaire method are also given here, as they are indicative of some of the characteristics of female and child workers.

While the main purpose of the study was to collect time allocation data, the census of all households, using a standard employment/un-employment block questionnaire yielded

¹⁷ *This additional characteristic was introduced in response to the advice of Dr. Surjit Sinha , former Vice-Chancellor of Viswa Bharati University. The study was initially to be a collaborative effort between Dr. Ashok Rudra and us. Since Dr.Rudra was located at Shantiniketan, a district near Viswa Bharati was chosen. Similarly Bharatpur is within 4 hours of Delhi. However, due to unavoidable reasons Dr. Rudra have to leave Shantiniketan at that time. The further progress of the study, its methodology as well as its findings, do not have the benefit of his advice. This field work was entirely designed and executed by Dr. Ashok Rudra (Viswa Bharati University) and Rekha Roy*

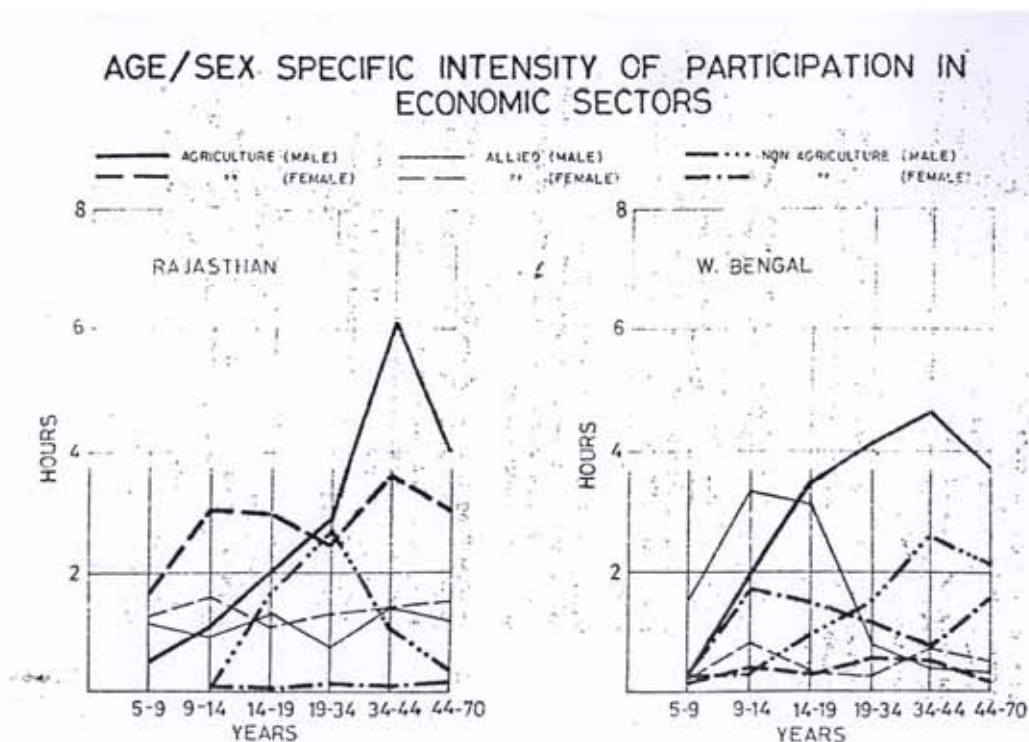
some insight which helped in the interpretation of the time allocation of data, as well as revealed the flaws in the methodology of collecting data , what we call measurement failure .

Table: 1
Work Participation Rates

	Secondary Data : The States		Primary Data : The Selected Villages				
	Census 1961	Census 1971	NSS 27R '72 – '73	NSS 32R 77 78	ISST Census 1976	NSS/ISS 32R 1977	Time Dis- position 1976- 77
<u>Adults (15-59)</u>							
<u>Rajasthan</u>							
1) Person	81	55	-	71 83	81	72 96	87
2) Males	95	92	90	89 89	89	90 93	94
3) Females	64	15	66	51 75	71	49 98	80
<u>West Bengal</u>							
4) Person	56	48	-	52 72	51	50 71	62
5) Males	90	84	81	87 87	91	91 91	93
6) Females	19	8	17	15 57	10	12 62	34
<u>Children</u> (0-14)							
7) Children	15	6	-	-	28	14 34	56
8) Males	16	8	-	-	29	14 20	45
9) Females	14	3	-	-	27	14 48	69
<u>West Bengal</u>							
10) Children	4	3	-	-	4	11 17	45
11) Males	6	5	-	-	7	18 18	60
12) Females	2	1	-	-	1	2 23	30

What is striking is Row 2 and Row 5, that is percentage gainfully active male population. Whatever the method of investigation, Decennial Census, NSSO, 27th or 32nd Round, whatever the area or level of estimation State or village or sample household, the figure for males in Rajasthan remains around 89-90%, and for West Bengal in the range of 81% to 93%. Whereas figures for females and children vary according to methodology used; from 15% to 98% in the case of Rajasthan females and 8% to 62% for West Bengal; 6 to 56% for Rajasthan children and 3% to 45% for West Bengal children.

The obvious inference is that the gainful activity of females and children – the tasks they engage in, its location does not get into the net cast by the existing investigation methodology, with the same precision as males.



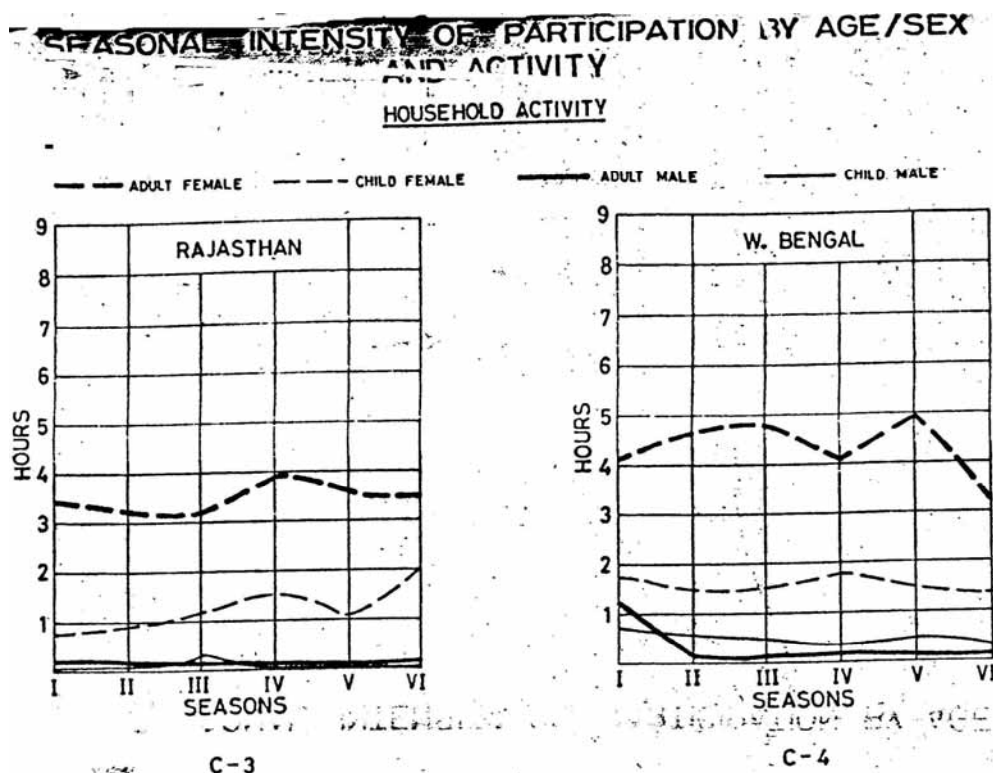
GRAPH A

It is not new to say that the difficulty in appropriately netting female labour is because of the nature/style of women's work. Many analyses of secondary employment data refer to the difficulties/problems posed by including female labour figures, and some even exclude it in trend analysis to avoid "irregularity". The time allocation data helped to understand what brings in this "irregularity" Predictable but interesting patterns emerge which are further specified in the Graphs.

A table giving hours of work across types of work, shows that females whether in Rajasthan, a high FPR State or West Bengal, a low FPR State, report at least 3 if not 6 hours per day in domestic work. In Rajasthan the women engage more in "outside home" activities even though there is strict, age-sex segmentation of tasks, whereas in West Bengal they engage in much more home-bound work. The same table shows the tasks females in the Rajasthan villages engage in. Cutting grass from fields and weeding fields adds up to 2 hours, going up to about 4 as the age level goes up. Cattle and goat grazing take about an hour. Both these are outdoor "male type" activities though regularly done by women and girls. (Mathia)

Per contra, in the West Bengal sample, home based production of goods such as quilts and of all things, begging, is relatively more "intensive" (1 to 2 hours) than farm work for women. As mentioned earlier housework, especially cooking takes immense time (up to 4 hours) in West Bengal.

In the Rajasthan sample the women, over different age groups, weave in and out of economic and non-economic activity with the same range of intensity as West Bengal women – nearly 4 to over 5 hours per day from about the age of 9-14.



It is natural then that women are perceived and perceive themselves as mainly engaged in domestic activity. Even when they also do income earning as for example in Rajasthan, directly that is formally visibly or indirectly as in West Bengal, that is unpaid family labour, free collection of goods and services, they cannot but be seen as predominantly house-workers, which indeed they are. (Deere).

Comparison of data obtained from the questionnaire (census of households) and the time allocation data for the same household revealed that:

- In Rajasthan four of the 37 women who reported as non-workers in the schedule (Code 42-43), were in fact spending up to 4 hours a day in activities such as groundnut picking and sowing the field. 9 others who reported as non workers were grazing cattle and cutting grass for more than 1 hour. Thus 13 out of 37, at least 30% were outside the questionnaire net.
- Two of the 36 male children and 2 of the 34 female children who reported as non-workers were observed to be hoeing the fields; 18 other female children were observed to be cattle grazing and cutting grass.
- In West Bengal, 20 out of 104 females who reported themselves as non-workers were observed to be working in activities such as

winning, threshing and parboiling, working as domestic servants in the homes of others for as many as 8-10 hours per day. This emphasizes our earlier point regarding the seriousness of measurement failure in a situation like that of West Bengal.

- 15 out of 64 female children who reported as non-workers were also observed to be doing some gainful work. The majority worked as domestic servants, 10 females were reported spending 8-10 hours begging, but were not included as workers in this exercise as the NSSO does not recognize this as an economic activity though it is recognized as an occupation.

One of the other objectives of the study was to investigate the factors that influenced women's participation in the labour force, what we called determinates of labour supply. It was found that ownership of assets, in this case land, played a significant role in determining participation. Tables 4 a and 4 b describe the relationships.

Table 4 **Work Participation rates by land classes and sexes in the surveyed villages (Census of Households – Villages (3) 1976 Census.**

Rajasthan (October 1976)

Operated land (in bighas)	Work participation		Rates
	Males	Females	General
Landless	67.0	74.1	70.5
0.1 – 2	69.9	47.4	58.5
2 - 5	67.0	67.4	67.1
5 – 10	67.5	57.6	63.1
10 – 15	66.5	53.9	61.3
15 – 20	50.9	52.1	51.1
- 20	63.7	52.0	59.6

Table 4. b **West Bengal (Dec. 1976) .**

Operated land (in acres)	Work Participation Rates		
	Males	Females	General
Landless	70.8	3.6	33.0
Homestead only	79.2	4.5	40.2
0.1 – 1	69.3	2.5	36.7
1 – 2	56.5	6.0	30.2
3.5 -5.0	56.9	4.6	29.3
5.0 – 7.5	48.9	1.8	23.3
7.5 – 10.0	38.1	4.3	20.4
- 10	50.0	0.0	25.0

In Rajasthan (R) villages, FPR was clearly inversely related to land ownership. the FPR moves steadily inversely to land ownership class, whereas MPR does not show this effect. Finally among landless, FPR is greater than MPR

In West Bengal (WB) villages such a clear relationship was observed only amongst men. The pressure of landlessness however does not seem to bring out females in West Bengal into the easily identified workers categories. What they are doing under this pressure, namely more intensive work in household chores, comes out better in time allocation study section, though the sample is too small to generalize.

It appears that in the Eastern Region the dominant reason for low FPR is not so much the agronomy and other economic factors (see table 2.3), or measurement failure but some modes inhibiting against women working like men. West Bengal exhibits this inhibition even more than its neighbours, Orissa and Bihar.

Table 2.3 **Participation Rates in Rice Intensive Districts – 1961**

State	District	Male	Female
West Bengal		55	9
	Bardwan	54	9
Orissa		61	27
	Sambalpur	65	40
Bihar		56	27
	Shahbad	53	20
Madhya Pradesh		60	44
	Raipur	62	53
Andhra Pradesh		62	41
	W. Godavari	63	32

Source : Census 1961 figures rounded to the decimal.

But such a statement cannot fully absolve the other two factors: the demand side, i.e. opportunity for gainful work, the market pull, nor can it absolve measurement failure.

It appears as if there is a relative lack of opportunity for employment in the profile of the West Bengal villages, compared to the Rajasthan villages. It will be seen in Section 3 that even males in these villages have less than a days work. There seem few options to the poor for scraping together a living. In the Bharatpur sample villages there are no landless. Land is of such poor quality that it has not much value. But everyone owns some, and finds some “allied” activities to scrape together a living. Not so in the Bhirbhum sample villages.

It is probably true to say that in generally low opportunity market females would have less opportunity than males. But it is also true that in many cases even where there is low opportunity, females find ways and means to grasp a subsistence, find some means of self

and family survival – outside formal avenues, behind doors, under the ostensibly available. They usually cannot give up and sit back. They will in other words make an opportunity when there is none. This comes out sharply in the large percentage of females engaged in free collection in West Bengal. It also comes out sharply in the activity recorded of landless women in our sample

The relevance of this still risky statement here is that it indicates measurement failure. It indicates that where females (or males or children) do not have ‘public’ Identifiable participation in gainful activities, the measurement (enumeration) through questionnaire even if done by females, is not adequate. They may not be employed but they have a means of livelihood. They may not be seeking work or willing to accept work except of certain kinds, suitable to cultural inhibitions. But the more orthodox these inhibitions, more invisible they are in statistics.

The Nature of the Inequality: a time use profile of a girl child

Naini is a 11-year-old Mina girl of Etrampura, a small village of 57 households in Rajasthan. Here is a joint family of nine, which includes her parents, uncles, as aunt and a younger brother. The family owns eight bighas of land, lives by its produce, occasionally hires labor or hires itself out, depending on the season. The father and the uncle plough and dig while Naini, her mother and her aunt weed, pick groundnuts, cut grass.*

While Naini's uncle, 19-year-old Kardiram, goes to high school in Bhusawar, five kilometers away, and her younger brother Chuttanlal goes to school in the neighboring village, where he is in the third standard, Naini assists her parents in household chores. "Who will do all this if I go to school?" she asks when questioned.

Rising at six in the morning, Naini's first task is to make cow-dung cakes for an hour. This is followed by going to the well to fetch water. Returning to the house she sweeps the front courtyard. At 7:30, she sieves the wheat flour, lights the fire and assists her mother to prepare rotis. The family sits down to eat daliya and bajra rotis in brass thalis.

It is Naini's daily task to clean the utensils after breakfast. After packing some lunch for the family, she sets out with her mother to their field which lies on the border of Mehtoli and Etrampura, about three kilometers away. In September, a quarter of the field is covered with capsicum (red chili peppers) while the rest is being ploughed and readied for the next crop. She and her mother are assigned the task of weeding the field. At noon she goes home with her mother to cook some lunch while her father and her uncle remain behind and eat in the field.

She cuts the potatoes, while her mother prepares the rotis. After lunch, she washes the utensils and again goes to the well to fill another pitcher of water. Having been doing this for two years already, Naini pulls up the water with great ease. In the afternoon Naini is seen again in her field, cutting grass for her cattle. By four, she has collected a big bundle which she ties and carries home. This she deposits in the cattle-shed. Her uncle will cut it later and feed it to the cattle.

Adjoining their mud hut next to the cattle-shed is a little storeroom, from where Naini takes out the cow-dung cakes which she prepares every morning, and the firewood which she and her aunt had collected last week. With the help of these cow-dung cakes Naini fires the oven and cooks daliya. She then sweeps the house again.

Her aunt usually prepares the food but as she is very sick these days, this task is shared by Naini and her mother. Once dinner is ready and Naini's daily tasks have been completed, she finally finds half an hour to sit down and relax, chatting and teasing her brother Chuttan, who has kept aside his books. At 7:30, when it is time for dinner, she serves daliya, boiled milk and bajra rotis to all the family, and joins them for dinner which they eat by the light of an oil lamp. After cleaning the fireplace at 8:30, Naini rolls out Chuttanlal's mattress and her own and gets ready to sleep, to get fresh for another tomorrow.

Section III

Using the Tool to Influence Policy

The study opened the doors of perception in many spaces, such as Central Statistical Organization, National Sample Survey Organization and United Nation Organizations. It was used by ISST in other studies to reveal women's double – burdens, amongst other things.

The time use module was used in all the studies that ISST did afterwards, whether it was of women's work at the Maharashtra Employment guarantee site, or in "Women's Quest for Power" – in the Chapter The Milk Maids of Khaira district¹⁸, basically to show that there were burdens which were not being understood and unless these burdens were understood, the services that would be provided would be ignored or inappropriate. For example, we found through time use, that women from land less households, added 4 hours to an already burdened 14 hours of labour, when a buffalo was introduced (Ruth Dixon also found such burdens).

In the areas of mainstream economic policy making one of the glaring gaps is the knowledge of women's economic contributions in the spaces and sectors. The description of the pilot time use study of ISST revealed measurement failure by the statistical system, but it also revealed the pressures, the burden of work on women and children, and the relationship between poverty and the push to work, as well as the hidden work loads of women, non monetised , unrecognised as in West Bengal .

In the drawing up of the 11th plan, much effort is being made to gender the sectoral plans. However the available data does not give visibility to the location of women in the Indian political economy. There is no economic geography map of India with women's face. However data needs to be presented according to regional characteristics, different

¹⁸ *The study in Khaira District in Gujarat, revealed that amongst landless households, when a buffalo was added in order to enhance the income of the household, women who were already stretching their hours of labour due to fetching water, fuel and doing some hiring out of labour, working already 16-18 hours, another 2 hours was added due to looking after the buffalo. This again seemed to account for the high mortality rate of women from the poverty households in Khaira district. It is interesting to recall that the study of milk producers in Khaira district conducted by ISST at that time and published in a book called "Women's Quest for Power", in 1979, led the NDDDB to focus on health via the Tribhuvandas Foundation, on especially to the milk producers of Khaira district*

regions have different kinds of characteristics whether it is land or opportunity or occupation, women in hill areas, women in the sea coast, women in tea estates are different from women in paddy fields.

In my view, we do not need to gender any of those chapters¹⁹ What we need to do is to respond to women's location in the political economy and therefore, it is a mapping of the statistical picture that will create the national response rather than lobbying or advocate for purple lines as gendering, in already designed approaches, to various sectors like the infrastructures or urban or agriculture. Or gender budgeting.

Enlarging the data sets , with modules of TUS can reveal many useful indicators for policy, such as where women need tools and technologies to relieve burdens as well as strengthen their productivity, it can reveal the care economy, the discrepancy between hours put in and the monetary reward, and help therefore to design policies and programmes and ideas for investment .

For example, when the paper was being written for the Prime Minister of India, to take to the Non-Alignment Movement Summit in Cuba held in September 16, 2006 where, trade was the core theme, and solidarity in trading was the proposal that was being made for mandating by the Summit. However, it was found that no one neither in the Commerce Ministry nor from ICRIER nor from the RIS Center – Research Information Center, which was a NAM Center, had included the fact that women were the majority of the workers in the export led service and manufacturing sectors. Women's work was what was earning foreign exchange for the Philippines, for India, for Sri Lanka and for Bangladesh. But, the officials, the economists were neither aware that it was women's work that was creating the remittances for example, nor that the reasons for it being so women oriented were not necessarily very pleasant. Women were cheaper, muter, they took them at the younger age and women were willing to do it for wages, which were not necessarily “**decent**”. They were not aware that there were reasons for them to look at legal protection, facilities, etc., This was not a part of the deal²⁰.

However by revealing the data and presenting it at the special committee the govt took note and a proposal was forwarded to have south -south covenants to prevent the trend to pull down wages , through competition between the south countries .Hence the importance of ensuring that the data on women and work is not only collected but made visible in appropriate ways to feed into macro economic policies and programmes.

In sectoral planning in India, we do not see the location of women in the Indian political economy whether it is presented according to regional characteristics, different regions have different kinds of characteristics whether it is land or opportunity or occupation, women in hill areas, women in the sea coast, women in tea estates are different from women in paddy fields. There is no economic geography, demographic map of India with women's face.

¹⁹ *Ibid: To be or not to be- the location of women in public policy .*

²⁰ *Devaki Jain: Strengthening the South Through NAM: The Opportunities, August 4, 1998.*

What we need to do is to respond to women's location in the political economy and therefore, it is a mapping of the statistical picture that will create the national response rather than lobbying or advocate for purple lines as gendering, in already designed approaches, to various sectors like the infrastructures or urban or agriculture.

Therefore, there is need not only to bring time use into macro economic policy but to in fact bring knowledge on women's economic contribution. From the immediate and intelligible, such as the value of non monetized work, or giving dignity to other types of contributions such as care work, or reproduction of the human beings, to designing new measures such as time spent, and new ways of measuring such as through group or the collective identification of a measure, to renaming the domains of human experience e.g. formal informal economies – ideas have not only been generated and helped change drastically the way women are viewed – not as patients and receivers of welfare but as agents and actors involved at various levels and ways the in complex processes that make up life as we know it. These have contributed to the debates on alternative indicators, not only of women's progress but also national and international progress as well measures of inequality.

Recasting the national accounts to include women's unpaid activities, would require not only TUS but other tools and is certainly worth doing at that level... and as I have shown even small and dirty studies at a local level either to reveal the impediments to children going to school, or how and when waged employment is required, or how to provide support services to improve the opportunity for women and men to be more productive

But unless it is factored in to one of the clear goals, they do not make a difference as revealed by the overall neglect of past efforts.

Section IV

Appendix

The Action Research Implemented by Singamma Sreenivasan Foundation

Time use Studies were done in four districts in Karnataka by Singamma Sreenivasan Foundation viz., Chamarajanagar, Koppal, Bangalore (Urban) and Tumkur. The module on time use was part of a schema to conduct a gender audit, and show how development between men and women, i.e., the outcomes of an area development plan. The study was called *Strengthening Gender Equity Measures through a Sample Household Survey*²¹ and *Gender Audit: Holding Development Accountable*²².

The Singamma Sreenivasan Foundation wanted to develop a gender audit with a simple proforma and easily available data for auditing the outcome of area development. This was part of an exercise to help the district governance to understand the gendered impact of their plans and outlays; it would also give information for those planning employment and skill development.

²¹ *The goal of this particular project “Strengthening Gender Equity Measures through a Sample Household Survey” was to further address and attempt to bridge district level data gaps with respect to gender-related development indices in two backward districts. Also, this exercise attempts to bring some improvement over the indices of gender equity proposed in the Human Development Report. The survey was conducted in two backward and newly formed districts viz., Chamarajanagar and Koppal covering 1500 households from each district i.e., a total of 3000 households from two districts. Chamarajanagar and Koppal districts were part of Mysore and Raichur districts respectively.*

²² *The main objective of this pilot study, is to develop intelligible “gender audits” at the district level and demonstrate how they can be obtained from a survey that is simple enough to be undertaken periodically by district agencies. The survey was conducted in two districts viz., Bangalore (Urban) and Tumkur, which provide a contrast; while the former is predominantly urban, the latter is mostly rural. In order to get meaningful estimates of the indicators, it was decided to select a sample of 2,500 households from each district i.e., a total of 5000 households from the two districts.*

A Gender Audit proforma which was implemented by SSF, so that the Panchayati Raj Development area development work could be seen in terms of its fall out on its gender equity, clearly show the value of the Time use Module in the quick and dirty sample survey that can be done every year, in a gram panchayat, even by an anganawadi worker. Most of the data were the kind of secondary data that is available annually and time use was something that could be done for a sample of households.

The research dramatically revealed what is now common knowledge in the world that women have double sometime four times of the time in what is called **unpaid activities** and similarly girls more than boys. An interesting aspect in planning the district is straight away revealed that in urban India, women didn't have many opportunities to, engage in productive activity. Whereas in rural India they had and it was the opposite for girls and boys; as boys were more used as workers in urban India and not in rural India.

Today, such studies could even show, why migration is taking place and even prevent it. There is a great deal of material today which shows that there is hardship migration, due to lack of locally available employment and women are the major sufferers either being left behind or being pushed as for example in Maharashtra where young girls are unofficially married to men, so that young couples can be recruited by the contractor.

The methodology used to study the time spent on paid and unpaid economic activities, the survey included a time use questionnaire using 5 Indicators

Time Spent on Economic Activities (Minutes rounded to Hours)

Indicator	Ch Nagar		Koppal		B'lore Urban		Tumkur	
	Male	Female	Male	Female	M	F	M	F
Time spent on economic activities on a normal day (for age group 5-14 years)	0.91	2.52	2.57	3.89	0.72	0.49	0.57	1.13
Time spent on economic activities on a normal day (for age group 15-59 years)	7.47	8.97	8.20	9.79	8.00	6.47	7.68	8.45
Time spent on unpaid economic activities on a normal day (for age group 5-14 years)	0.82	2.31	2.08	3.11	0.46	0.49	0.49	1.01
Time spent on unpaid economic activities on a normal day (for age group 15-59 years)	1.61	6.93	2.00	6.78	2.72	5.43	3.72	5.76

It may be noted that, for the working age group, the time spent on *unpaid* economic activities as a percentage of the total time spent on economic activities, i.e., is 34% and 84% for males and females respectively in Bangalore (U) District, and 48% and 68% for males and females respectively in Tumkur District. *Thus more than two-thirds of the time spent on economic activities by women is unpaid.*

SECTION -V

References²³

1. Bhattacharya Sudhir – Women’s Activities in Rural India – A Study based on NSS 32nd Round (1977-78) Survey Results on Employment and Unemployment, NSSO, Dept. of Statistics, Government of India, June 1981.

This is a comprehensive report on labour force participation characteristics of rural females. It discusses the results of the special probing enquiry conducted in the survey on the nature and extent of under utilization of available labour time of rural females and the activity behaviour of rural females who remain normally engaged in domestic activities.

2. Deere C.D. The Agricultural Division of Labour by Sex – Myths, Facts and Contradiction in the Northern Peruvian Sieria, Economic Department, University of Massachusetts, Amsterdam.

The paper analyses the relationship between the agricultural division of labour by sex and the differentiation of the peasantry in Northern Peruvian Sieria. It suggests that under-enumeration of females is due to the errors in classification as also investigation methodology. ‘If the first question asked in a Census question is that of the person’s principal occupation, women reply “their home” in a patriarchal society, women’s first responsibility is towards home and children, cultural modes require that women project what is right’. Even if the respondent is a woman she often under estimates the economically productive content of her work and considers it as part of her domestic duties. It was observed that while animal raising is considered gainful by most official definitions, most women did not report as workers, though it was observed through the time disposition study that their contribution was significant.

3. Hart Gilian “Patterns of Household Labour Allocation in a Javanese Village” – paper prepared for the A/D/C RTN Workshop on Household Studies, Singapore, August. 76.

The monograph presents primary data on labour allocation from a sample of 87 households in a Javanese village and postulates that labour force behaviour can only be adequately understood in the context of household decision making and the factors which determine the allocation of time of various household members among a range of activities.

²³ *Some of the additional (earlier) annotated bibliographies*

A strong direct relationship between class status and the absolute and proportionate amount of time spent by women in housework exists. Women perform the bulk of housework, and there is little inter-class variation in the sexual division of labour in housework. The heavy involvement of landless and near-landless women in income earning activities relative to women in the land-owning groups is particularly marked in the 10-15 age group. The data indicates that the amount of time spent by Class III females aged 10-15 actually increased between the peak and slack months, and substantially exceeded that of females in all other age, sex and class groups in the latter period.

4. Parthasarathy G – Rural Poverty and Female Heads of Households: Need for Quantitative Analysis

Paper presented at Technical Seminar on Women's Work and Employment, 9-11 April 1982; through cross tabulations of agro-economic Research Centre. He develops the argument that the poorest labouring set, are women, from women-headed households.

5. Fong Monica – Victims of Old Fashioned Statistics: Institutions and Agrarian Reform Division, FAO, Rome. Reprinted from Ceres, the FAO review on agriculture and development.

The paper suggests that a new statistical outlook is required using concepts, measures and methods of collecting and analyzing data better suited to the work of women. She suggests that statistics on women may be improved by adopting the "gainful worker" approach in combination with the "labour force" approach, and the need to pay attention to what constitutes work in agriculture: and the timing of the survey or census. The author also emphasizes the role of the interviewer in measuring women's work.

6. Mathaei J.A. – The Development of the Female Labour Force in the United States : An Historical Investigation, Department of Economics, Yale University, 1977.

The paper examines the changing economic activity of women historically during the process of the movement of production out of the family relationships "Even when other social forces changed, the division very soon became a part of the idea of "women's nature" seen as naturally determined and fixed. In this way, custom has blended into biology and nature custom – as past social experience has played an essential role in conserving the content of womanhood throughout history".

7. Dandekar V.M. Some key results in Employment and Unemployment – NSSO.

The activities 01 to 71 are considered 'gainful' and a person engaged in any of them is considered 'working' or 'employed', the activities 81-82 connote 'Unemployment'. The employed and the 'unemployed' together constitute what is called the labour force and persons placed in these categories are said to be in 'OR' to be participating in the labour force, the remaining activities, namely 91-99 are considered 'not gainful' and persons engaged in any of them are considered to be 'out of the labour force'.

8. Agarwal Bina 'Work Participation Women in Rural India, Some Data and Conceptual Biases IDS, University of Sussex (1979):

The paper highlights that there is a dearth of empirical research and reliable data on rural women and suggests that there are conceptual bias that affect existing measurements of women's work participation. These include the fact that enumerators are male and information is collected from male head of households, reflects a male perspective, that there is an overall fuzziness that surrounds demarcation of domestic and productive work, that the predominance of female labour use and the seasonal character of agricultural men and women at a given point of time.

She concludes that there is a need for a sounder empirical base on the time criteria of women by socio economic class and capture the operation wise crop specific variations in women's work. She suggests that detailed region specific micro level research could provide clear definition of domestic and non-domestic work.

9. Sundar P. Characteristics of Female Employment Implications of Research and Policy, EPW Vol. XVI No. 19, May 9, 1981

The paper attempts to highlight how the women's employment situation differs from the male and why it is necessary to consider female employment separately in formulating employment policies. The paper reviews the reasons why female employment and unemployment are under-studied. It discusses the factors determining female participation rates and the supply of female labour and how they are different from those determining male participation. It then goes on to discuss some of the distinctive characteristics of the demand for female labour and the implication of these differences for the design of programmes and policies affecting female employment.

- 10a. Beguin A. Preface to "Unpaid Work in the Household" by Goldschmidt Clearmont L

Quoting from the World Employment Conference Beguin defines employment as "Yielding an output" and "Providing an income to the employed".

She says "In so doing, it was, no doubt rightly, placing emphasis on remunerative employment and on market-oriented outputs rather than on unpaid work in the subsistence sector or production for direct household consumption.

It is clear, however, that the household sector, the value of whose production has been estimated at 25% to 40% of the accounted for Gross National Product in industrialized countries, plays an extremely important role in satisfying many of the basic needs of the population and that this role is undoubtedly even greater in developing countries with their large subsistence sector. There has therefore been increasing interest in assessing the value in economic terms of the goods and services produced by households for their own use or consumption, as a contribution to measuring and, therefore, providing a basis for understanding some of the ways in which the market and non-market sectors interact, and the impact of these interactions on real household incomes and welfare.

- 10b. Gold Schmidt – Clermont. Unpaid work in the Household : A Review of Economic Evaluation Methods by ILO, Geneva 1981

Pointing out the need to recognize and integrate in economic analysis the unpaid productive activities performed in the household sector, this work reviews the different methods that have been used to measure these activities. To facilitate comparison with market oriented activities, non-market household work is sought to be measured in terms of (a) volumes of inputs and outputs, or (b) monetary values of inputs and outputs. A typology of evaluation methods is thus evolved and 75 research studies dealing with household production in industrialized societies are examined in this light.

The author concludes, “given the state of the art, no single evaluation method answers the needs of all evaluation purposes. It is possible, however, once the purpose of the evaluation has been defined, to devise a combination of methods for approximating, at least in order or magnitude, the relative value of unpaid household work compared to market work”.

“How do market rigidities affect these transfers? What would the impact be, for instance, of a reduction of working hours on the labour supply, on the production of goods and services for self-consumption, on the consumption of market goods, on time available for leisure, education, etc.”

“The similarity between production processes occurring in the market and in the household is further underlined by the overlap between the two sectors – children are cared for, food is prepared, the ill are nursed, etc. as a result of paid and unpaid work inputs. Interactions between the two sectors are continuous: transfers of manpower from the household to the labour force (e.g., when former full time homemakers take-up wage employment and reduce their work inputs in the home); transfer of production from the household to the market economy (e.g., when the same former, full time homemakers spend part of their wages in buying, on the market, goods or services they were producing previously); and, inversely, transfers from the market sector to the household. Although such interactions have been observed and to a certain extent analysed, the underlying mechanisms are not well documented”.

11. King – Quizon E. Time Allocation and Home Production In Rural Lagung Households. Symposium on Household Economics, Manilla, May 1977. Union of Philippines, Quezon.

The paper views the household as an economic unit which maximizes welfare through the optimal use of total resources. It describes the decision making within the household by identifying determinants of the allocation of time among family members.

12. The Second Sex in the Third World : Is Female Poverty a Development Issue ? Birdsell. N., McGreevey W.: (Prepared for the International Centre for Research on Women Policy Roundtable June 1978, Washington).

Highlighting the handicaps facing the poor women of the Third World Countries, this study deals with the questions: How do such women contribute towards economic growth. Female poverty is thus viewed as a development issue and several conclusions are drawn on the basis of number of case studies. It is found that a large percentage of women work in the ‘informal’ sector and there is a distinct preference for flexible

working hours which facilitate household and childcare. When women work outside the home, there may be an adverse impact on the nutrition, health and education of children affecting in it, the quality of the human capital. Thus the author argues, if the working mother is relieved of the pressure of work leading to better ‘mothering’, she can make a positive contribution to economic growth.

One way of achieving this, the author suggests, is increasing the productivity of men which ensures a higher family income and reduces the compulsions behind women’s work.

“Much of this work of women is not subject to the market place of wages in which men place their services or the fruits of their labour. In censuses and employment surveys, where work has meant an activity producing each income, women have been treated inconsistently or overlooked altogether. The unpaid family worker in a small shop or a farm was the first casualty of the misleading statistical categories “employed”, “unemployed”.

The answer to such false divisions is the time-use survey - a careful check on how people in poor households use their time. Time is perhaps the most important – in the poorest households, the only – resource which the poor have available to them, US women work at home and outside the home an average of 6 hours per day ; women in Bangladesh work 11 hours.

Time budget surveys demonstrate indisputably what employment surveys previously barely implied : Women make an enormous contribution to the real income and well-being of the poor.

13. Jain. D., Chand M. Rural Children at Work, Preliminary Results of a Pilot Study. The Indian Journal of Social Work, Oct. 1979 Vol. 2, No. 2, Tata Institute of Social Sciences.
14. Mukhopadhyaya S. The Nature of Household Work. Paper prepared for the Technical Seminar on Women’s Work and Employment, April 1982.
15. Swaminathan M. A Study of Energy use Patterns of General Background caste for the Seminar on Women’s Work and Employment, April 1982.
16. Reddy A. ASTRA – Rural Energy Consumption Patterns – A field study, Bangalore, Indian Institute of Science (1980).
17. Batliwala S. Rural Energy Scarcity and Nutrition – A new Perspective 1981

The calorie gap suffered by the low-income groups is an acknowledged phenomenon and the usual response is to advocate increased food intake through increased employment or to improve nutrition through supplementary feeding programmes and better health and sanitation measures. The author proposes a new approach – closing the calorie gap by reducing the energy expenditure of the target population specially the poverty households of rural areas. Field Studies carried out by ASTRA quoted to highlight the typical patterns of rural energy supply and consumption. The author suggests development of alternative energy sources and of appropriate technologies to save human energy use, can play a significant role in ameliorating malnutrition and ensuring better living for the nutritionally “vulnerable” sections – women and children.

18. Ahmed, Iftikar, Technological change and the condition of Rural Women: A Preliminary Assessment (ILO, Geneva, 1978).

This paper examines cross-country evidence to study impact of technological change on the condition of rural women who usually play dual roles as housewives and as agents of production. Empirical data from underdeveloped countries are reviewed to arrive at a number of hypotheses including –

- (a) Technological change is usually accompanied by increasing work burdens for rural women and also by a decline in their income-generating activities; (b) their socio-economic status may affect the impact of such change; (c) rural women tend to be associated with sectors characterized by low levels of productivity and (d) women's access to technology, extension services and various inputs (physical, capital, skills etc.) is in no way commensurate too their role as a factor of production in the rural economy. Specific areas for research are then suggested, which would test these hypotheses and would fill the gaps in knowledge.

20. **Ramaswamy N.S.** -Animals Carry India Foreward Soft Energy Note, Oct-Nov IV 1981

21. **Jain D** –Milk Maids of Kaira – Chapter in Women's Quest for Power, Vikas Publishing House, 20/4 Shibabad, Ghaziabad, U.P 1980

A Household survey was carried out covering 124 households in 10 villages of Kaira District. The intention was to understand the role of women in dairying and the impact of the Anand Pattern on the women of dairying households. Within each village households were selected randomly from four asset categories to represent variations in household resources and therefore income.

The time pattern of women's work was recorded on an average women from landless households worked for 10-11 hour per day but landless women who also combined agriculture worked for 2 hours more. These additional 2 hours seemed to be provided by cutting into time spent in domestic activity. An implication of this phenomenon was that dairying might be eroding the time available for activities such as child care, cooking, etc. Yet it was possible that women of thnon-dairying households were extending their time in household chores because they lacked an alternative gainful occupation.

22. **Chand M, Baruah R** - Employment Opportunities for Women in Forestry, Paper presented for the Seminar on Women's Role in Forestry convened by the FAO and Ministry of Agriculture, Dehradun, December 1980.

The paper was based on a survey of 65 tribal households spread over 8 villages in Betul district Madhya Pradesh. It described the tasks of women in forestry revealing the exploitation they suffer both at the hands of the forest officials and the middle men in spite of well intentioned policies. Recording time allocation provided a comparison of average hourly earnings in different occupation ranging from 0.20 NP collection of fire wood normally done for 10 hours a day to 0.50 NP or nursery work done for 7 hours in the day.

23. Impact on Women Workers – Maharashtra Employment Guarantee Scheme – A Study – The study was carried out on 180 respondents at eight work sites. Its aims were to assess the impact on the MEGS or (a) women's work (b) their domestic/household life (c) worker's social household behavior.

Then time allocation data revealed the multiple nature of women's work. Domestic work seemed to take up to 4 hours for 62% of the workers whereas 32% reported over 4-6 in domestic work. The core group aged 30-49 also put in 2-4 hours of domestic work.

It was noticed that EGS workers reported working 8 hours at site compared to non-EGS workers reported working 6 hours. However, they spent 4-7 hours on domestic work. From this limited sample it could be suggested that EGS work does curtail hours that can be spent in domestic work.

24. Income Generating Activities for Women – Some Case Studies, Prepared by the Indian Cooperative Union, sponsored by UNICEF, 1980

The Book describes 4 endeavours which have been effective in supporting women in their quest for income, these were the Lijjat Pappad Center at Valod Gujarat. The Sarvodaya Sangh at Tirupur, Tamil Nadu, The Dastkar Anjuman at J & K and the Sikki Kendras at Sunsand Bihar. Household surveys which recorded time allocation were carried out at all 4 sites, to study the intensity of work in home based industries.

25. A case study on the Social and Cultural Implications of Tasar Production for Tribal Communities, sponsored by the Swiss Development Corporation.

A field survey of 100 households in Chandrapur – Maharashtra has been done to find out if a Tussar development programme i.e., increased Tussar production in fact will improve the quality of life of the tribals. It seeks to answer whether Tussar production is suited for stimulating the progress for the tribal population especially the weakest, how far it will protect the integrity of the eco-system within which the tribal system operates and how far it will replace it with systems of dependency. (On going) ISST.

26. Integrating women's interests into a state Five Year Plan (Karnataka) sponsored by the Ministry of Social Welfare-The study has been undertaken in Karnataka to find out to what extent development schemes have been utilized by the women. 1000 households have been surveyed in 2 districts of Karnataka, Dakshina Kannada a developed district and Gulbarga a backward district. Time allocation has been recorded. Results are awaited.

27. We had submitted some similar suggestions to NSSO Technical Committee – given below: **Suggestion for consideration for NSSO 38th Reschedule (Devaki Jain & Malini Chand) December 1981.**

Indicate here time spent in following six activities according to Codes A, B, C.

	Sr.No. as in Block 4	Status
1	-Animal Husbandary -Pig, Cattle,goats & Poultry	
2	Maintenance of building Repairs	
3	Productionof Goods for self- use: Mats/Ropes	
4		
5	Fetching water	
6	Fetching fuel	
7	Domestic chores, cooking, Washing, child care	
	Codes: 0 - < 2 hrs – A: 2-< 4 hrs – B:> 4 hrs - C	

Probing Questions :

1. What was the reason for your usual attachment to domestic duties
Pressing need - 1
Non Availability of Gainful work - 2
Are you willing to accept gainful work at your household?
2. Are you willing to accept gainful work at your household?
3. The nature of work acceptable to you (regular full time – 1,regular part time – 2;
Occasional full time – 3; Occasional part time – 4).

**Time disposition of persons in labour force
During the week ended on -----**

	Sr No.as in block 4	Status (Code)
		Seventh day
		Sixth day
		Fifth day
		Fourth day
		Third day
		Second day
		First day

Additional Codes :

1. Animal Husbandry (own)
2. Maintenance and building repairs
3. Production of goods for self – use: mats/ropes/garments/cloth
4. Fetching fuel
5. Fetching water
6. Domestic chores ; Cooking, washing cloths and utensils and child care

ADDITIONAL REFERENCES

1. **Oppong C**, - FAMILY Structure and Women's Reproductive and Productive Role Some Conceptual and Methodological Issues (World Employment Programme Research Working Papers, ILO, Geneva, 1979)

This paper points out that our understanding and analysis of women's productive behaviour will remain incomplete if we do not carry out more complex analysis of residential patterns and domestic organization. This obviously needs a more 'synthetic' approach, combining concepts and techniques of several disciplines. The author discusses the deficiencies inherent in the use of the unitary 'household' model as an analytical tool in cross cultural research and argues that women are usually so influenced by conjugal and kin ties that the latter need special analysis. A new framework for such analysis is then introduced, visualizing four possible alternative situations : (a) women sharing a particular domestic task or responsibility or right with both husband and kin, (b) With only kin, (c) with only spouse and (d) with no one, performing alone. This framework thus combines the study of the conjugal division of labour, power, rights and duties in each domestic area with analysis of the extent to which these are also shared by Kin groups.

2. **Anker R**, - Demographic change and Role of Women : A Research Programme in Developing Countries (World Employment Programme Research Working Papers, ILO, Geneva, 1978)

This paper seeks to evolve a research programme which will focus on an important socio-economic phenomenon in the developing countries – the interaction between changes in women's roles and changes in demographic behaviour (fertility, mortality, family structure, etc.). An inter-disciplinary approach is considered suitable and three broad types of studies recommended : (a) collection and analysis of household survey data; (b) collection and analysis of socio-anthropological data and, (c) analysis of urban labour markets. At least one major country study is advocated to represent four major regions (Latin America, Asia, Sub-Saharan Africa and the Middle East) and a number of smaller countries case studies envisaged to throw light on the functioning of urban labour markets and on policies adopted for improving women's role and status.

3. **Krishna Raj M & Patel V** - "Women's Liberation and the Political Economy of Home Work" National Conference on Women's Studies, April 1981

This paper focuses on the problems of definition, measurement and analysis of the nature of housework which is visualized as an economic category within the productive process of society. Discussing the socialist feminist analyses of house-work, the author suggests that housework has an ideological function in perpetuating the relations of production and argues that women's oppression is not merely a cultural phenomenon, it has a material base in house-work, independent of her exploitation in the labour market.

4. **Mukhopadhyaya. S** – Work and Women : Some Pertinent Issues

Stressing the difficulties inherent in applying the economist's definition of "Work" to the varied activities performed by women, this paper identifies two major problems concerning women and work at the macro level:

- i) problem of measuring the intensity of effort spent in both economic and the so-called non-economic activities, and
- ii) the problem of assessing sex-based discrimination prevalent in society today. This assessment could lead to greater societal awareness as well as to better legal provisions.

5. Jain D – Women’s Employment – Possibilities of Relevant Research Paper prepared for KULU Women and Development, Copenhagen, 1980 published by APCWD, Bangkok.

Instead of discussing the dialectics surrounding women’s employment, this paper highlights four ongoing projects which serve to reduce the hardships faced by women workers : (i) the Maharashtra Employment Guarantee Scheme, (ii) the UNDP project to Modernise the Woollen Industry in Jammu and Kashmir, (iii) the Amul Dairy Project and, (iv) the Karnataka Sericulture Development Project. Some of the important findings of this survey are:

- There is need to collect task-specific work data for men, women, and children to classify population by assets held apart from the routine classifications;
- While promoting employment through specific projects it is not only important to assess the number of man days generated but also to establish the specific identity of the actual beneficiaries;
- In the choice of technology, the criterion of labour intensive should be further disaggregated into female and male labour intensive techniques;
- Necessary changes must be introduced so that the implications of micro-surveys are fed back to the actual field situations, to produce a positive impact on the target groups and
- The most vital concept that still needs exploitation through research is the concept of work.

The author concludes “the most significant way in which studies of women specially female labour and its employment can improve the conditions of women is to link the analysis and solutions to all other groups which suffer from such distress - thus making research on women the radical edge to social transformation.

6. Mukhopadhyaya.S – “Women Workers of India” : A case of Market Segmentation in the book Women in the Indian Labour Force, ARTEP, ILO, Bangkok, 1981

This paper points out that the concept of a homogenous labour market where all categories of workers are seeking work under similar market conditions is no longer realistic. Wages offered by employers are often influenced by parameters like race, sex, caste, etc. apart from the value – productivity of the worker while the workers’ participation behaviour is influenced by the knowledge of the significant role played by such parameters. Thus we have a situation of market segmentation where the labour market might consist of a number of submarkets which endorse certain sets of workers differentiated not by skill or productivity but by factors such as race, sex, etc. This paper argues that the women, workers of India also represent such a case of market segmentation. Sex-based earning differentials are identified as the first dimension of segmentation and substantiated by an analysis of micro-studies pertaining to different regions of India. The same segmentation is revealed by the peculiarities of the female occupational structure: In the rural sector more than 80% of women workers are

concentrated in agriculture and allied activities while in the urban sector they crowd the lowest paid jobs whether in the informal or in the organized sector. So far as the labour force participatory behaviour of female workers is concerned, it is influenced by any more variables than in the case of males e.g. number and age of children, extent of domestic work, etc. Available data for India show that the age specific female work participation of rural women is uniformly associated with higher rates. As regards women's own perception of their role, most studies indicate that their economic role is perceived more as one of supplementing the family income rather than as one leading to 'emancipation' or equality of status.

7. Jain D, Chand M - "The Importance of Age and Sex Specific data in Household Surveys for the Regional Seminar on Household Surveys in Asia, ESCAP, Bangkok 1980. The main conclusions that emerge from the paper are:

- that all surveys have an implicit value base which needs to be explicitly stated as a preamble to the surveys:
- that household surveys should take note of the interests of women and children and provide for appropriate investigations and appropriate tabulations by age and sex;
- that the schedules should be so designed as to capture the processes, systems and conditions of the people of these, as yet agricultural and tradition-bound societies, and investigate in particular women's participation in developmental programmes and the benefits derived there from:
- that in order to probe the pattern of work and leisure among women, time disposition studies be undertaken with the aid of appropriate schedules that would accurately capture the patterns and the regional variations therein: and
- that wherever necessary, female investigators be used for the collection of data from women or matters concerning them.

8. Klevane, Wanda Minge, 'Does Labour Time Decrease with Industrialization'

This paper examines the direction of change in the composition of family labour time as a result of industrialization. It contradicts the assumption that work input by children in peasant agriculture is limited. In fact the progressive postponement of their role as workers inside or outside the home has been an important feature of modern, industrialized societies and has resulted in a reallocation of family labour time. Available studies suggest that there is actually an increase in the labour time required for the maintenance of the family and in view of the extended 'childhood' in post-industrial society, this increased work requirement has to be met by women. In contrast to 2-7.4 hour work day in an agricultural society, in industrial societies women are found to work 5.8 – 9.5 hours each day.

9. Collecting Statistics on Agricultural Population and Employment, FAO, Rome, 1978

This Guide is intended too help persons organising censuses and surveys to measure different aspects of agricultural population and employment. Different objectives for collection of relevant statistical data are discussed and four types of observational units proposed: individual persons, farms or holdings, households and localities, villages or small administrative sub-divisions: A detailed methodology for data collection is

provided as well as a specimen programme for statistics collection which could be adopted even by developing countries. Areas needing further research are identified. Annexures contain specimen questionnaires and specimen summary reports from selected countries and a list of references pertinent to the subject matter of the Guide.

10. Bardhan, Pranab - "Some Employment and Unemployment Characteristics of Rural Women : An Analysis of NSS Data for West Bengal, 1972-73"

In rural employment planning, it is important to understand and quantify the specific employment and unemployment characteristics of rural women because the female labour market has some special features as a result of which the nature of employment programmes for which they may be available are often quite different from those for men. This paper provides some quantitative dimensions for some of these employment and unemployment characteristics of rural women. The analysis is based on some special tabulations from more than 500 sample villages in West Bengal by the NSSO.

11. White, Benjamin - "The Economic Importance of Children in a Javanese Village in Population and Social Organization (ed) Moni Nag. The Hague, Houston 1975.

The study questions the view that rural over population emphasizes that prospective Javanese parents have no economic justification for producing large families of potential labourers. Based on detailed time allocation data from 40 households the study reveals that (i) most children begin tasks between the ages of 7 and 9, (ii) productivity per hour of children's agricultural labour is not much lower than that of adults. This is true of non-agricultural wage labour as well, (iii) many tasks performed by children while not productive labour, and (iv) children from large families tend to be more productive than children from small families.

12. Cain Mead - "The economic Activities of Children in a Village in Bangladesh Population and Development Review, Vol. 3 No.3, 1977. The Population Council, 1 Dag Hammarskjold Plaza, N.Y.

The study analyses the work contribution of the child, the time spent and their age of entry into economic tasks in Char Gopalpur village in Bangladesh. It is based on time allocation data collected from 120 households divided into 3 groups based on landholding. It revealed that children are net producers as early as age 12, compensate for their cumulative consumption by age 15 and compensate for their own and sister's cumulative consumption by age 22. The cost of feeding children overshadows other child-rearing costs including clothing, education and marriage.

13. Khan, A.R., et al, "Employment, income and the Mobilisation of Local Resources: A Study of two Bangladesh Villages" (ARTEP, Bangkok 1981)

The objective of this study is to estimate the potential employment and output in the Small Village Communities and to see how such potential could be realized. Characteristics of labour force participation, cropping pattern and income distribution in the two sample villages are taken up for detailed analysis. Possibilities of generating employment and income are then discussed, in the light of alternative policy packages.
