

CHAPTER II

REVIEW OF LITERATURE

This chapter is presented under the following sections:

- (1) Household work - the job and its task components.
- (2) Methodological aspects of time-use research in household work.
- (3) Time norms-definitions and views.
- (4) Time-use in household work and tasks.
- (5) Hurdles in establishing time norms of household work among our population.
- (6) Variables associated with time-use in household work.

Household Work - the Job and its Task Components

Household work is a 'job' comprising a multitude of tasks and subtasks. It is needed in the operation of all household units and families. As emphasized by Parson (1951) and Broderick (1970) attending to household work is essential in every household for the "survival" of family, the basic and most significant social unit.

For the accomplishment of household work the human resources of time, physical capacity and cognitive insights

are needed along with material resources (Deacon and Firebaugh (1981). Of these, time used is the easiest to compare and so is used widely for work comparisons of individuals, families and groups.

In order to assess the time spent in household work, the first requirement is to delineate this activity to distinguish it from other activities performed in a house. According to Walker and Sanik (1978) variety in definitions has increased on account of mushrooming of time-use researches for multiple purposes. Unless some agreement can be found in the definition of the terminology, attempts to quantify household work will be wasted. Confusion of definition presents many problems of establishing categories of coding time-use data for household activities at the present time as

Some researchers have classified some types of household activities as work; others have classified the same activities as leisure; still others have called these activities "non work" , to differentiate them from paid work activities (Walker and Sanik, 1978,p.4).

Hence, in order to improve precision in defining the terminology - household work, some of the commonly accepted definitions were reviewed.

According to Walker (1970) household work consists of

. . . purposeful activities performed to provide goods and services used by the family

inorder that they may function as a family
(but excludes) work performed to provide money
income with which to buy goods and services(p.2).

According to this definition tasks like livestock care,
kitchen gardening and home production do not find a place
in the definition of household work.

*Not true
for kitchen
gardening
and home
production
for the
household*

Steidl and Bratton (1968) have explained household
activities as tasks performed.

. . . for subsistence and cultural development:
to maintain the family with food, clothing, and
to provide an atmosphere that helps each family
member achieve his goals (p.181).

The definition highlights the function of household work
as to satisfy the physical, physiological and psychological
needs of the members of the family.

Walker and Sanik (1978) explain household work
as

. . . a multiplicity of purposeful activities
performed in individual households to create
goods and services which enable the household
to function (p.9).

It is performed in every house in response to the
constant series of demands that repeat in daily living.
This feature of household work brings in some sort of
routine, a regularity of performance among family members.

The definitions indicate that household work

(a) is a work directed by the needs of family members, (b) it does not contribute to money income, (c) it is a routine activity, (d) it aids to strengthen the solidarity of family living and (e) it enables the family to function.

If household work is to be considered an occupation (of the homemaker) then it might be useful to look at it as a 'job' and understand its 'job content'. In industries, the specific content of a piece of work is identified and studied by 'work analysis' especially when the job needs improvement for satisfactory results. The same method can be adopted for studying household work too, if one is sure of its specific task components.

According to Davis(1959) the content of a job can be determined by two specific process: (a) specification of individual tasks and (b) the combination of individual tasks into specific jobs. Further, a clearer picture can be got by going into the specification of performing each task. All the three steps together make job measurement informative and useful.

The household work includes several fragmented tasks. A comprehensive picture of its task components can be obtained from the research studies conducted among different groups.

Parker (1966) prepared a comprehensive list of household tasks performed by American families on the basis of the needs and purposes of individual members. She

classified them as tasks related to child care, clothing, family living, food, housing and management.

Walker and Sanik (1978) included under household work the following tasks: food preparation, dish washing, shopping, housecleaning, maintenance of home, yard, car and pets, care and construction of clothing and household linens, physical and nonphysical care of family members and management. This improvement in the enlistment of tasks with specificity makes the term household work simpler and easier to segregate it from other activities performed in the homes.

Basnyat (1977) listed the tasks as those related to food, clothing, cleaning of utensils and dishes, regular care of the house, care of individual family members, financial management, special care of the house and supervision of household tasks. Supervision of household tasks is an additional task reported for the homemakers of Nepal and India. It found a place in the list on account of the high degree of reliance on employed help among higher income group urban households of her sample.

A review of the housekeeping tasks performed by the tribal households of Bihar by Thomas (1979) has revealed collection of firewood and fetching water as additional housekeeping tasks. Thus the exact components of household work differ from society to society. So need arises to identify the task components of household work.

Included under management in Walker research

Methodological Aspects of Time-Use Research in Household Work

Studies Conducted Outside India

The usual purpose of time-use research in household work has been to reduce time costs through knowing time patterns of the homemakers and the entire household. Other purposes also have been served by these researches. Gage (1964) had undertaken a study to determine the money value of time spent in household work so as to use the same in court cases. Many of the later studies (Morgan et al., 1966; Gauger, 1973; Bains, 1973; Hall, 1975 and Gage, 1975) focussed on estimating the economic contributions of workers through household work performance to the economic growth of the country.

According to Gross et al. (1973), methods of studying time-use in household work "have changed little, since the beginning of such research." In all research studies approximate clock-time had generally been obtained from the homemaker through records maintained by her for a period of upto seven days, through recall usually for a very recent period of one to two days or by estimate through direct observation. The data were then analyzed for factors such as types of tasks and selected family and personal variables to know the time cost of each task and further its variations within a group. Using the time-use

data of households, the time patterns of different groups had been worked out and even compared.

Nelson's (1963) study showed a deviations in the analysis of time-use data. She examined the organization of household work time and found that the activity timings were organised in houses around meal preparation.

The refinement in study of time-used in household work was further made through the measurement of work load in terms of work unit i.e., by identification of what is accomplished in work time. Initial attempt was made by Warren in 1930's (1940). The purpose of the work unit was to enable the comparison between the amount of time required in one household with that used in other households, accomplishing the same quantities of the same tasks. According to Walker (1957, p.3)

. . . a work unit in homemaking is the amount of household work done in one hour under average conditions by an average worker. The workload is the sum of work units.

The work unit as well as the work load were derived from a quantitative analysis of household work irrespective of the quality of the work performed and the equipment used.

The procedure used by Walker (1957) for developing the work units of household work is explained here. In order to record the homemaking time, a work sheet was prepared whcih included the information about the family size, age

of children, type of meals served daily during morning, noon, and evening, tubful of clothes washed and pieces of clothes ironed per week as well as time used in household work. All the household activities were categorized and the approximate time used in all these tasks by the homemaker, helpers and all workers was recorded. The total homemaking time was then converted into work hour by changing the minutes into nearest tenths of an hour.

In order to calculate the total daily work load of the family, the work output of all the workers in the home was measured and the estimated work units of each task was added. This gave the total work load of the family in terms of household work.

Gauger (1973) and Gauge (1975) followed the same methodology for assessing the total time cost of families on household work. Thus it became evident that the total household work duration of a family was to be estimated by adding up the total hours spent on each component task.

A clear picture of the procedure followed for sample selection could be obtained from Walker's (1970) study among 1296 husband - wife families in the city of Syracuse, New York. The sample was drawn from a list of 45,000 husband - wife families arranged by city and suburbs and by the number and ages of children - the major control variable. From pools of names so arranged, 42 families were randomly

selected for each of 32 classifications of family composition. The types of families selected included families with no child and with 1,2,3,4 to 6 and 7 to 9 children; families with youngest child under one year of age, 1 year old, 2 to 5, 6 to 11 and 12 to 17 years of age; and families with all children of the same age, and with varying combinations of age. In families with no children, age of the homemaker was the control variable. Families with adults other than husband and wife were excluded from the sample. These manipulations of the population were purposely done by Walker, (1970) to control the variability factor in time-use on household work and make the averages worked out for a group typical and representative of the group's standards. Employment status of the homemaker and the socio-economic status of the families were the random variables.

For each family, time records were completed for two days for each member of six years of age or older. The resulting 2592 records were equally distributed among the days of the week and seasons of the year. Interviewers asked homemakers to recall time-use for the day before the interview.

The analysis of this methodology indicated the extent of care one has to take while selecting sample for an intensive search into the day's chores on account of the multiplicity of the factors interfering with its time-use. Even when certain family variables were controlled, so many

were to be represented through random choice of the groups.

Studies conducted in India

Studies conducted in India were aimed mainly at analysing the time patterns of homemakers and the factors associated with time-use in household work (Saraswathi, 1962; Adaviappa, 1976; Basnyat, 1977; Thomas, 1979 and Bafna, 1979). Certain studies had been directed to identify the homemaking problems of specific groups like employed homemakers (Remabai, 1963; Mukherjee, 1981). Only in one study (Prafullakumari, 1963) the time patterns of the entire household had been reviewed. Even with selected tasks also, only a few studies (Wells, 1967; Vyjayanthimala, 1968) had reported the entire households' time-use. One of the latest studies done by Chauhan, (1981) has tried to estimate the money cost of the household work contributions of the homemakers based on the time-use data.

In almost all the studies, the time-use data on household work had been collected from the homemaker either through recall or record keeping. Only Shamier (1970) and Sandhu (1972) resorted to observation of tasks performed in households from morning till night-fall for collection of the required data.

Most of the studies, excepting the one done by Sandhu (1972) was conducted among urban households and mostly among the middle and high income groups.

Thus information is very much lacking about household work performance of families of the weaker sections as well as the rural populations.

Most of the investigations have reported persistent visits, rapport maintenance, and collection of time-use data for number of days as the measures taken to collect reliable and valid data from the respondents. Studies which relied on the recall or record keeping by the homemaker for data collection, had also mentioned of casual observations during the house visits as a measure to check reliability of the time-use reported on different tasks. But ^{They} did not mention of the time spent and other specifications about what was observed during these visits. Hence the reliability of these measures was not established satisfactorily.

Thus the review of literature on the methodological aspects of time-use research in household work reveals that no extensive work to assess the total time cost of household work has been yet done in India. Further, in view of the inability of the majority of India's rural population to report clock timings on each household work, the usual procedure adopted in time-use surveys conducted abroad for making time estimates becomes less feasible. Hence a suitably modified methodology for collecting data from rural households is required to conduct an intensive study on time-use in household work.

Time Norms - Definitions and Views

According to Flexner (1975,p.540) "norm is the average in our grading system". The word has originated from a Latin word 'norma' which means the ruler or the 'standard measure'. Funk and Wagnalls state the meanings of the term under different contexts as :

A rule or authoritative standard, . . . a value considered as representative of a specified group. . . . The average or median of performance in a given function or test regarded as a standard for the group concerned(p.863).

According to Gross et al.(1973, p.402),

. . . norms of time . . . are the averages of how the resource is actually used by a large number of people. They in no case indicate how time. . . should be used for individual cases.

"Norms represent the way things are done by a group" (Jungs, 1970, p.90). To individuals, they offer the standards for comparison. Sherlekar (1978, p.420) describes the term time norm as, "the standard time value for a job" as decided by the "mode value" taken from a sufficient number of observations of task performance.

Time norm that refers to the average that lies between the extremes is also referred to as the typical time. In Programme Evaluation and Review Technique (PERT), it is used to know how long a project will take, how much time ahead or behind schedule the workers are at any point and what work content

is there in each phase or activity of a project (Levin and Kirkpatrick, 1979). The labour cost of a work/project is estimated from the time demands of the work involved and this will be possible only if time norms of the job is readily available. The same is true with household work too as it is one of quite complicated, fragmented and time consuming jobs performed in every house.

Time-use in Household work and Tasks

An estimate of the average time used in household work was made for the first time by Warren(1940). Her study titled "Use of Time in Relation to Home Management" was conducted with a sample of 497 farm homemakers of New York. According to Gross et al.(1967) the study,

. . . deepened the understanding of time management especially through the development of a quantitative workload unit for accurate comparison of the work done in different households. . .(p.539).

Homemakers spent about 52 hours a week (7.4 hours a day) on household work. Other members of the household also participated in the work. The total time spent on household work was 63.5 hours a week i.e. 9 hours per day.

Analysing a week's time records maintained by 85 Wisconsin farm homemakers, Cowles and Dietz(1956) reported the average household work week of a family as comprising of 60.5 hours. About 87 percent of this duration i.e.52 hours

46 minutes was contributed by the homemaker and the rest 7 hours 44 minutes i.e. 13 percent of the total duration by other members.

Prafullakumari (1963) investigated the contributions of various family members in 50 selected households of Madras city to determine the total time spent by households in homemaking activities. The study indicated that male members spent more time in planning, budgeting, buying and keeping accounts. Family participation was evident in carrying out household chores.

Wells (1967) analysed the expenditure of time for food preparation by the families of a University campus. The study revealed that, on an average, food preparation task took 6.85 hours per household. Of the total time, 4.06 hours was contributed by the homemakers and the rest 2.79 hours i.e. 40.7 percent of the total duration by other family members and servants.

Vyjayanthimala (1968) estimated the average time-use of households of Madras city in dish washing as 2 hours per day. The activity was performed in the mornings, afternoons and evenings. The homemakers received assistance from daughters and paid servants for this task.

The study conducted by Walker (1970) among Syracuse families of New York revealed that the total time spent in household work varied according to the hours of paid

employment of the homemakers. The time-use of the whole group was found to be 10.4 hours a day per family.

Households having homemakers with paid employment for 30 or more hours a week, spent on an average 8.0 hours a day on household work while in those having homemakers with no paid work, the household work took 11.1 hours a day. As the hours of paid employment increased for the homemaker, the time-use on total household work decreased.

The work contributions of the homemaker, husband and other workers towards household chores were estimated to be 7.3 hours (70.2 percent) 1.6 hours (15.4 percent) and 1.5 hours (14.4 percent) respectively. The time used daily in household tasks was 2.2 hours for food related tasks, 2.2 hours for house care activities, 0.9 hours for clothing care, 1.2 hours on family care and 1.5 hours in marketing, management and recreation.

The study conducted among industrial workers of Calcutta by Mukherjee (1980) revealed that female members did 38.3 percent of the household chores individually and 14.2 percent jointly. About 5.4 percent of the chores were done by maids or servants. Male members did 17.6 percent of the chores individually. The activities shared by both sexes were fetching water, repair and maintenance of various possessions, odd jobs and errands. Shopping was found to be largely performed by the male members -

husband or sons and brothers.

The studies reported here in general indicate that-

- (1) household work, eventhough it is performed mainly by the homemaker, is still a family venture. Other members do give a helping hand in carrying out the day's chores.
- (2) studies dealing with the total time-use of families on household task or work on the whole are very few.
- (3) studies representing a large population are lacking with the exception of those done abroad.
- (4) no extensive survey as per the reports available has been conducted to establish the time norms of household work at a regional or national level on account of restricted coverage of population.
- (5) studies reported indicate an average time-use of 9 to 10.4 hours a day on household work by specific groups of American families. Data on Indian families are lacking.

Hurdles in Establishing Time Norms of Household Work among Our Population

- (1) Lack of fixed schedule: Margaret Mead (1953), the renowned Anthropologist while referring to Indians in South America had stated :

. . . traditionally work and rest were not in opposition to one another, but were often part of the same process. There was not eight hour day, no special time for siesta, no set bed time for any one, no time for rest. Rest and work were both in the nature of things, according to the demands of the present (p.165).

check "no?"

This type of work scheduling poses problem in identifying work hours specifically and accounting to the same.

Parkinson's (1957) law is applicable to household work also. "Work expands to fill in the time and space available". On days of external pressure and time constraints work gets performed quickly while on days of less demand, work is dragged over a longer time. Variations in work time from day to day becomes routine and so a day's time-use of a family may not be a dependable guide for establishing time norms of a group.

(2) Low estimate of value of time and lack of standards:

Gilbert (1944) highlighted among the traits common to Indian people,

. . . a low estimate of the value of time which leads to unpunctuality and infinite patience
 . . . a tendency toward . . . slipshod methods of doing things rather than thorough procedures (p.19).

Owing to the variations in the standards of work performed and expected in each family, the time-use on the work varies considerably.

- (3) Poor clock time concept : According to Fraisse (1963) our quantitative estimates of time in terms of minutes and hours becomes possible only after long training and never becomes perfect because minutes and hours have no tangible reality. In a culture paced by the clock, it is comparatively easier. But, if reliance is based much on a natural clock such as shadows or change in light and internal clocks of hunger or the need for rest, the time estimation of tasks by workers becomes difficult. Observations reveal that reliance on clock timings is less in rural areas especially among homemakers.
- (4) Diversified character of household work:
Intermittency of the actions required on certain tasks, interruptions due to situational factors and performance of more than one task at a time (dovetailing) are some of the very important characteristics of household work that influence valuing of its time cost. Presence of both active and inactive work periods also poses problems in accounting the time demands of certain tasks.

Variables Associated with Time-Use in Household Work

Most of the studies have reported variables associated with the homemaker's time-use on household

work and not to the total household work. But based on the fact that the homemakers contribute to around three fourths of the total time spent in household work, the variables associated with their time-use on household work can be taken for granted as having association with time-use on total household work.

The variables have been grouped into (1) family, (2) situational and (3) worker variables.

1. Family variables : Comprise of socio-economic and demographic variables.

- (a) Rural-urban residence: The studies conducted by the Bureau of Home Economics (1920) and Weigand (1954) indicated that the rural homemakers were spending more time on household work compared to their urban counterparts.
- (b) Size of family : Size of family as a variable was linked to time-use of homemakers on home-making in a number of studies. (Bureau of Home Economics, 1920; Weigand, 1954; Cowles and Deitz, 1956; Maceda, 1958; Suneson, 1961, Saraswathi, 1962; Prafullakumari, 1963; Hall and Schroedder, 1970 and Sandhu, 1972). Increase in time-use, specially on food preparation, clearing away and care of family has been reported with increase in family size by Cowles and Deitz (1956) Maceda (1958) and Prafullakumari (1963).

- (c) Caste: According to Desai (1978) caste differences determine the differences in modes of domestic and social life, types of houses and cultural patterns of the people which are found in the rural area.
- (d) Age and number of children in the family: Studies done by Bailey (1960) Saraswathi (1962) Prafullakumari, (1963) Alcaro, (1967) and Walker (1969) indicated a decrease in time-use on household work as age of the youngest child increased. There is unanimous agreement over its impact on care of family.

The work units evolved by Alcaro (1967) for time-use of Indiana families on care of children revealed that in a one child family, a child under 2 years took 90 minutes, 2-5 years 60 minutes and 11-17 years 15 minutes per day. Walker (1969) reported a decrease in time-use of families on household work according to increase in the age of the youngest child, irrespective of other variables.

Presence of children in the household caused differences in household work load. Hall and Schroeder, (1970) and Saraswathi (1962) reported an increase in time spent in child care with the increase in number of children under 8 years.

According to Prafullakumari (1963) the increase is based on the number of sons under 18 years of age from 1-4. Chauhan (1981) reported significant decrease in time spent on child care as the youngest child in the family reached above 12 years.

Maceda (1958) reported a decrease in time spent on care of family members as the family moved from one stage of life cycle to another as with children growing, the demand on their personal care decreased.

- (e) Income: Chauhan's (1981) findings indicated a significant association of time-use of homemakers on food related tasks and care of clothing with family income.
- (f) Family occupation : Sandhu's (1972) study among the rural households of Ludhiana indicated differences in time-use of homemakers on household work according to differences in the family occupation.
- (g) Type of family : Time-use of homemakers of nuclear and joint families differed (Sandhu, 1972). In nuclear families, the homemakers spent on household work, on an average, 37.9 hours as against 41.5 hours in joint families for 4 days.
- (h) One parent - versus two parent families : Lysterly (1966) compared time demands of families with mother as head of the family with pre-school and (or) elementary school children to the time demands of two parent

families with children of similar age. She reported less time-use in one parent family on food preparation and after meal clean-up, house care, clothing care, management and marketing but more on child care.

2. Situational Variables: Comprise of factors associated with the work environment.

- (a) Housing and equipment : Cowles and Dietz (1952) reported a higher time-use by homemaker living in two storey buildings compared to those living in single storeyed buildings. Both Hall and Schroeder (1970) and Morgan et al. (1966) found increase in size of dwelling linked with increase in the household work week.

Presence of equipment like dish washer, location of childrens play areas and arrangement of kitchen and laundry were also reported by Hall and Schroeder (1970) as having impact on time-use in household work. According to Oakley (1974) domestic technology affects only particular tasks but not the job of household work as a whole.

- (b) Presence of pet animals : Hall and Schroeder (1970)

reported presence of cat or a dog in the home as increasing the work load of a homemaker.

- (c) Day to day differences : Time spent in household work differed for week days and holidays for employed homemakers (Maceda, 1958). The day to day differences were significant at 1 percent level for time used in food preparation, care of clothes and shopping in Sandhu's (1972)

study among rural households.

(d)Meal type and related factors : Rajakannu(1971) analysed the job content and time cost of cooking breakfast and lunch in selected families and found that the time cost of meal prepared, ^{varied by} quantity cooked, whether vegetarian or non-vegetarian dishes, the type of fuel used and the type of utensils used for cooking whether aluminium, brass or steel.

3. Worker variables : Factors associated with the workers are grouped under this category. As homemaker is the main worker as far as household work management is concerned, her characteristics are given weightage in all studies.

(a)Age of the homemaker: Cowles and Dietz (1956);Weigand (1954) Hall and Schroeder (1970); Sandhu (1972) and Chauhan (1981) reported association of time-use of homemakers with her age. Dietz (1953) reported longest work day for young homemakers below 35 years of age and shortest for those above 50 years. Walker's study (1970) on the other hand showed that time-use on household work was low in families with homemakers below 25 years of age.

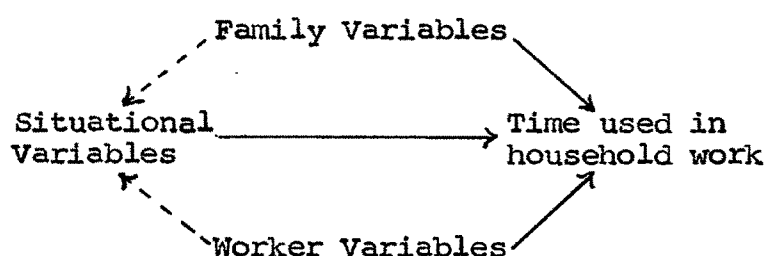
Sandhu (1972) reported an increase in time-use on household work until 59 years of age and then onward a decrease. Chauhan (1981) reported significant decrease in time-use of homemakers on food related tasks, care of

family members and care of clothing as the homemaker reached 40 years plus. Thus the youngest and oldest homemakers had shortest work week.

- (b) Employment status and hours of employed work : were reported as major variables influencing time-use of households on household work by Walker (1970). Many others like Weigand (1954); Saraswathi (1962), Sandhu (1972) and Walker and Gauger (1973) reported association of time-use of homemakers on household work with the employment and hours of employment of the homemaker. Full-time homemakers spent more time on homemaking compared to employed homemakers. The longer the hours of paid employment, the less was the time spent on homemaking tasks. (Walker, 1969).
- (c) Attitude towards work : Williams (1968) reported that there was no steady progression from greater to less time or vice-versa according to attitude. It varied from task to task. Maloch's (1963) study of most and least liked tasks indicated a possible linkage of the two variables.
- (d) Handicapped homemaker : Manning (1968) found that the disabled homemakers spent 2.7 hours less but received 6.7 hours more help.

Based on the variables discussed, it can be concluded that time norms of household work will vary

according to several independent variables associated with the work management. The association of the factors with time-use on household work is shown diagrammatically as follows :



The bold lines indicate strong association while the dotted lines indicate a moderate level of association. These factors lengthen or shorten time-use on household work and so have to be controlled through proper stratification of the population while establishing time norms of the work.

Because most of the earlier studies conducted in the U.S.A. had revealed that the time spent in household work was influenced greatly by a number of variables, Manning (1973) and Gage (1975) stratified their population and further restricted the choice of population to selected types of families, as husband-wife families, single parent families, two parent families and the like. Many of the variables could be represented only through random choice of the sample.

Conclusion

The time-use data, being regarded as a "parameter of human behaviour", aids interested workers to "fix the mode of action that is particularly appropriate to circumstances" so as to make effective improvements in the existing mode of behaviour. (Moore, 1963, pp.6-7). This might be of greater value when made available on day to day tasks like household work that takes away more than one third to one half of a day's time per household.