CHAPTER V

SUMMARY OF FINDINGS AND CONCLUSION

The present study aimed at developing a methodology for establishing time norms of household work of rural families. Two methods - interview and observation were used for collecting time-use data on household work and a third method - simulation was used for one of the tasks - food preparation. The methods were compared and evaluated in terms of:-

(1) adequacy of the time-use data provided in terms of:-
   (a) level of specificity
   (b) comprehensiveness attanined and
   (c) dependability and
(2) feasibility of the technique for administration to a large sample.

The first method-interview revealed that the household work of rural families consisted of food preparation, fetching water for domestic use, care of utensils and equipment, care of house, care of clothing, physical care of family members, shopping and collection of firewood. Of these tasks, care of clothing alone was not attended by a majority of the households.

Food preparation was the most time consuming task. On an average, it took 23.9 hours a week i.e. 39.05 percent of the total household work duration. The dietary pattern of the families was simple and comprised of one cereal preparation - mostly in boiled form and one or two side dishes. The cereals (millets) in majority of the cases needed processing before cooking by hand pounding or grinding in a stone mortar and was a time consuming task. The time spent in food preparation varied significantly for families according to their type (nuclear/extended), income and occupational status. Complexity of meal preparation was the chief determinant of time-use in meal preparation.

An average time-use of 6.9 hours a week i.e. 11.27 percent of the household work week was reported for the daily task of fetching water. For domestic use, water was collected mainly by drawing it from wells. Source of water supply (well or tap), its nearness to the house and the quantity of water collected daily were the variables influencing time used in this task.

Cleaning of utensils used for cooking, eating and the like was done either once or twice daily in all families. Cleaning of pooja room equipment, water tubs and lamps and cowdung coating of baskets and winnowing pans were the common weekly tasks under care of utensils.

The families spent, on an average, 3.0 hours a week i.e. 4.90 percent of the household work week on this task.

Care of house, a regularly performed task comprised daily sweeping of rooms and yards and weekly mopping and cowdung coating of the floor and hearth. The time spent in this task was estimated to be 5.5 hours per family i.e. 8.99 percent of the household work week. Meantime used on this task varied with the type and size of the house.

The only task attended by families for caring for their clothing was its regular washing. More than one-half of the families did not perform this task regularly. Hence the task consumed the lowest proportion of time. The average time-use of a family on this task was 0.78 hours a week i.e. 1.47 percent of the total household work week.

On an average, a family spent 14.4 hours a week i.e. 23.53 percent of the total work duration on physical care of family members. The task comprised two subtasks - special care of children and care of family members in general. Under the latter were included component tasks like serving meals to the members of the family, carrying food to the work place and keeping water ready for bathing and washing.

The mean time-use was significantly different for families of different income group, type, size and composition.

Shopping for weekly purchases was a regular task for most of the households. The market day was set aside for this task. In one-fifth of the households, the task was performed by the male members. No sign of record keeping or budget planning could be traced out from any family. The task - shopping consumed, on an average, 2.5 hours a week i.e. 4.09 percent of the total household work time of a family.

Firewood picking was another typical task of this group. Children were widely engaged in this task and housewives used their free time. The task consumed, on an average, 4.1 hours of a family i.e. 6.70 percent of the total household work duration.

The total household work week of a family ranged from 30.5 hours to 114.5 hours with a mean of 60.83 hours. The differences in mean time-use were found to be significant for families of different types, sizes and income.

The second method-observation of tasks performed in families revealed that the task components of household work were the same as that elicited by recall while interviewing.

As against the self report in which the majority indicated of not sparing time for daily home-washing of clothes, the observation revealed that a good majority of the families were attending to this task daily or weekly.

The only household task attended to by the menfolk in one-half of the families was shopping. Girls above ten years were the main helpers in all household tasks. Even in households with two or more adult women members, the household work was allotted to one woman - the housewife. The household work was thus considered as a one-worker task.

The hours of household work were found to be distributed mainly between 6.a.m. and 8.30 a.m. and also between 5.30 p.m. and 8.00 p.m. The morning tasks were organised around the occupational schedule of the members of the family, while the evening schedule was fixed around the night meal timing.

The time spent by a family on food preparation ranged from 7.7 to 37.8 hours a week with an average of 23.3 hours. Average time spent in this task was significantly different for nuclear and extended families. The situational variables like complexity of the meals prepared and the frequency of meal preparation were proved to be the main determinants of time-use in the task.

The households spent, on an average 4.7 hours a week for fetching water for daily use. This was estimated to be 8.9 percent of the total household work week of a family. Mean time-use in this task differed significantly for families of different types and sizes. Amount of water consumed daily was the variable influencing time used in this task.

On care of utensils, the families spent on an average 3.4 hours. a week i.e. 6.5 percent of the household work duration. Number of utensils washed daily was the main determinant of time used in the task. Family type, occupation and income were linked with time-use on the task.

The time spent in care of house ranged from 1.9 to 7.1 hours of a family with an average of 4.4 hours i.e. 8.2 percent of the household work week. The mean time spent in care of house varied significantly for families according to their socio-economic status and the quality of housing characterised by its type and the floor area.

Physical care of family members was the second most time consuming job and consumed on an average, 10.7 hours a week irrespective of the family size and composition. The time spent by families on this task ranged from 4.2 hours to 28.0 hours a week. Around

forty two percent of the total household work duration was apportioned to this task.

On care of clothing, the families spent 2.0 hours a week i.e. 3.7 percent of the total household work duration. The time spent in this task was not affected by any of the family variables.

The families spent 2.5 hours a week on shopping. The time spent in this task differed significantly with in the group by their family occupation.

The total time spent on household work ranged between 35.0 and 84.6 hours with an average of 53.4 hours a week. No family or worker variable was found to be a determinant of the time-use on household work.

Simulation, the third method revealed that the time spent in preparing the four typical meals of the group differed. To prepare a type I meal of plain boiled rice, bajra 'kali'/jowar 'kali', 1.2 hours were needed. The time demanded varied workerwise and cereal-wise.

To prepare a type II meal consisting of a side dish - a vegetable preparation added to the type-I meal, 1.8 hours were needed. Difference in the raw ingredients and the worker's organisation and

pattern of performance of each sub-unit of the task brought in the time variations in the observations.

To prepare a type III meal consisting of boiled rice and two side dishes, an average of 1.9 hours were required. The time spent by the workers ranged from 1.6 to 2.2 hours on account of differences in the procedure followed for the preparation of the side dishes and the organisation and style of performance of tasks by the workers.

For preparing iddli/dosai with a side dish, a considerably longer time was needed. The time estimated by the observations ranged from 2.5 to 2.8 hours with an average of 2.7 hours. The strenuous and lengthy grinding process (pre-preparational task) and the slow cooking procedure together attributed to a longer time-use. Worker-wise variations were more than those that were noticed for the other types of meals.

The food preparation task was found to be comprised various elementary tasks - pre-preparation (collecting the requirements, cleaning of raw ingredients, chopping, pounding, winnowing, sorting, grinding and the like), cooking (boiling, roasting, grinding, seasoning and the like) and post-cooking tasks (cleaning and rearrangement of the work area).

Cooking demanded a person's full time attention, while being performed on account of the constant need for feeding the cooking range and defects in kitchen layout. The implements used for grinding and pounding - the grinding stone and the 'ural' were placed in the courtyard, away from the cooking area. Workers accustomed to cooking on single cooking point, used only one, while the others used both the cooking points provided in the simulated kitchen set up. This brought in individual differences in time used in preparing each type of meal.

Evaluation of the Techniques

The comparison of the time norms - the mean hours spent by a family, established by the first two techniques revealed that the estimates differed significantly at .01 level for tasks like fetching water for domestic use, care of house, physical care of family members, care of clothing and collection of firewood and the household work in total. For food preparation, care of utensils and marketing, the differences in means were not significant. Only for one task, the mean time-use estimated by observation was higher than that recalled and reported by the homemakers. Thus, it was found that the respondents

had a tendency to over estimate the time spent in household tasks when they were asked to recall and report.

On review of the methodological aspects of the two techniques, it could be confirmed that the differences in the two time estimates could be partly due to the random fluctuations in the two samples, day to day differences in the task timings and inaccuracies in the self-estimate of time-use in different household tasks when the respondents were made to recall and report.

Inaccuracies in the self-estimate of time used in household tasks were evident because:

(a) the time signals suggested to the homamakers as time cues were of practical use only for less fragmented tasks that took a fairly long duration. For tasks like physical care of family members that lacks in a continuum and for those that need a considerably low time, like care of house, the time signals were of no practical use.

(b) intentional reporting of higher time-use for tasks for which facilities available to the families were felt inadequate was common. For example, in fetching water for domesting use,

a higher time-use was reported intentionally by the homemakers who felt the need for acquiring tap facility in their premises.

(c) some of the workers ignored certain tasks when the time spent on the same was considerably low. This probably contributed to variations in the time-use data collected by the two methods on care of clothing.

(d) some of the task components of household work when performed with a different purpose still formed an integral part of the other activities performed in the house. As for example washing one's own clothing was a part of personal care while washing family clothing including the other member's clothing was a household task.

(e) some of the household tasks or task components were not treated as 'work' in the real sense. For example, the components of physical care of family members were not treated as work by a few house-wives.

Observation of task performance in households was a highly time consuming job and demanded on an average 18 hours of contact with a family for collecting two days' time-use data while interview demanded only 1.8 hours of contact with a family. So the cost of data collection may increase considerably if observation is chosen as the method for establishing time norms of household work.

The population mean interval projected from the two sample means differed. With interview method, a closer interval could be estimated while with the second method - observation, a broader interval alone could be projected.

Further, observation of two days' task performance alone was not adequate for providing full data on time used in household work. So part of the data had to be collected through recall by interviewing. Hence dependability of the estimates was partly brought down to the level of the interview method.

Even two days' observation hindered the privacy of the families and distorted partly the behaviour of the respondents in the sample.

Objections were raised in some families for a very keen observation of tasks like food preparation and care of family members fearing casting of 'evil eye' by an onlooker.

Added to these were the problems associated with poor housing condition like lack of space and light in the kitchen, congested work areas and the like. So the level at which specificity of time-use data could be collected through observation was brought down to the level of the first method.

Conclusion

Interview is the most feasible technique for gathering time-use data on household work and its component tasks from a large population. This method, if supplemented with other techniques would aid in establishing reliable and valid time norms of household work. The time data in this case would be available only at a broad level.

Observation is not a feasible technique for establishing time norms of household work but the method as followed in the present study is adequate as a supportive technique for improving the validity and reliability of the data gathered through interview.

As simulation is dependent on data collected from large population through other techniques for finalising upon the typicality of the task, the method cannot be recommended for establishing the time norms of even subtasks of household work. Further, as all tasks cannot be simulated, a comprehensive time data on household work cannot be elicited. The method provides time-use data at the level of elements of a a task and so can be suggested for establishing time norms useful for work designing and standardisation for better performance. The method needs base-line

data gathered through a survey for replicating the task inorder to establish the time norms of a group.

As none of the socio-economic, demographic and personal variables examined in the study indicated consistently a very significant association with time-use in household work, in both the surveys, no specific stratification of the population is necessary. At the same time,a highly representative sample is indispensable for establishing the norms of a group. Weighted stratified random sampling done by socio-economic status would aid in avoiding omission of even minority groups by chance.

Thus observation of task performance in two or three houses in the study area followed by simulation of the possible tasks in a laboratory should form an integral part of the pilot work of the interview technique for improving the dependability of the time-use data. This would aid the investigators to know what to enquire, how to enquire, how much of the data to be gathered and further in which aspect special attention is needed for gathering in-depth information for estimating time-use of families on household work. Thereby the contact time with a family can also be minimised.

The respondents' interest in reporting the data can be improved considerably through rapport sustainance and choice of additional recording instruments like the tape recorder. Use of graphical time recording procedure reduces time needed for data recording and make the same clear and informative.

Making use of documentary data on certain aspects like family particulars is possible from the census data. Observable and documentary data should be gathered prior to interviewing primarily for making the interview short, less taxing and a stereo typed procedure.

Contributions of this Study

The study contributes to the discipline of Home Management by providing information for the methodological improvement of time-use research at a regional and national level in household work. It throws light on the difficulties in gathering valid and reliable data on this work especially when the population to be covered is not guided by clock time. Further it reveals the limitations and scope of each of the techniques used in time-use research in Home Management in a model form.

Information lacking about the pattern and extent of time-use of rural families on household work is brought out for a small population.

The findings provide base-line data for extension education in the study area on household work management as there is need and scope for the same. Work organisation and adoption of feasible technology for better task performance would save their resources. Further, the tasks can be standardised by selecting the best possible work procedure facilitated through improvement of work, workers and work environment.

Recommendations for Further Research

Norms of household tasks are to be established at regional level to facilitate comparison of household work and determine the value of household work in terms of time and money. When the holistic time-use data of our population is made available at a national level, the norms established on basis of temporal intervals can be referred as "Time Price Index", an index indicating the value of household work at intervals(Walker and Sanik, 1978).

Researches are needed for measuring with precision the fragmented tasks lacking in a continuum like the physical care of family members. As the task gets overlapped with other tasks performed at home, difficulties arise in even defining this task.

Experimental researches are needed for standardising the tasks performed by the families, especially the ones consuming major time.

Researches are being encouraged in the area of Social Forestry among tribals. There is scope for such researches in the rural areas too as the families spend a considerable amount of time in firewood picking.

It is high time to equip rural homes with simple gadgets. The efficiency of the age old mechanical gadgets like the different types of stone mortars used in typical rural families needs to be examined with reference to time and energy consumption. Further better cooking ranges need to be introduced and their acceptability be tested. So a follow-up work for improvement of work and work environment of the rural homes along with attempts for developing a positive attitude among the workers for a change in their work habits is recommended.