Gender issues in the measurement of paid and unpaid work

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Conducting the Time Use Survey—
Indian Experience

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CONDUCTING THE TIME USE SURVEY - INDIAN EXPERIENCE

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Introduction.

The first ever Pilot Time Use Survey in India was conducted during July 1998 to June 1999. Incidentally, this survey with its sample size of about 18600 households spread over six states may be the first among all developing countries. In this paper an attempt has been made to present the various details of the Indian Pilot Time Use Survey as per the guidelines provided by the UN Statistics Division.

1.   How data collection on time -use fit into the national statistical system

   a.   Is this the first national or pilot time -use survey (TUS) for the country? If not.

Time Use Survey in India was the first survey of its kind conducted on a pilot basis in over 18,600 households spread over 6 selected States namely, Haryana, Madhya Pradesh, Gujarat, Orissa, Tamil Nadu and Meghalaya. As this was the first ever attempt to conduct Time Use Survey in the country, it was conducted as a pilot basis in the form of an independent survey. Of course, sample size for the pilot survey was decided in such a way that it should provide reliable estimate at national and State level.

   b.   How is this TUS related to other surveys conducted by the national statistical system?(ad hoc? Independent? Integrated?)

The Time Use Survey in India was conducted independently of the other surveys spreading over one year with 4 sub-rounds of 3 months each. The field work of the survey was done during July, 1998 to June, 1999 with the help of the staff of the Directorate of Economics and Statistics of the participating states. As the feasibility of the conducting Time Use Survey in India was to be established through the Pilot Survey, no attempt was made to examine the suitability of integrating it with other regular survey. Now when the feasibility has been established, this aspect will be examined when planning for full-fledged survey in the country.

c. **What were the major factors or events that led to the decision to collect nationally representative data on time-use?(For example - Beijing Platform for Action? Needed by government for a specific programme or policy? Valuation of unpaid work?)**

To start with, the need was felt to arrive at a better estimate of value of goods and services produced, particularly in the household sector, in order to construct a more complete national income account. A more complete measurement and imputation of Gross Domestic Products (GDP) provides an indicator of how much a country produces not just for the market but for sustenance of the society.

Conventional data on GDP do not generally include the goods and services produced for self consumption within the household. However, it has been estimated that the value of such goods and services can be very high, upto 50 percent to 60 percent of the national GDP (Ironmonger 1998, Luisella Goldschmidt- Clermont 1995). This means that by excluding the value of unpaid goods and services, the conventional data on GDP may underestimate considerably the total income of a nation.

Exclusion of unpaid services and non-marketed products also reduces the cross-country comparability of the national income data. Since developing countries have the culture of producing several goods and services within the household, according to some researchers, the conventional national income data underestimate the income and overestimate the poverty of these countries.

In short, it was felt necessary to estimate the time spent on unpaid household activities through a well designed time use survey and impute its value at least in a satellite account to start with. Unpaid work has been identified as a key source of policy intervention by United Nations through its Platform for Action(PFA), Beijing. The PFA has called for developing "suitable statistical means to recognize and make visible the full extent of the work of women and all their contributions to the national economy, including their contribution in the unremunerated and domestic sectors..." and stressed the need " to develop a more comprehensive knowledge of work and employment ---- through--- efforts to measure and better understand the type, extent and distribution of unremunerated work, particularly in caring for dependents...." (UN Beijing Declaration, Platform For Action, 1995).

The first serious demand for conducting the Time Use Survey in the country was made by the International Seminar of Women Economists held at Bangalore in 1997 to discuss the Human and Gender Development Indices. In this Seminar, the recommendations of the Beijing Platform for Action were also discussed. The Central Statistical Organisation (CSO) started planning the TUS as a follow up of the Bangalore Seminar and to fulfill the recommendations of the Beijing Platform for Action.

d.   What are the plans for the next five years on data collection on time-use? If there are no definite plans, why not?

Presently there is no definite plan during the next five years regarding conducting a full-fledged Time Use Survey. Before taking that decision, detailed analysis of the data collected in the Pilot Time Use Survey is being undertaken to establish the strong need for the full-fledged survey. Two such important exercises are

(i)   Valuation of Unpaid Work in the Country
(ii)   Estimation of Labour Force Using Time Use Survey Data.

2.   Survey objectives

a.   What are the specific objectives of the TUS?

Important objectives of the Indian Time Use Survey were following

1.   To develop a conceptual framework and a suitable methodology for designing and conducting time use studies in India on a regular basis. Also, to evolve a methodology to estimate labour force/work force in the country and to estimate the value of unpaid work in the economy in a satellite account.

2   To infer policy/programme implications from the analysis of the data on (a) distribution of paid and unpaid work among men and women in rural and urban areas, (b) nature of unpaid work of women including the drudgery of their work and (c) sharing of household work by men and women for gender equity.

3   To analyze the time use pattern of the individuals to understand the nature of their work so as to draw inference for employment and welfare programmes for them.

4   To analyze the data of the time use pattern of the specific section of the population such as children and women to draw inferences for welfare policies for them.

5   To collect and analyze the time use pattern of people in the selected states in India in order to have a comprehensive information about the time spent by people on marketed and non-marketed economic activities covered under the 1993-SNA, non marketed non-SNA activities covered

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under the General Production Boundary and on personal care and related activities that cannot be delegated to others.

6   To use the data in generating more reliable estimates on work force and national income as per 1993-SNA, and in computing the value of unpaid work through separate satellite account,

b.   Who are the expected users of the survey results? In the country? Internationally?

Results of the Survey are likely to be utilized by the Policy makers in the Department of Women and Child Development, Ministry of Labour, Ministry of Statistics and Programme Implementation, etc. at the national and state level, academicians and researchers for research purposes and Non-Governmental Organisations and Media personnel for the advocacy purposes.

c.   What were the main findings?(e.g. Time spent in different activities by sex? Time spent on paid work and unpaid work by sex? Time spent in simultaneous activities by sex?]

d.   What were some of the survey findings directly related to the specific objectives?(For example, employment in informal sector activities? Homebased work?)

Main Findings of the Indian Time Use Survey

All the activities included in the Indian Activity Classification were put in three categories, namely, System of National Accounts (SNA) Activities, Extended SNA Activities and Non-SNA Activities. The SNA activities consist of primary production activities, like crop farming, animal husbandry, fishing, forestry, processing and storage, mining and quarrying; secondary activities like construction, manufacturing and activities like trade, business and services. Extended SNA activities include household maintenance, care for children, sick and elderly. The activities related to learning, social and cultural activities, mass media and personal care and self-maintenance are categorised as Non-SNA activities.

Following Tables give some important results :

Table 1: Time spent on various activities (All)

Weekly average time (in hours) spent on SNA, Extended SNA and Non-SNA activities by sex and place of residence (All)

Activities	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
SNA	42.31	22.53	32.72	41.06	9.16	25.77	41.96	18.72	30.75
Extended SNA	3.74	33.95	18.40	3.44	36.44	19.26	3.65	34.63	18.69
Non-SNA	121.98	111.50	116.89	123.47	122.44	123.03	122.42	114.58	118.62
Total	168.03	167.98	168.01	167.97	168.04	168.06	168.03	167.93	168.06
Total persons	22285	21130	43415	10305	9549	19854	32590	30679	63269

Note : The figure of total time for each may not be exactly equal to 168 due to effect of rounding.

The distribution of time in three types of activities has been presented in two ways. The Table1 gives the average time spent on various activities assuming that all individuals participate in various activities. The advantage of this approach is that the total of average time on all the activities will add to 168. However, the disadvantage of this approach is that in some of the activities, persons included in the divisor might have not participated. Therefore, another Table has been prepared which gives average time for various activities for the participants only.

On the average male spent about 42 hours in SNA activities as compared to only about 19 hours by females. However, situation completely changes when we consider extended SNA activities. In these activities male spent only about 3.6 hours as compared to 34.6 hours by females. Therefore, female spend about ten times more time in extended activities as compared to male. In Non- SNA activities, which pertains to learning, leisure and personal care, male spent about 8 hours more as compared to females. On the average 71 % of the time is spent in Non-SNA activities. The SNA and extended SNA contribute for 18 % and 11 % respectively.

Time Use variations for males were not found to be significantly different in rural and urban areas. However, the female's participation in SNA activities (5 %) in urban area was much lower as compared to 13 % in rural areas. This may be due to the fact that women in rural area generally participate in agricultural activities, which are treated as SNA activities.

Table 2: Percentage of time spent on various activities (All)

Percentage of weekly average time spent on SNA, Extended SNA and

Non-SNA activities by sex and place of residence (All)

Activities	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
SNA	25.18	13.41	19.48	24.44	5.45	15.34	24.98	11.14	18.30
Extended SNA	2.23	20.21	10.95	2.05	21.69	11.46	2.17	20.61	11.13
Non-SNA	72.61	66.37	69.58	73.49	72.88	73.23	72.87	68.20	70.61
Total	100.0	100.00	100.00	100.0	100.00	100.0	100.0	100.00	100.00

Note : Total may not tally due to rounding error

In India no payment is made for a number of economic activities. Such activities are performed either by family labour or through exchange labour . It will be good to study the sex wise detail of the unpaid work in the SNA activities such details are given in Table 3 . It may be seen that for the six states combined payment was not made for about 38% of the time spent in SNA activities. The amount of unpaid activities was more (51%) for female as compared to only 33 % for male. The predominance of women in unpaid activities was visible in all the states. The percent of time spent by females in unpaid activities was highest in Haryana(86%) followed by Meghalaya(76%) and Orissa(69 %) . This percentage was lowest for Tamil Nadu (32%) .

Table 3: Time spent on paid and unpaid activities
Distribution of time spent (in hours) in SNA activities by mode of payment and sex(Participants)

Male			Female			Total		
Paid	Unpaid	% time on unpaid activities	Paid	Unpaid	% time on unpaid activities	Paid	Unpaid	% time on unpaid activities
36.54 (18468)	18.12 (19747)	33.15	14.87 (8847)	15.18 (16633)	50.52	27.16 (27315)	16.85 (36380)	38.29

Note : Figure in paranthesis in the second line under each activity gives sample number of persons participanting in the activity

In patriarchal society like India, some of the jobs like cooking, taking care of children, sick and aged persons, etc. are generally performed by women. Unfortunately, no data are generally available at state level to show the time spent by women on these activities. Further these activities are treated as non-economic as per SNA but they are essential for the survival of society. Moreover, if more and more women get themselves involved in economic activities, then some alternative labour have to be deployed, like in some developed countries, to perform

these activities. Time Use Survey is first such source, which have provided much sought after data on these activities.

Table 4 below presents average time spent in a week on some of the important activities which generally fall in the domain of women life. Women reported that they spent about 2.1 hour per day on cooking food, about 1.1 hour on cleaning the households and utensils. Participation of men in these activities was just nominal. Taking care of children was also mainly the women's responsibility as they spent about 3.16 hours per week on these activities as compared to only 0.32 hours by males. Women reported less than 1 hour of time spent on activities relating to shopping, pet care, teaching own children, accompanying children to places, care of sick and elderly, supervising children and care of guests. However, if this time is calculated during one year period this time will become quite significant. There was not much difference in the time spent on most of the activities among states.

Table 4: How Burdened is Women's Life ! Weekly average time spent (in hours) on some peculiar activities by sex (All)		
Activities	Combined states	
	Male	Female
Cooking	0.52	14.93
Cleaning household	0.21	4.55
Cleaning utensils	0.10	3.39
Washing and Mending clothes	0.18	2.71
Shopping	0.59	0.64
Pet care	0.03	0.04
Care of children	0.32	3.16
Teaching own Children	0.16	0.19
Accompanying Children to places	0.08	0.09
Care of sick and elderly	0.04	0.19
Supervising children	0.28	0.78
Care of guests	0.03	0.04

For proper individual development, men and women should get equal time for reading, personal, hygienic, leisure such as reading newspaper, watching TV and listening to music,

sleep, etc. Time Use Survey attempted to collect these data also. Table 5 below provides the requisite data.

Table 5: Gender discrimination in personal activities Weekly average time spent (in hours) on some peculiar activities by sex (All)		
Activities	Combined States	
	Male	Female
Participation in Community functions	0.01	0.01
Reading	0.61	0.50
Watching T.V.	5.37	5.41
Listening to music	0.66	0.36
Reading newspaper	0.57	0.20
Sleep	62.14	61.30
Eating and drinking	9.67	9.20
Smoking and Drinking intoxicants	0.29	0.03
Personal Hygiene	7.62	6.91
Physical exercise	0.64	0.14
Talking and Gossiping	7.62	7.02
Meditation	0.72	0.86

In case of personal hygiene men spent 1 hour more than women. There was substantial difference on time spent for personal hygienic by men and women. Men in all the 6 states spent much more time than women in reading newspaper, listening to music, smoking and drinking intoxicants and physical exercise. Almost about 1 hour was spent by men and women per day in gossiping and talking.. Data from this survey do not support the general belief that women spent more time than men in gossiping and talking. It is heartening to note that both men and women spent about ¾ of an hour per week on meditation. Time spent by women on meditation was marginally higher in all the states except Haryana. Data from the survey also brings out the fact that reading habits are not deep rooted in the states covered in the survey because men and

women spent only about 1 hour and ¾ hour respectively in reading newspaper and other materials.

In this survey, no attempt was made to find out the number of workers in the informal sector. Defining the informal sector is still quite problematic and therefore, even if included this survey would not have thrown reliable estimates. While identifying the occupations of the respondents, information was collected whether they were home based workers. However, this data have not yet been generated.

3.   Design specifications of survey and factors considered in design decisions

a.   Relating survey objectives, design and resources

i.   Was the TUS designed as an independent survey or a module/rider in a multipurpose or core survey(For example module of labour force survey)?

The Time Use Survey in India was conducted independently of the other surveys spreading over one year with 4 subrounds of 3 months each. The field work of the survey was done during July, 1998 to June, 1999 with the help of the staff of the Directorate of Economics and Statistics of the participating states.

ii.   Why did you choose this particular survey design? Describe briefly how objectives and resources influenced decisions on choice of design.

As no previous survey was conducted on this topic and concepts and methodologies to be used were not firmed up, it was decided to conduct this survey on a pilot basis. However, to ensure the use of data collected in the pilot survey also, a proper sampling procedure was followed.

India has lot of socio-economic, demographic, geographic and cultural diversities. To ensure that all aspects of diversities are captured, six States were selected to give geographical presentation to each regions of the country. Haryana, Madhya Pradesh, Gujarat, Orissa, Tamil Nadu and Meghalaya were chosen to represent northern, central, western, eastern, southern and north-eastern regions respectively.

The sampling design adopted in the survey was three stage stratified design.   The first, second and third stages were the district, villages/urban blocks and households.   Proper stratification of the districts in the selected

states were done using the population density and proportion of tribal population to ensure capturing of the variability in the population. In the villages/urban blocks also sub-stratification was adopted to ensure representation of all types of households in the Survey.

Coverage of only six States was influenced by the availability of resources. This survey was conducted without any financial or technical assistance from any foreign country or international agencies. However, to ensure that results are representatives, a proper sampling design and sample size was worked out.

> **iii.** **What was the total survey cost? How does this cost compare to other household surveys that the statistical office conducts?**

The total cost of the survey was about Indian Rupees 6 million (US $1,40,000). It may be mentioned that the cost covered only the cost of field work and data entry. The development of questionnaire, training of investigators, generation of final tables, etc. were done at central level at CSO without hiring any additional staff. Further, no separate project staff were hired in the States for this survey. The Regular staff, who conducted the survey, were given some honorarium. Similarly, no separate computer and other equipments were purchased exclusively for this scheme. Therefore, the cost estimates given here are very conservative.

It may not be very much appropriate to compare the cost estimate of this survey with that of other survey because of the specific procedure adopted for this survey. However, keeping in view the work load involved (investigators were to stay in each village/urban blocks for 10 days), the cost of this survey may be higher than other survey.

> **b.** **What was the method of data collection? (Self-employed current diary? Recall interview or retrospective diary? Participant observation? Combinations of self-completed/recall/observation?)**

For collecting the data in the TUS, merits and demerits of three methods of data collection on time use pattern, namely, diary methods, observation method and interviewer method in the Indian context was discussed in detail. Keeping in view the level of illiteracy in the country, it was decided to use interviewer method of data collection. For collecting the data on time use pattern, one day recall method was adopted to minimize the recall lapse.

c. What were the survey instruments used in the TUS?

    i.   Type of basic instrument for collecting time‑use data? For example. Simplified time diary, full time diary stylized activity list. Etc.

    ii.   Design specifications for basic instrument for collecting time‑use data, eg.

- **For full time diary : whether time interval is open or fixed: if fixed, length of interval?**
- **For simplified time diary or stylized activity list : number of prelisted activities**

For collecting the data 24 hours diary was used. Information was collected in a time interval slot of one hour each starting from 3 A.M. to 4.00 A.M. Therefore, time interval taken was one hour fixed interval. A detailed activity list was also worked out. The respondents were asked to enumerate the activities performed by them in each of the one‑hour time slot. The investigators assigned the time and activity code after selecting the appropriate activity codes in the Activity List.

    iii)   What background questionnaires were used? What additional questionnaire items were included for time ‑use data analysis?

The final questionnaire used in the survey was evolved after a number of discussion with the academic experts and the practicing survey statisticians. The final questionnaire consists of following three parts:

i.   Schedule 0.1: Listing Questionnaire for the Rural Areas
ii.   Schedule 0.2: Listing Questionnaire for the Urban Areas
iii.   Schedule 1.0: Household Questionnaire which consist of following Blocks
    (a)   Block 0: Identification of Sample Households
    (b)   Block 1: Household Characteristics
    (c)   Block 2: Particulars of Household Members
    (d)   Block 3: Time Disposition of Persons on Selected Days of the Week

In Block 1 and 2 of schedule 1.0, detailed information have been collected about the socio-economic and demographic particulars of the selected households and individuals. Some of the important household characteristics collected in the survey were household size, occupation of the household, monthly per capita expenditure, possession of land, presence of disabled person in the household, etc. Individual characteristics collected were age, sex, marital and educational status, employment status and for females aged 18 years and above, whether participating in the household decision making. These

household and individual characteristics have been utilised by studying the variation in time use pattern by these characteristics.

d.   Did the survey collect information on simultaneous activities?

> **i.   If yes, up to how many? Were the activities prioritized(for example, main/primary, secondary/parallel) What proportion of diaries reported simultaneous activities? What were the five most common combinations of simultaneous activities?**
> **ii.   If no why not?**

In this survey information on simultaneous activities were collected. In every one hour time slot respondents were asked whether they perform more than one activities together. Though, specifically no data was collected on which of the simultaneous activities were primary or secondary. However, while allocating the time for the simultaneous activities, Investigators were instructed to give more importance to economic activities as compared to non-economic activities. To ensure the total time to be only 24 hours, the total time spent on simultaneous activities was divided by the number of activities to find out the time spent on individual activities. Simultaneous activities were mainly observed during morning and evening hours. No specific table have been generated till now to find out the most common combination of the simultaneous activities.

e.   Did the survey collect information on context variables?

> **i.   If yes what were these context variables(for example, paid/unpaid : for whom; with whom: for what purpose: location)**
> **ii.   If no why not?**

The survey did collect information on contextual variables. For each of the activities reported by the respondent, information were collected whether the activities was performed within the household or outside household and whether the activity was paid or unpaid. In case the activity was paid, the mode of payment(cash or kind) was also collected.

f.   Time sample

> **i.   How were days of the week represented or sampled?**
> **ii.   How was seasonal variation accounted for?**

iii.   How were special days/holidays represented or sampled?

To catch the variation in the activity pattern, time use data was collected for all the individuals aged 6 years and above for three type of days, namely normal, abnormal and weekly variant. After selecting the household, the investigator visited the selected households to find out the details of three types of date from different members of the selected households. Based on the information the investigator prepared the work programme for the next one week. If the normal date for an individual was Monday, the investigator will visit that member on Tuesday to find out his time used pattern on Monday. This arrangement worked quite well for normal days but there was some problem, particularly in the urban areas for weekly variant because in urban areas, Saturday and Sunday were generally reported as weekly variant and the investigator has to cover all the selected households on Sunday and Monday.   The information was collected within a reference period of one week for only one day each of normal day, weekly variant and abnormal days.

As mentioned above special days/holidays were covered by collecting time use pattern for weekly variant and abnormal days also in addition to the normal days.

The seasonal variation in the time use pattern was captured by conducting the survey in four sub-rounds of three months each spread over one year period.

g.   Describe the following aspects of defining and sampling the reference population:

i. What were the considerations in defining the reference population? For example : age cut-offs: type of family, etc.
ii How were household members belonging to the reference population selected?   For example : all eligible household members are selected: take a sample of one male and one female; one member of the household randomly selected

In this survey all persons of age 6 years and above in the selected households were covered in the sample. The age cut off of 6 years was taken to capture the prevalence of child labour in the country. For each of the household member aged 6 years and above time diary was filled in for three types of days namely normal, weekly variant and abnormal days.

iii.   How were sample households selected?

Sampling design was so prepared to ensure the selection of all types of households viz., rich and poor. The rural households in the selected village were grouped into six sub-strata viz. those owning land of 7 acres or more, 2-7 acres and less than 7 acres and those not owning land as self-employed in non-agriculture, rural labour and others. Similarly the urban households in the selected sample blocks were grouped into six sub-strata viz., self-employed households : Monthly Per Capita Consumption Eexpenditure(MPCE) <= Rs.1200, MPCE > Rs.1200 : regular wage/salary households : MPCE <= Rs.1200, MPCE >Rs.1200 : casual labour households and other households. A sample of 12 households was selected from each village/urban blocks. This

sample size of 12 was allocated amongst six strata in proportion to the number of total number of households in the respective sub-strata.

      iv.   **What was the total sample size(households, household members diaries/questionnaires)? Briefly describe the distribution of sample household members by relevant characteristics.**

Out of 18,628 household planned to be covered, the survey could be conducted in 18,591 households. Therefore, the non-response rate was almost negligible. The average household size varied from 4.56 in Gujarat to 3.57 in Tamil Nadu. The single member households were about 6%. The percentage of landless rural households was as high as 64% in Tamil Nadu and as low as 13% in Meghalaya. The percentage of rural households owning 8 acres or more land was highest (13.40%) in Gujarat and lowest (1.73%) in Orissa.

Out of total population surveyed, about 70% of the respondents were residing in rural areas. There were marginally higher males (51.7%) compared to females (48.3%). About 18% of the respondents were of age less than 6 years. About 34% population in rural and 29% in urban were in the age group 0-14 years. Percentage of population aged 60 years and above was 6.6% in rural areas and 5.7% in urban areas. In some of the age groups, sex ratio (females/males per 1,000) was found to be adverse to females, particularly in some states. For all the six states combined, the survey figure for rural areas compares quite well with NSSO and NFHS. The urban figure from the survey compares quite well with that from NFHS.

About 49% of the surveyed population were found to be currently married. The proportion of widowed population was about 5%. In all the six states taken together 67% of the persons were found to be literate; the percentage being 56% for females and 77% for males. Their literacy rates were found to be highest in Tamil Nadu followed by Meghalaya. About 29% of the household in the states covered do not have any literate member aged 7 years and above. Fortunately, this percentage was only 9% in urban areas. Further, still about 57% of the households in rural areas and 26% in urban areas do not have any such literate female members. However, the percentage of such households has reduced in rural and urban areas from 67.8% in 1993-94 to 57.14% in 1998-99 and 39.7% in 1993-94 to 26.26% in 1998-99 respectively.

The survey results show that about 47.5% of the respondents were employed whereas 51.7% were out of labour force. The percentage of unemployed was found to be less than 1%. There was wide variation in the percentage of persons employed among states. The percentage of persons employed was higher in rural areas as compared to urban areas in all the states whereas unemployed were more in urban areas.

In this survey the prevalence of child labour was found to be 4.5% . Out of total persons surveyed about 1.16% were found to be having some form of disability. The incidence of

disability was found to be highest (2.09%) in Orissa followed by Haryana (1.61%) and Gujarat (1.11%) . Out of the total disabled persons, about 58% were males and remaining 42% females.

Contrary to the general perception, about 87% of the women reported that they participated in the household decision making. There was almost no rural urban difference. Similarly, very little difference was observed among the social groups as far as female participation in household decision making was concerned. Even about 88% of illiterate women reported that they were participating in the decision making.

4.   Activity classification

a.   What considerations did you give priority to in developing your activity classification?   Was the trial UN Classification of Activities for Time-Use Statistics considered? If you, how was it used; if no why not?

When the planning of Indian Time Use Survey was in progress, final UN Classification of activities were not available. Therefore, India has to attempt to develop its own activity classification. However, in developing the activity classification, UN activity classification as well as that available with ILO, Australian Bureau of Statistics, Eurostat, etc. were also taken into consideration.

Basic consideration while preparing the activity classification was that all the activities may be categorised into activity pertaining to System of National Accounts (SNA), Extended SNA and Non-SNA.   In the classification, all the activities were grouped into following categories :

I   Primary production activities
II   Secondary activities
III   Trade, business and services
IV   Household maintenance, management and shopping for own households
V   Care for children, the sick, elderly and disabled for own households
VI   Community services and help to other households
VII   Learning
VIII   Social and cultural activities, mass media etc.
IX   Personal care and self maintenance

In this activity classification, except Group I to III, all other Groups more or less corresponds with the UN activity classification. Activity classification used in Indian Time Use Survey is given at Annexure 1.

5.   Assessment of design and implementation of field operations for time-use data collection

a. Organisation of field work

The pros and cons of getting the survey conducted through a Non-Governmental Organisation (NGO) was deliberated in great details. As the survey was to be conducted in 6 States, the strength of the NGO in terms of skilled manpower was an important consideration. As it was difficult to identify such a NGO, it was decided to involve Directorate of Economics and Statistics of the respective States in this exercise. These organisations already conduct large-scale surveys and have their offices located at the districts and block level. Moreover, they also have the data processing facilities. The use of these organisations helped in fast training of the already experienced investigators, reduction in the cost of the survey due to short distance travel involved by the investigators, avoidance of the involvement of another agency for the data entry and processing work. The involvement of these agencies also helped in the capacity building in these organisations.

b Procedures specific to a time-use survey. For example how was data from children collected? How was illiteracy addressed? If respondent was not attuned to concept of "clock-time" or time measured in hours/minutes how was time measured.

The problem of illiteracy was addressed by using interviewer method of data collection. As time schedule are not followed vigorously by people, particularly in rural areas, it was not possible to measure the exact time of the occurrence of various activities of the respondents. One had to depend on the broad sense of time of respondents who could tell investigators, some times after prompting, how much time he/she took for completing a specific activity of job. The investigator had to maintain the chronology of activities carefully for each hour while questioning the respondents about activity wise time spent.

In case of young school going children, the respondents were not able to tell specifically the utilization of activity-wise time. The investigators had to take the help of their parents or care taker for recalling the time use details.

i Were incentives used to increase response rates and cooperation?

No incentive in the form of cash or kind was given to the respondents in this survey. Their cooperation was solicited mainly through persuasion. Some time the help of head of the village and learned persons in the village was also taken.

ii What was the average length of interview?

On an average, interviewing the members of one household took about two hours. It may be mentioned that each household was surveyed by a team of two investigators comprising one male and one female. Interview for one person took about 45 minutes.

      iii.   **How many callbacks were allowed for in instructions and what was the actual number of callbacks needed on average?**

As the investigators team stayed either in the village or in the nearby area for ten days to survey one village, no substitution of the household was allowed. Some times investigators have to visit two or three times, depending upon the convenience of the household, to get the desired information.

      iv.   **Was substitution of households and/or respondent allowed? Why or why not? Provisions for controlling non-response?**

As mentioned above the substitution of household or respondents was not allowed in the sampling design. Therefore, if the selected household was not present during the reference period, it was treated as non-response. Similarly, if an eligible member of the selected household was not present for interviewing inspite of all the efforts by the investigators, the case was treated as that of non-response.

    c   **Recruitment and training of field staff for the TUS.**
    d   **Field coding and field editing of time -use activities.**

Soon after the development of the questionnaire, data entry format was also developed. Then a Training for Trainer Programme for all the concerned official of the six States was organised by the Central Statistical Organisation (CSO).Sampling design, field scrutiny, data entry formats and each question of the questionnaire was explained in great details during 5 days training. Hands on training was also imparted to the participants to familiarise them with the data entry package. Field training was also organised in one rural and one urban areas to canvass the questionnaire and understand the difficulties likely to be encountered by the investigators.

Detailed instruction manual was also prepared for filling in the questionnaire by the investigators and was discussed and explained in the training programme.

To provide technical guidance for various activities in the Survey, a Technical Advisory Committee (TAC) was constituted under the Chairmanship of Prof. Indira Hirway, a non-official expert from Centre for Development Alternatives, Ahmedabad. A number of meetings of the TAC was held to finalise the questionnaire, sampling design, tabulation plan etc. The members of the TAC also visited the field to see the quality of field work. The officers of the Central Statistical Organisation involved with this Survey also frequently inspected the field work. For

each State participating in the Survey, a Technical Advisory Committee was also constituted which has the representation of non-official members also. These State level Advisory Committees were also requested to meet every quarter to sort out the local problems and provide the guidance. Each State was also asked to submit regular progress report of the field work. Because of these strict monitoring mechanism, field work of the Survey was completed, as per schedule in July, 1999.

6.   Assessment of design and implementation of data processing of time-use data

a.   Organisation and staffing of data processing, including:

The data entry programme was developed centrally by the CSO with the help of Data Processing Division of NSSO. The validation programme was also developed by CSO with the help of DPD, NSSO. After giving the due training to the officers of six participating states in the use of data entry and validation package, each state was given the responsibility of doing the data entry and validation for their own state. Almost all the states used their existing hardware facilities and existing staff for undertaking these activities. The staff involved in these activities were given some honorarium to compensate for their extra work. In one of the states, data entry and validation was done by a private vendor under active supervision of the state officials. The validated data was sent by all the states to CSO. The Computer Centre of the Ministry of Statistics and Programme Implementation helped us in processing the validated data and generation of final Tables.

i.   Process of defining edit and imputation specifications
ii.   Process of developing of coding tools such as code-books or coding index

Most of the questions in the questionnaire were coded. Therefore, the basic responsibility of filling in the codes was that of the field investigators. As the codes were given in the questionnaire itself, there was no need to develop a separate code book. However, the existing code books for National Industrial Classification and National Occupational Classification were also used in this survey.

iii.   Were special computer programs developed?   What software were used? What hardware were available?

Special computer programmes were developed for the generation of the final table as per the Tabulation Plan. The software were developed using COBOL language. No standardized package was used. Initially there was plan to use Main Frame computers but afterwards a Personal Computer with 4GB memory was used.

b.   Recruitment and training of coders, editors and other data processing staff

As already mentioned, in this survey a pre-coded questionnaire was used. Therefore, the field investigator responsible for collecting the field data was also given the training for filling in the proper codes. In the field scrutiny done by the supervisors, suitable instructions for checking the codes were also given. At the time of validation of data, codes for various items were again validated through computer programmes.

c.   Coding editing and imputation:

i. What were the most common errors in coding?

Generally investigators committed error in the coding of industrial and occupational codes of the employed persons. Some times errors were also found in the codes of educational levels of the respondents.

ii.   What were the most common types of edits that had to be made?

Editing was mainly adopted to ensure that information collected in one Block of the questionnaire was consistent with other related Blocks. Editing was also done to ensure that total time reported by the respondents adds to 24 hours.

iii.   What were the most common imputations that had to be made?

Very rarely imputation was used in the case of time on some activities in such cases where the total time for either all the activities in one hour time slot do not add to 60 minutes or the total of all the activities in all the time slots do not add to 24 hours.

d.   Describe time-use data file: What does a record consist of? For example: one record pe r time episode

Five types of records were created. The first and second records pertain to the house listing schedules of the rural and urban areas. The third and fourth records pertained to household and individual characteristics information. The fifth record pertain to the time disposition of one individual for 24 hours with one hour time slot.

7.   Tabulation plan for time-use data

a. How was the tabulation plan developed? Were potential users involved?

Initially, the CSO prepared the draft Tabulation Plan which was discussed in the meeting of the Technical Advisory Committee (TAC) constituted for this survey. The possible users of the data from official, non-official, NGOs and Research Institutions were represented in the TAC. Therefore, the potential users were fully involved in the preparation of the Tabulation Plan.

b. What were the basic summary statistics generated? For example: estimates of proportion/total of persons time spent in a day: on a weekday: on a weekend: in an average week in a quarter; in an average weekday in a year, etc.

As regards the time use basic statistics generated was the average weekly time (in hours) spent by an individual in individual activities with male/female and rural/urban breakups.

c. How does the tabulation plan present distinctions of paid and unpaid work?

For each activity, while collecting the data on time spent on that activity, it was also enquired whether some payment was received for the time spent on that activity. Except the SNA activities, the question of payment does not arise for extended SNA and Non-SNA activities. Therefore, tables have been generated showing the percentage of time spent by women and men in unpaid activities covered under SNA with rural-urban breakup.

d. Describe the estimation procedures.

The Estimation Procedure

Notations :

S : staratum   D: total number of districts   d : number of sample districts

i: subscript for i-th sample district   r/u : subscripts for rural/urban

j : subscript for j-th class(j=1,2,3)   k : subscript for k-th sample village/blocks

m : subscript for p-th sample household   z : size of a stratum x sample district

x   rural/urban x class

n: number of sample villages/blocks available for tabulation

Z: village/block size (equal to village population as per frame and z = 1 for each urban

L: total number of hg's/sb's formed in a village/block

H: total number of households listed

h: number of households surveyed and available for tabulation

y: sample value of any characteristic under estimation

$\hat{Y}$: estimate of the population total of the characteristic y

FORMULA FOR ESTIMATION

$$\hat{Y}_{sr} = \frac{D_S}{d_s} \sum_{i=1}^{d_s} \sum_{i=1}^{3} \left[\frac{Z_{sirj}}{n_{sirj}} \sum_{k=1}^{n_{sirj}} \frac{1}{z_{sirjk}} \left\{ L_{sirjk} \sum_{m=1}^{6} \left[\frac{H_{sirjk\,m}}{h_{sirjkm}} \sum_{p=1}^{h_{sirjkm}} y_{sirjkmp} \right] \right\} \right]$$

The same formula may be used to obtain $\hat{Y}_{su}$

$$\hat{Y}_S = \hat{Y}_{sr} + \hat{Y}_{su}$$

Standard Error Estimates : The standard error estimates may be calculated on the basis of sub-sample wise estimates of stratum totals. The estimates of the variance of $\hat{Y}$ and $\hat{R}$ are given by :

$$\hat{V}(\hat{Y}) = \frac{1}{4} \sum_{s} (\hat{Y}_{s1} - \hat{Y}_{s2})^2$$

and

$$\hat{V}(\hat{R}) = \frac{1}{4\hat{X}^2} \left[\sum_{s} (\hat{Y}_{s1} - \hat{Y}_{s2})^2 - 2\hat{R}(\hat{Y}_{s1} - \hat{Y}_{s2})(\hat{X}_{s1} - \hat{X}_{s2}) + \hat{R}^2 (\hat{X}_{s1} - \hat{X}_{s2})^2 \right]$$

e.   List titles of major tables.

Table 50. Statewise weekly average time (in hours) spent in household maintenance, management and shopping for own households by usual activity status of individual and sex (participants)

Table 51. Statewise weekly average time (in hours) spent in household maintenance, management and shopping for own household by age, sex and marital status (Participants)

Table 52. Statewise weekly average time (in hours) spent in household maintenance, management and shopping for own household by education level and sex (Participants)

Table 53. Statewise weekly average time (in hours) spent in care for children, sick and elderly by usual activity status of individual and sex (Participants)

Table 54. Statewise weekly average time (in hours) spent in community service and help to other households by usual activity status of individual and sex (Participants)

Table 55. Statewise weekly average time (in hours) spent in community service and help to other households by age,sex and marital status (Participants)

Table 56. Statewise weekly average time (in hours) spent in community service and help to other households by education status and sex (Participants)

Table 57. Statewise weekly average time (in hours) spent in learning activities by usual activity status of individual and sex (Participants)

Table 58. Statewise weekly average time (in hours) spent in learning activities by age, sex and marital status (Participants)

Table 59. Statewise weekly average time (in hours) spent in learning activities by education status and sex (Participants)

Table 60. Statewise weekly average time (in hours) spent in social and cultural activities, mass media etc. by usual activity status of individual and sex(Participants)

Table 61. Statewise weekly average time (in hours) spent in social and cultural activities, mass media etc. (Participannts)

Table 62. Statewise weekly average time (in hours) spent in social and cultural activities, mass media etc. by education status and sex (Participants)

Table 63. Statewise weekly average time (in hours) spent in social and cultural activities, mass media etc. by usual activity status of individual and sex (Participants)

8.   Dissemination and use of time -use data

a. **Were survey results provided to expected users both in the country and internationally? In what ways have they been used so far?**

b. **In what ways have the survey results been made available to expected users and other audiences?**

i. **Publications(printed and/or electronic forms)?**
ii. **Workshop discussion forums, briefings?**
iii. **Public-use file of data?**

To share our experience of conducting such surveys and for discussing the preliminary results of the survey, an international seminar was organised at Ahmedabad during 7-10 December 1999. This seminar was attended by the representatives of developed and developing countries as well as representatives of international organisations in addition to official and non-official experts from India.

With a view to disseminate the results more widely, it was decided to bring out the results of the Time Use Survey in the form of a Report. This report was prepared in a short period of time and was released in June, 2000. This Report has been very widely circulated both nationally and internationally. A number of newspaper articles have also appeared quoting the results of the survey and appreciating the good work done by the CSO.

With a view to popularize the use of data by the concerned users the State Level Reports are written by the concerned states and are discussed in dissemination workshops being organised in the respective states in which the other related Departments of the State Governments, NGOs, Academicians and Researchers are also invited. Till now state level dissemination workshops have already been organised in Gujarat, Meghalaya and Tamil Nadu. For other three states also these are to be organised shortly.

c. **How is the time-use data being used to improve measurement of paid and unpaid work?**

As the main objective of conducting the Time Use Survey is to value the unpaid work in the economy, some deliberations were held for evolving the methodology. As wage data would be required to undertake this exercise, it was decided to collect the wage data for skilled and unskilled workers and for those involved in construction and manufacturing activities. These wage data have been collected for each district in which the Survey village/Urban block was

located. This was considered essential because there is large scale variation in the wage data among different States and different regions within the State.

CSO is presently undertaking an exercise to develop the methodology for valuation of unpaid work using the Time Use Survey data and the wage data collected along with the Time Use Survey. The first meeting of the Technical Advisory Committee constituted for providing guidance in this exercise was held on 21st September, 2000. The exercise is likely to be completed by the end of this year.

ACTIVITY CLASSIFICATION

I *Primary Production Activities*

11 Crop farming, kitchen gardening, etc.

111. Ploughing, preparing land, cleaning of land
112. Sewing, planting, transplanting
113. Application of manure, fertilizer, pesticides and watering,
      preparing organic manure. Harvesting, threshing, picking,
      winnowing
114. Weeding
115. Supervision of work.
116. Kitchen gardening – backyard cultivation
117. Stocking, transporting to home, guarding or protection of crops.
118. Sale and purchase related activities
119. Travel to the work.

12. Animal husbandry

121. Grazing animals outside
122. Tending animals – cleaning, washing shed, feeding, watering,
      preparation of feed.
123. Caring for animals : breeding, shearing, medical
       treatment, grooming, shoeing, Al etc.
124. Milking and processing of milk Collecting, storing of poultry
      products.
125. Making dung cakes
126. Poultry rearing – feeding, cleaning.

127. Other related activities.
128. Sale and purchase related activities
129. Travel to the work.

13. Fishing, Forestry, Horticulture, Gardening

131. Nursery - seedlings
132. Planting, tending, processing of trees.
133. Collecting, storing & stocking of fruits etc.
134. Wood cutting, chopping & stocking firewood
135. Fish farming, cleaning sea-bed, feeding fish, catching fish, gathering
      other aquatic life
136. Care of house plants, indoor and outdoor garden work..
137. Flower gardening – landscaping, maintenance, cutting, collecting,
      storing

138. Sale and purchase related activities.
139. Travelling to the work.

14. Collection of fruit, water, plants etc., storing and hunting.

140. Fetching of water
141. Collection of fruits, vegetables, berries, mushrooms etc. edible goods
142. Collection of minor forest produce, leaves, bamboo, etc.
143. Collection of fuel/fuel wood/twigs.
144. Collection of raw material for crafts.
145. Collection of building materials
146. Collection of fodder
147. Sale and purchase related activities
148. Collection of other items
149. Travel to work.

15 Processing & Storage

152. Milling, husking, pounding
153. Parboiling
154. Sorting, Grading
155. Grinding, crushing
156. Any other related activity
157. Sales and purchase related activities
159. Travel for the work

16. Mining, quarrying, digging, cutting, etc.

161. Mining/extraction of salt,
162. Mining/digging/quarrying of stone, slabs, breaking of stones for construction of building road, bridges etc.
163. Digging out clay, gravel and sand
164. Digging out minerals – major and minor
165. Transporting in vehicles
166. Storing, stocking
167. Any other related activity
168. Sale and purchase related activity
169. Travel for the work

II. SECONDARY ACTIVITIES

21 CONSTRUCTION ACTIVITIES

211. Building & construction of dwelling (laying bricks, plastering, thatching, bamboo work, roofing) and maintenance and repairing of dwelling.

212. Construction and repair of animal shed, shelter for poultry etc.
213. Construction of wall, storage facility, fencing etc. for farms, irrigation work.
214. Construction of public works/common infrastructure – roads, buildings, bridges, etc.
217. Any other activity related.
218. Sales and purchase related activity
219. Travel to the work.

22.   MANUFACTURING ACTIVITIES

221. Food processing and cooking for sale – making pickles, spices and other products; canning fruits, jams & jellies; baking; beverage preparation, selling readymade food etc.
222. Butchering, curing, processing, drying storing etc. of meat, fish etc.
223. Manufacturing of textiles – spinning, weaving, processing of textiles; knitting, sewing, garment making of cotton, wool and other material.
224. Making handicrafts, pottery, printing and other crafts made primarily with hands. (wood based leather based crafts, embroidery work etc.)
225. Fitting, installing, tool setting, tool and machinery – moulding, welding, tool making,
226. Assembling machines, equipment and other products,
227. Production related work in large and small factories in different industries – as production workers, maintenance workers paid trainees and apprentices, sales, administration and management activities.
228. Sale and purchase related activity
229. Travel for the work.

III   **TRADE, BUSINESS AND SERVICES**

31   TRADE AND BUSINESS

311. Buying and selling goods – such as capital goods, intermediate goods, consumer durables, consumer goods – in the organised and formal sectors.
312. Petty trading, street and door to door vending, hawking, shoe cleaning etc.
313. Transporting goods in trucks, tempos and motor vehicles.
314. Transporting in hand carts, animal carts, cycle rickshaws etc. or manually
315. Transport of passenger by motorized and non-motorised transports
317. Any other activity.
319. Travel to work.

32   SERVICES

321. Service in Government and semi government organisations (salaried)
322. Service in private organisations (salaried)
323. Petty service : domestic servants, sweepers, washers, pujari, barber, cobbler, mali massaging, prostitution, (wages) watching and guarding
324. Professional services : medical and educational services (private tution, non formal teaching etc.), financial services and management and technical consultancy services
325. Professional services : computer services, Xerox/photocopying services, beauty parlours, hair cutting saloons etc.
326. Technical services: plumbing, electrical and electronic repair and maintenance and other related services
327. Others
329. Travel to work.

IV. ***Household Maintenance, Management and Shopping for Own Household***

411. Cooking food items, beverages and serving.
421. Cleaning and upkeep of dwelling and surroundings
422. Cleaning of utensils
431. Care of textiles: sorting, mending, washing, ironing and ordering clothes and linen
441. Shopping for goods and non-personal services: capital goods, household appliances, equipment, food and various household supplies.
451. Household management: planning, supervising, paying bills, etc.
461. Do-it-yourself home improvements and maintenance, installation, servicing and repair of personal and household goods.
471. Pet care
481. Travel related to household maintenance, management and shopping
491. Household maintenance, management and shopping not elsewhere classified.

V ***Care for children, the sick, elderly and disabled for own household***

511. Physical care of children: washing, dressing, feeding
521. Teaching, training and instruction of own children
531. Accompanying children to places: school, sports, lessons, etc./PHC/doctor
541. Physical care of the sick, disabled, elderly household members: washing, dressing, feeding, helping.
551. Accompanying adults to receive personal care services: such as hairdresser's therapy sessions, temple, religious places etc.
561. Supervising children needing care – with or without other activities
562. Supervising adults needing care – with or without other activities.
571. Travel related to care of children

572. Travel related to care of adults and others.
581. Taking care of guests/visitors
591. Any other activity not mentioned above

VI   COMMUNITY SERVICES AND HELP TO OTHER HOUSEHOLDS

611. Community organised construction and repairs: buildings, roads, dams, wells, ponds etc. community assets.
621. Community organised work: cooking for collective celebrations, etc.
631. Volunteering with for an organisation (which does not involve working directly for individuals)
641. Volunteer work through organisations extended directly to individuals and groups
651. Participation in meetings of local and informal groups/caste, tribes, professional associations, union, fraternal and political organisations
661 Involvement in civic and related responsibilities: voting, rallies, attending meetings, panchayat
671. Informal help to other households
681. Community services not elsewhere classified
691 Travel related to community services

VII   LEARNING

711. General Education: School/university/other educational institutions attendance
721. Studies, homework and course review related to general education
731. Additional study, non-formal education under adult education programmes.
741. Non formal education by children
751. Work-related training
761. Training under government programmes such as TRYSEM, DWCRA and others.
771. Other training/education
781. Learning not elsewhere classified
791. Travel related to learning

VIII   *Social and Cultural Activities, Mass Media, etc.*

811. Participating in social events: wedding, funerals, births, and other celebrations
812. Participating in religious activities: Church services, religious ceremonies, practices, kirtans, singing, etc.
813. Participating in community functions in music, dance etc.
814. Socializing at home and outside the home.
821. Arts, making music, hobbies and related courses:

822. Indoor and outdoor sports participation and related courses
831. Games and other past-time activities
832. Spectator to sports, exhibitions/museums, cinema/theatre/concerts and other performances and events
841. Other related activities.
851. Reading, other than newspaper and magazines.
852. Watching television and video
853. Listening to music/radio
861. Accessing information by computing
862. Visiting library
863. Reading newspaper, magazines
871. Mass media use and entertainment not classified elsewhere
891. Travel related to social, cultural and recreational activities, social, cultural and recreational activities, social, cultural and recreational activities not elsewhere classified, mass media use and entertainment.
892 Travel relating to search of jobs.

IX. PERSONAL CARE AND SELF-MAINTENANCE

911. Sleep and related activities
921. Eating and drinking
922. Smoking, drinking alcohol and other intoxicants.
931. Personal Hygiene and health
932. Walking, exercise mining, jogging, yoga, etc.
941. Receiving medical and personal care from professional
942. Receiving medical and personal care from household members.
951. Talking, gossiping and quarreling
961. Doing nothing, rest and relaxation
971. Individual religious practices and meditation
981. Other activities
982. Resting/convalescing due to physical illness and physically unwell persons.
992. Travel related to personal care and self-maintenance

Country Report on The Time Use Pilot Survey in India
A Supplementary Note

Indira Hirway[1]

This Supplementary Note to the Country Paper on the Time Use Pilot Survey, India, primarily aims at adding some details on the Indian scheme of classification of Time Use Activities.

Statistical classification can be defined as "a set of discrete values which can be assigned to specific variables which are to be measured in a statistical survey, or registered in administrative files which will be used as basis for the production of statistics" (Hoffman 1997). Classification of any statistics this plays an important role in determining the utility of statistical data. In the case of time use studies also, the classification of time use activities should relate the data to the objectives of the survey in a way that the classified data reveal details of time use patterns that help in analyzing the data for the purpose of achieving the objectives of the survey.

The objectives of time use surveys have changed, at least in terms of focus, over the years. As time use surveys started and developed in industrialized countries as a tool of measuring unpaid work of men, and particularly women, in the society, the main objective of these surveys was to make the invisible domestic work of people (mainly women) visible and quantify it in term of the time (spent) and value. With the emergence of developed countries on the scene, however, time use surveys have acquired an additional focus of "netting economic work of people" for improved estimates of work and workers, as also of national income. With the gradual realization that time use surveys can give better estimates and information in workforce/labour force even in industrialized countries, the objectives of time use surveys at present tend to include both the sets of objectives, namely, to get improved estimates of work and workers, and to measure unpaid extended SNA[2] activities and non-SNA activities.

The Indian time use survey accepted both these sets of objectives for the survey, and attempted to design a suitable activity classification. When India designed its classification, the following alternative classifications were available to choose from:

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[1] Director, Centre For Development Alternatives, Ahmedabad and
Chairperson, Technical Committee on Time Use Survey, appointed by Government of India, New Delhi.
[2] The term extended SNA activities is used in the Indian time use survey to indicate activities that fall outside the SNA Production Boundary, but within the General Production Boundary.

1. Classification of Time Use Activities as used in industrialized countries
2. Classification of Time Use Activities as developed by the Expert Group at UNSD (The Expert Group Classification).

CLASSIFICATION USE IN INDUSTRIALIZED COUNTRIES

Historically speaking, the early classification of time use activities provided details mainly about non-economic activities of people. The classification developed by Szalai (1972), for example, basically addressed non-economic activities of industrialized countries. The assumption was that economic activities in these countries are properly recorded and measured in conventional statistics.

The classification developed by several industrialized countries thereafter primarily address the non economic aspects of people's life, to measure unpaid domestic work and to compute monetary value of this work. Appendix – 1 presents activity classifications used in major industrialized countries like Canada, Australia, Japan, Republic of Korea, New Zealand as well as the classification used by Eurostat in its Harmonized Time Use Survey. The chart also presents the International Standard Activity Classification as developed by Harvey and Niemi that presumably attempts to meet the needs of industrialized as well as developing countries.

The main framework of these classifications attempts divide activities of men and women into broad groups and subgroups as per the broad characteristics of activities. For example, the Australian Classification, based on Aas' classification (1978) divides total activities into (a) Necessary Time (personal care activities), (b) Contracted Time (employment and educational activities), (c) Committed Time (domestic and other unpaid work), and (d) Free Time (leisure time). Australian Classification has 9 groups and 74 subgroups indicating major groups and sub groups of the classification. Of these there is only one group (with 9 subgroups) for economic activities, while there are 4 groups (33 subgroups) for extended SNA activities, and 4 groups (32 sub groups) for non-SNA activities. Similarly, the activity classification in Canada has one major group on Employed Work, while 4 groups for extended SNA activities and 5 groups for personal care and personal activities. A look at the activity classifications used in Japan, New Zealand, Republic of Korea and in the Eurostat Surveys confirms the focus of industrialized countries on understanding non economic aspects of human life (Appendix 1). The details of these aspects of life are being captured by these classifications for activities pertaining to household management, childcare, hobbies, games and sports, socialization, entertainment, mass media, study etc. However, these classifications did not meet the needs of the Indian time use survey as India also wanted to capture details of economic activities carried out in the country, such as, activities in the subsistance sector, informal sector, home based work and

voluntary work. Also, India wanted to identify work and workers using the description of activities, rather than people describing themselves as workers.

THE EXPERT GROUP CLASSIFICATION

The other alternative classification that was available to India was the Expert Group Classification. This EG classification has emerged at the Expert Group Meeting organized by UNSD in 1997. The Expert Group discussed two sets of classifications, namely, the Trial Classification of the UNSD and the Alternative Classification presented by the ILO, and came out with the third classification, namely, Expert Group Classification (Appendix 2).

The EG classification differed from the earlier classifications in three ways: (a) the EG classification used the SNA framework as the basic framework for determining the economic nature of activities, (b) Activities of non-marketed production which are an important part of production in developing countries, were assigned one major group with detailed specifications at two and three digit levels, and (c) on the job activities which are normally not specified in details, are included in the classification with details. This classification thus divides time use activities in four major groups, namely, SNA activities (divided into market oriented and non-market oriented activities), Non-SNA Activities (extended SNA activities divided into 4 sub groups), Personal activities and Travel. The 10 subgroups are further divided into 84 two digit activities.

The two main principles underlying the classification are: (a) to provide a structure which is consistent with the conceptual framework of SNA and which allows for creating satellite accounts, and (b) to ensure comparability with other time use classifications. The major groups of this classification one as follows:

1. Employment for Establishments
2. Primary production activities (not for establishments)
3. Services for income and other production of goods (not for establishments)
4. Household maintenance, management and shopping for own household
5. Care for children, the sick, elderly and disabled for own household
6. Community services and help to other households
7. Learning
8. Social and cultural activities
9. Mass media use
10. Personal care and self maintenance

It is clear that 1 to 3 major groups are within the SNA Production Boundary, 4 to 6 outside the SNA boundary but within the General Production Boundary and 7 to 9 and 0 are in non-production activities.

This classification has certain advantages:

- It has the SNA framework

- It has comparability with the standard time use classification used in Europe, America and Australia
- It avoids duplications, both internal and external
- It attempts to meet the specific needs of developed and developing economies, and
- It provides a classification that can be used at the global level.

In spite of these positive points, however, we in India found several problems with it at the conceptual and operational levels.

1. The EG classification collects information about economic activities (as per the 1993 SNA) in the three major activity groups, namely, Employment for Establishments (that includes paid and unpaid employment in establishments, i.e. in fixed structures and large scale agricultural holdings), Primary Production Activities, not for Establishments (which mainly include peasant or subsistence farming and activities connected with other types of primary production, production for household's own use), and Services for Income and Other Production of Goods, "not for Establishments (which mainly include activities for production of goods and services, not covered in "Establishments" and are typically income generating services, and production of non primary goods for sale or for household consumption).

   If the first group is trying to capture non-subsistence economic activities, particularly in agriculture, it does not serve much purpose as agriculture on large farms is not necessarily non subsistence agriculture. The subsistence nature of agriculture is linked more with the availability of irrigation, and technology and less with the size. For example, a large holding in a backward region can be a subsistence farm, or a small holding with modern technology can be a non-subsistence farm. Also, it is not possible to distinguish between a subsistence farm and a non-subsistence farm empirically like this as it depends not only on the rainfall, irrigation and technology but also on the specific situation of farmer. A subsistence farmer may sell a part of the products if the rainfall is good, or if he needs cash for meeting some emergency expenses, and may buy grains from the market in the lean season. In short, the distinction between subsistence and non subsistence agriculture (and other primary production) as made in the first two groups does not serve much purpose.

   Also, the definition of an establishment as "fixed structure" also does not distinguish between subsistence and non-subsistence activities or between formal and informal activities. A unit can be an informal unit even it has a fixed structure (for example, a cobbler sitting under a tree) or a unit without a fixed structure can be a formal sector unit.

   In short, the three major groups help neither in distinguishing subsistence or non-subsistence unit nor in separating formal and informal sector production. As a result, the classification is confusing and does not match with the established classification of economic activities.

It seems to us that the kind of information sought in these three groups can be collected in a better way through contextual variables like (a) whether the production is sold in the market or consumed at home, or (b) whether the production unit is registered or not.

2. A comment about the concept of under employment / un employment in developing countries will not be out of place here. The EG classification intends to collect information on "seeking employment" to estimate unemployment in the labour market. However, unemployed in developing countries frequently do not spend time on "seeking employment" as no work in available. They are "available" for work and "willing to take up work/more work" if work is available. This information can be collected through a special activity called "forced leisure". The Indian classification has included this activity at the three digit level. In other words, both "seeking work" as well as "forced leisure" would capture the un/under employment of the labour force.

3. The EG classification does not include several specific activities of some developing economies (such as, traditional petty services, production of traditional goods, food processing etc). Though many of these activities will be classified as 3 digit activities, a few of them do need a 2 digit category, for example, repair and maintenance of dwellings, participation in government employment programmes etc.

Indian Scheme of Classification of Time Use Activities

The following principles were accepted as guiding principles while designing the Indian activity classification:

- Classification of time use activities should be comprehensive in the sense that it should cover all the activities performed by people so as to ensure the full measurement of all paid and unpaid work of men and women in the society.

- Classification of time use studies should match with the present systems of classification of economic statistics so that paid and unpaid economic activities can be integrated while formulating macro policies. Time use classification should also be in the SNA (System of National Accounts) framework so as to distinguish activities falling under (SNA) Production Boundary, General Production Boundary and non-SNA personal activities.

- Time use classification should be related to the present established time use classifications developed by different (industrialized) countries. This is for enhancing international comparability of time use data. That is, time use classification should provide information about major aspects of extended SNA work, i.e. (a) household management, (b) care of children, elderly, sick and disabled persons, (c) repairs and maintenance of house, equipments etc. (d) production for self consumption and (e) voluntary work; as well as major non-SNA activities such as, (a) rest and sleep (b) personal hygiene and care, (c) TV, mass media use like radio etc. (d)

education and self development (e) sports, games, leisure time. This will help in generation of comparable data across the countries.

- Time use classification should facilitate the valuation of unpaid work, and compilation of satellite accounts ultimately. That is, the classifications should help in putting value/price to different activities so as to facilitate valuation of different activities.

- Time use classification should be broad based enough to incorporate major activities carried out in both developed and developing countries. It should be flexible enough to allow for incorporation of specific activities performed in different countries.

- Time use classification should be simple, easy to understand, easy to operate and subjected to easy coding. The number of broad groups and sub groups should be large enough to reveal the major characteristics of activities, but should not be too large or too unwieldy.

- The classification should be hierarchical or multiphase/multi digit, with each digit related to the levels of details of the classification. For example, the first digit may refer to the major groups, the second digit to the subgroup and the third digit to the specific activity.

- And lastly, time use classification should have contextual variables to provide extra details about the activities that would throw useful light on the way the activities are carried out. These variables could prove extremely useful in understanding the activities better.

The Indian classification has been developed keeping in mind the 10 principles discussed above. The major groups of the classification are as follows:

1. Primary Production Activities
2. Secondary Sector Activities
3. Tertiary Sector Activities (Trade, Business and Services)
4. Household Maintenance, Management and Shopping for own households
5. Care of children, elderly, disabled for own household
6. Community services
7. Learning
8. Social and Cultural Activities
9. Personal care and self maintenance

It is clear that the first three activities refer to SNA activities falling under the Production Boundary; the next three activities are non-SNA activities falling in the General Production Boundary; while the last three activities are personal activities which are non-delegable activities.

These activities are further divided into 2 digit classification that covers the major dimensions of the first digit activities. For example, Activity One relating to Primary Production Activities, is divided into six 2 digit groups, namely (1) crop farming, animal husbandry, (3) fishing, forestry, horticulture gardening, (4) fetching fuel, fodder, water, fruits etc, (5) processing and storage and (6) mining and quarrying, digging, cutting etc. Secondary Sector Activity were sub divided into (1) construction activities and (2) manufacturing activities; while Tertiary Sector Activities were sub divided into (1) trade and business, and (2) services. The sub groups are divided into 3 digit activities which describes specific activities falling in the 2 digit subgroups. The description of these activities may change in different countries depending on the specific situation of countries. The third digit of the classification, thus, provides flexibility to the classification.

One can see that in the Indian Classification, economic activities have occupied three major groups. To capture the paid and unpaid nature of economic work, a contextual variable, whether the activity is paid or unpaid, has been used. Another contextual variable provides information about the place of activity, i.e. whether the activity was performed within or outside the home.

Contextual Variables: Contextual variables are important in any activity classification as (a) they provide critical information across all the categories of activities and (b) they reduce the number of total activities to make the number manageable. The Expert Group Classification as well as other classifications have suggested several contextual variable like (a) for whom or for what purpose, (b) with whom and (c) where. The number or contextual variables cannot be very large as the respondents may not give correct response if the number is too large. The Indian classification uses two contextual variables, namely, whether the activity is paid or unpaid, and whether the work is done within or outside the home. Both these variables together can throw useful light on paid and unpaid home based economic work. No contextual variable has been used to distinguish between formal and informal economic work. Though it was possible to add an additional contextual variable "whether the unit for which you work is registered or not", it was not done largely because we were not sure about the quality of response to this question and because we did not want to add too many contextual variables. We tried to make up for this loss by adding extra categories on employment status in the background schedules.

SOME RELATED ISSUES

Along with the classification system of time use activities, it was necessary for us to take some related decisions. These are discussed below.

Pre-coded and Post coded Time Use Schedules: Time use schedules can be of two types: (1) where activities are pre-coded, and (2) where respondents are given free hand about describing their activities and the activities are coded later on. A post coded activity schedule has some advantages in that it puts no

restriction on respondents about describing their activities. Such a schedule also allows for new activities (which are not thought of earlier by schedule makers) to enter the list of time use activities. However, a pre coded schedule has several advantages: It helps people (who are not very expressive) to respond to the time use schedule. It also makes investigation and coding easy. Post coding can be very unwieldy and unmanageable.

We therefore decided to pre code our schedule. However, we took several measures to get the required details from the field.

    a. We prepared a detailed three digit schedule describing all the possible activities that people can undertake. Each state tested this schedule in a village/urban centre to see whether changes are needed in the activity schedule.

    b. At the end of the first round, a stock was taken (in addition to continuous monitoring of the field survey) about the field experience to see whether any additions/changes were needed in the schedule or in the methodology. A few changes were made in the activities at this stage. For example, collecting flowers/leaves for pooja (meditation), resting due to sickness, forced leisure etc. were some of the additions made during the first round.

    c. In order that respondents do not forget any activity done by them, investigators were asked to check the entire list of the activities with respondents. This checking was for reminding respondents about all their activities done in the previous day.

    d. One code "others" was added in each sub group as a three digit activity. This gave a chance to respondents to add any new activity (not included in the list) that they have performed. This gave some kind of openness to the list without any serious post-coding problems in the schedule.

Multiple Activities: People frequently perform more than one activity simultaneously. For example, watching TV and chopping vegetables, or cooking and taking care of a baby etc. It is important to note such activities separately as these indicate time stress on people. Special instructions were given to investigators to note such activities carefully.

The question, however, was regarding distributing the time among these activities to keep the total time spent at 24 hours. The approach adopted in India was

a. Investigators were asked to determine the main and secondary activity/activities from among the multiple activities, and distribute the total time spent on these as per their relative importance.

b. If these activities were observed as having equal importance, demanding equal time, the approach was to distribute the total time equally between them.

Special tables are expected to be compiled of such multiple activities to understand the types of such activities and their links with gender.

Travel Time: The time use schedule in India collected information about the time spent on traveling for each activity. In fact, the last 3 digit code in each sub group collected data on the time spent on travelling. Travel time in the time use literature is either classified separately or is included in the time of the activity for which travelling has taken place. While the second approach appears to be logically correct, it tends to overestimate the time spent on the activity. The first approach of combining all the travel time, however, does not relate travel time to the activities for which travelling has taken place. We therefore treated travel time as a separate activity code which can be seen separately as well as can be linked with the activities for which traveling has taken place. Unfortunately, we have not collected information on the mode of the travel or distance of travel as the time use schedule did not have any scope for incorporating such questions.

Time Spent on the Job: Conventional statistics do not provide any information about the different activities, related unrelated to the job, performed while being on the job. For example, these data do not give any information about tea/coffee/lunch breaks on the job, telephone calls made, outings done or conversations made with colleagues as well as activities performed while being on the job. It is important to collect this information as "the black box" of time spent on employment can reveal useful details about the conventional employment data (Hussmanns 1999). We have not, however, collected this information.

Leisure and Unemployment: Leisure is considered as an indicator of welfare. However, in the context of developing countries (or even developed countries some times) it may not indicate welfare if it is forced. The unemployed or underemployed in developing countries do not always look for jobs as work are not available, and remain idle while being "available for work" and "willing to take up work". It is important therefore to distinguish between free leisure and forced leisure in a country like India. We therefore added a special activity "forced leisure" or "unemployed time" in the activity classification. Since "leisure time" or "free time" was observed fairly frequently, investigators were instructed to investigate it carefully before coding ti in the activity classification.

Waiting: Waiting is a common activity performed by men and women for a variety of reasons in developed as well as developing countries, and forms a particularly significant component of some activities, like waiting for transport, searching for employment, waiting in the queue for kerosene or other essential goods etc are commonly observed phenomena. The Expert Group therefore suggested that this activity should be included in the activity list. Somehow, this activity has not been included separately in the Indian classification. For example, waiting (for a bus or a vehicle) while travelling has been included in the time for traveling.

Lessons From the Indian Experience of the Activity Classification

The Indian time use survey was a pilot survey. It is important therefore that careful lessons are learnt from this experience about activity classification. This could also help in moving towards a standard international activity classification.

To start with, it seems to us that the Indian activity classification has several distinct advantages over other classifications:
Serves the Major Objectives: The Indian classification seems to serve the major objectives of time use surveys, for developed and developing countries. That is, it presents time use data in a way that the presentation reveals the major time use patterns, which, in turn, help in reaching the objectives. The classification can also be used in compiling satellite accounts, measuring the value of unpaid work.

Weightage to SNA Activities: The Indian classification gives due weightage to both, SNA and non-SNA activities. Economic activities which are usually neglected in the classifications of industrialized countries, including the ISAC (International Standard Activity Classification) presented by Harvey and Niemi (1993), get their due importance in the Indian Classification. With the two contextual variable, namely, paid/unpaid work and location of work (within and outside home), the classification of economic activities provides the required information on paid and unpaid SNA work conducted within and outside homes. Also, the classification does not leave it to the respondent to say whether he is employed or not.

Comparability with the Exiting Classifications: Another advantage of the Indian Classification is that it is comparable with the existing standard classifications of SNA activities as well as non-SNA activities. It is within the SNA framework distinguishing clearly the paid and unpaid SNA activities, extended-SNA activities and personal services. It also is in line with the existing workforce/labour force statistics as it provides information on persons (and the time spent by persons) engaged in paid and unpaid economic activities as well as on forced leisure time. The classification also is comparable with the established classifications of non-SNA activities.

Flexibility in the Classification: As mentioned earlier, the Indian time use classification is flexible enough to allow for the inclusion of specific activities conducted in different developed and developing countries. The three digit classification is largely meant for allowing this flexibility.

In spite of these advantages, however, there are some problems with the classification as revealed during its operationalization:

Additions of New Activities: To start with, we believe that there is a need to add these activities: (a) Waiting: though this is an important activity, it appears nowhere in the list. There is a need to put this in the list as people, and particularly the poor, have to wait for long in queues for essential services and goods, (b) Travel: It would have been better if the "mode of travel" and the "distance travelled" were included in the schedule. This information would have thrown useful light on the time spent in travel by people, (c) Computer Training: Though a lot of information is collected on training and education of persons, it would be desirable to have a special code for computer related training. Since computer training is spreading fast in the country, this detail would have been useful in estimating the spread of this specific activity.

Reformulation of the Classification: The survey experience also suggests reformulation of the classification of activities, at the two digit level. Though the activity list of the Indian time use study includes 2 digit classification, in the first three major groups, the rest of the groups do not have two digit classification (it is implicit in some ways). It is necessary therefore to make this 2 digit classification explicit by modifying the present classification. The modified classification is presented in Appendix 2.

This modified classification attempts to classify time use activities at three levels: At the one digit level, the classification provides broad division of activities which is in line with the main conceptual framework of the survey. The second digit classification provides broad sub divisions of the main groups, while the third digit classification refers to the specific activities carried out by men and women at the micro level.

It is worth noting that the modified classification differs from the Expert Group Classification in two ways: firstly, the first three economic activity groups are designed differently, and secondly, several changes are made at the 2 digit level classification keeping in mind the types of activities carried out in developing countries.

Comparability of Time Use Data Across Countries:

A common activity classification does not, however, ensure comparability of the time use data as the comparability also depends on the comparability in

1. The basic survey design,
2. Selection of days for which information is selected (for example, one working day and one weekly variant day),
3. Time period covered in the survey (for example, 24 hours), and
4. Time scales used or time slots selected. (Though comparable data on time spent on different activities may be collected by careful investigation even when slots are different)

It needs to be added, however, that the collected data refer to the time use, i.e. time spent on an activity and not the efficiency or productivity of the time use. To achieve comparability of productivity or efficiency one has to develop Standardized Extended per Capita Consumption, discussion on which does not fall in the purview of this paper.

APPENDIX 1

CLASSIFICATION OF TIME USE ACTIVITIES IN SELECTED INDUSTRIALIZED COUNTRIES

Country	SNA Activities			Extended SNA Activities			Non-SNA (Personal Activities)				
	No. of Major Groups	Description	No. of Sub Groups	No. of Major Groups	Description	No. of Sub Groups	No. of Major Groups	Description	No. of Sub Groups	Major Groups	Sub Groups
Australia	1	Employment Related Activities	9	1	Domestic Activities	10	1	Personal Care Activities	5		
				2	Child Care Activities	9	2	Education Activities	8		
				3	Purchasing Goods and Services	6	3	Social and Community Interaction	9		
				4	Voluntary Work and care Activities*	8	4	Recreational & Leisure	10	9	74
Canada	1	Employed Work	12	1	Domestic Work	22	1	Personal Care	12		
				2	Care of Children	15	2	School & Education	10		
				3	Shopping & Services	14	3	Entertainment	20		
				4	Organizational, Voluntary*, religious, activities	21	4	Sports & Hobbies	36		
							5	Media & Communication	14	10	177**

Appendix 1 Contd.

New Zealand	1	Labour Force Activity		1	Household Work		1	Personal Care		11	
				2	Care giving to Household Members		2	Education and Training			
				3	Purchasing Goods & Services for the Household		3	Religious, cultural and Civic Participation			
				4	Unpaid Work outside the Home		4	Social Entertainment			
							5	Sports and Hobbies			
							6	Mass Media and Free Time Activities			
Japan	1	Work for Day or Profit		1	Housekeeping		1	Meals -eating, drinking		20	
				2	Nursing		2	School work			
				3	Child Care		3	Watching TV, listening to radio etc.			
				4	Shopping		4	Rest and Relaxation			
							5	Studies & Research			
							6	Hobbies and Amusements			
							7	Social Life			
							8	Sports			
							9	Medical examination & treatment			
							10	Travel for different purposes			

Appendix 1 Contd.

Republic of Korea	1	Employment Related Activities	7	1	Domestic Activities	7	1	Personal Care Activities	5	9	42
				2	Family Care	5	2	Education Activities	3		
				3	Voluntary Work* & Community Participation	4	3	Social Life Recreation, Leisure	9		
							4	Others			
EUROSTAT	1	Employment	3	1	Household and Family Care	9	1	Personal Care	3		
				2	Volunteer Work and Meetings*	3	2	Study	2		
							3	Social Life & entertainment	3		
							4	Sports and outdoor Activities	3		
							5	Hobbies & Games	3		
							6	Mass Media	3	10	32
							7	Travel & others			
Harvey & Neimi	1	Paid Work	2	1	Household & Family Care	8	1	Personal Needs	5		
				2	Voluntary Organizational* & community participation	3	2	Study	3		
							3	Socializing	7		
							4	Sports – participation	4		
							5	Hobbies & Crafts	6		
							6	Entertainments & Culture	6		
							7	Mass Media	3		

Appendix 2
Modified Indian Classification of Time Use Activities

1. Primary Production Activities

11 Crop farming, kitchen gardening, etc.
12 Animal Husbandry
13 Fishing, Forestry, Horticulture, Gardening
14 Fetching of fruits, water, plants etc. storing and hunting
15 Processing and Storage
16 Mining quarrying, digging, cutting, etc.

2. Secondary Activities

21 Construction Activities
22 Manufacturing Activities

3. Trade, Business and Services

31 Trade and Business
32 Services

4. Household Maintenance, Management and shopping for own Household

41 Food processing - grinding, flour, husking, making spices - preparing food items and beverages and serving
42 Cleaning and upkeep of dwelling and surroundings, washing and ironing clothes cleaning utensils.
43 Care of textiles: sorting, mending and ordering clothes and linen
44 Shopping for goods and non-personal services: capital goods, household appliances, equipment, food and various household supplies
45 Household management: planning, supervising, paying bills etc.
46 Do-it-yourself home improvements and maintenance, thatching roofs, mud flooring, installation, servicing and repair of personal and household goods
47 Care or pets
48 Travel related to household maintenance, management and shopping
49 Household maintenance, management and shopping not elsewhere classified

5. Care for Children, the sick, elderly and disabled for own household

51 Physical care of children: washing, dressing, and feeding, putting them to sleep,
52 Teaching, training and instruction of own children

53 Accompanying children to places: school, sports, dance classes, craft lessons, meditation lessons, PHC, doctor etc.

54 Physical care of the sick, disabled, elderly household members: washing, dressing, feeding, and helping

55 Accompanying adults to receive personal care services: such as hairdresser's, therapy sessions, temples and religious places, visit friends and relatives etc.

56 Supervising children and adults needing care – with or without other activities

58 Travel related to care of children, the sick, elderly and disabled in the household

59 Taking care of guests/ visitors and related activities,

6. Community services and Help to other households

61 Community organized construction and repairs: buildings, roads, dams, wells, ponds, temples, etc. and community assets

62 Community organized work: cooking for collective celebrations, etc.

63 Volunteering with for an organization (which does not involve working directly for individuals)

64 Volunteer work through organizations extended directly to individuals and groups

65 Participation in meetings of local and informal groups/ caste, tribes, professional associations, unions, fraternal and political organizations

66 Involvement in civic and related responsibilities: voting, rallies, attending meetings etc.

67 Informal help to other households

68 Travel related to community services

69 Community services not else where classified

7. Learning

71 General education: school/ college/ technical institutes/ university attendance

72 Studies, homework and course review related to general education

73 Additional study, non-formal education under adult education programmes, night schools,

74 Non formal education for children and for adults,

75 Work-related training – skills, entrepreneurship,

76 Training under government programmes such as TRYSEM, DWCRA and others

77 Other training/ education/computer training

78 Travel related to learning

79 Learning not elsewhere classified

8. Social and Cultural Activities

81 Participating in social events: wedding, funeral, births and other celebrations
82 Participating in religious activities: religious ceremonies, practices and processions, walking to temples barefooted, attending religious meetings, etc.
83 Socializing at home and outside the home
84 Participating in community functions in music, dance etc.
85 Arts, making music, hobbies and related courses
86 Indoor and outside sports participation and related courses
87 Games and other pass-time activities, cards, video games
88 Spectator to sports, exhibitions/ museums, cinema/ theater/concerts/dances and other performances and events
89 Travel related to social, cultural and recreational activities

9. Mass media use

91 Reading
92 Watching television and video
93 Listening to music/ radio
94 Accessing information by computing
95 Visiting library
96 Reading newspapers, magazines etc
98 Travel related to mass media use and entertainment
99 Mass media use and entertainment not elsewhere classified

0. Personal care and self-maintenance

01 Sleep and related activities
02 Eating and drinking
03 Personal hygiene and health
04 Receiving medical and personal care from professionals and household members
05 Doing nothing, rest and relaxation
06 Individual religious practices and meditation
07 Seeking work
08 Enjoying forced leisure
09 Travel related to personal care and self-maintenance

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