CHAPTER II

REVIEW OF LITERATURE

This chapter presents the review of literature related to rural and tribal women's time use pattern, economic role, status and household development in order to gain insight on the methodological aspects and results. The literature and reports of researches conducted in India and outside India, relevant to the present study have been grouped under the following sub-heads :

1. Time Use Pattern of Rural and Tribal Women in Household, Agricultural and Allied Activities.
2. Women's Economic Role Through Market and Non-market Work.
3. Methodologies Adopted for Estimation of Economic Role of Women Through Non-market Work.
4. Studies Related to Status of Rural and Tribal Women.
5. Relevant Literature on Household Development.

1. Time Use Pattern of Rural and Tribal Women in Household, Agricultural and Allied Activities

1a. Time Use Pattern of Women in Household Tasks

The sub tasks included by various researchers (Grewal, 1980; Sandhu, 1985; Saxena and Bhatnagar, 1985; Kaur, 1986; Singh and Gandhi, 1987; Singal, 1989; Gill and Miglani, 1989; Sharma, 1991) under household tasks were : meal preparation, care of clothes, care of house, care of children and family members, shopping,

animal care and miscellaneous activities. Fetching of water was included in several studies (Kamalamma, 1981; Kaur, 1986; Singh and Gandhi, 1987; Singal, 1989; Sharma, 1991). Fetching of firewood fuel was considered as an additional household task in a few studies (Kamalamma, 1981; Singh and Gandhi, 1987; Singal, 1989; Sharma 1991).

Review of literature revealed that time utilization pattern showed variation in time-use by respondents in performing household work. The average time spent on household work ranged from 5.03 hrs. to 11.56 hrs. per day. (Grewal, 1980; Kamalamma, 1981; Kaur, 1982; Aujla et al., 1984; Saxena and Bhatnagar, 1985; Seetharam, 1992). In variance with this opinion, a few research studies have shown considerable amount of time spent i.e., 13.27 hrs. to 18.84 hrs. in performing household tasks including leisure time activities (Sandhu, 1985; Rana, 1986; Singh and Gandhi, 1987; Gill and Miglani, 1989; Sharma, 1991).

Gill and Miglani (1989) studied utilization of time in household work by rural homemakers and found that women from farm families spent 18.84 hrs., employees, 16.39 hrs. and labourers 12.03 hrs. on all household tasks. Saxena and Bhatnagar, (1985) investigated weekly, monthly and seasonal time-utilization by tribal and non-tribal women in Rajasthan and a significant difference was observed.

Analysis of time used by respondents in performing various household tasks showed that meal preparation took maximum amount of time. It ranged from 2.40 to 5.13 hrs. per day. It was

followed by time spent in animal care which ranged between 0.11 hrs. to 2.41 hrs. per day. Care of house was a regular task performed by rural homemakers and the time spent in performing this task ranged from 0.20 mins. to 2 hrs. and 20 mins. Fetching of water consumed 26 mins. to 5 hrs. on an average per day. It was further observed that time spent on fetching of fuel ranged from 20 mins. to 5 hrs. (Grewal, 1980; Kamalamma, 1981; Sandhu, 1985; Saxena and Bhatnagar, 1985; Kaur, 1986; Singh et al., 1987; Singal 1989; Gill and Miglani, 1989; Sharma, 1991; Kulkarni and Murli, 1991). The physical care of children and other family members required 0.7 mins. to 2.05 hrs. However, it was reported by Aujla et al., 1984; Saxena and Bhatnagar, 1985; Singh and Gandhi, 1987; Sharma, 1991; that childcare was the least done task by the homemakers.

Animal husbandry is considered as an extension of household activities by the rural women. Variation was observed in time spent per day in this task by rural women; 1.8 hrs. (Kaur, 1982); 4 hrs. 52 mins. (Aujla et al., 1984); 2 hrs. 55 mins., (Gill and Miglani, 1989) 5 hrs., (Sharma, 1991).

Sandhu (1985) reported that among household tasks meal preparation was considered to be a major activity in respect of time spent on it followed by house cleaning, children and adult care, animal care etc. Manning (1976) stated that rural non farm families in U.S.A. spent 54. 7 hrs. and farm families 55.4 hrs. per week on house hold work. Meal preparation took 10.2 hrs., dishwashing 7.2 hrs., special food preparation 14 hrs., regular house care 7.9 hrs. and special care of house took 3.1 hrs. per

week. Care of children averaged 6.8 hrs., while care of adults 0.4 hrs. per week. Financial planning and record keeping took 0.6 hrs. while shopping took 4.6 hrs.

Carr (1980) revealed that in Swaziland and Zambia women's work load during off peak season is only slightly less demanding than in lean season. When the number of hrs. spent in the fields is lower, the number of hrs. spent in other activities such as collecting water and firewood, processing food, preparing food and caring of children increases. In Kenya, it was found that, women spent almost twice as many hours on water and firewood collecting during dry seasons as they do during wet season. Hemmings (1981) found that women devoted the greater part of their work day in the rainy seasons to farm activities. They spent at least 60 per cent of their work day on processing food and fetching water in dry season.

Activities that had high demand on homemakers' time in rural areas, were regular meal preparation, laundering clothes, livestock care and after meal clean up (Grewal, 1980). Farming families spent less time on care of children during sowing of seeds and harvesting period. Non farming families spent more time for personal care and leisure activities in comparison to farming families (Saini, 1983).

Saikia's study (1986) of rural women in Assam revealed that 7.63 hrs. and 9.92 hrs. were spent on household and economic activities by non-tribal and tribal women. The non tribal Assamese women spent 4.29 hrs. and tribal women spent 3.91 hrs.

in household tasks excluding economic activities. In the tribal villages fetching of water and collection of firewood were exclusively done by women. Women were usually overburdened with monotonous household chores and performed all tedious and endless jobs without grumbling as they considered it their normal duty.

Saxena and Bhatnagar (1985) found that during peak season tribal women spent 14.66 hrs. on daily activities out of which 8.24 hrs. were spent on agricultural work, 6.42 hrs. on home activities, whereas non-tribal women spent 8.14 hrs. on farm activities and 7.61 hrs. on home activities totalling 15.75 hrs. per day. In slack season tribal women spent 4.17 hrs. on farm activities and 10.69 hrs. on home activities making a total of 14.86 hrs. Non-tribal women devoted 4.34 hrs. on farm activities and 12.54 hrs. on home activities with a total of 16.88 hrs. per day. Out of all the tasks food preparation consumed maximum time during both the seasons. Kaur (1986) found that farm housewives spent 6.23 and 6.26 hrs. in meal preparation, 0.66 and 0.99 hrs. in meal service, and 1.85 and 1.62 hrs. in dish washing in winter and summer season respectively. Similarly, house cleaning and care of clothing on an average took 1.34 to 1.64 hrs. and 1.29 to 1.88 hrs. in both the seasons. The work leisure ratio of farm housewives was found to be 1:10 in winter and 1:11 in summer season.

Singh and Gandhi (1987) found that on an average rural homemakers spent 15 hrs. 46 mins. per day on various household activities. The maximum time was spent on meal preparation,

personal care, fetching water and cleaning of house. The major time consuming activity was found to be cooking (5 hrs. and 3 mins.). Personal care and care of children was found almost ignored in rural areas (Kaur 1990).

Sharma (1991) investigated into time accountability pattern of farm households and found that maximum time i.e., 5 hrs. and 53 mins. was spent on cattle management including fetching of fodder and care. The time spent on personal grooming was 31 mins., care of children, 26 mins., care of house, 48 mins., fetching water, 1 hr. and 6 mins., food preparation, 5 hrs. and 23 mins., care of clothes, 40 mins., rest, 2 hrs. and 30 mins., sleep 6 hrs. and 44 mins.

1a. (i) Factors Affecting Time Use Pattern

Factors affecting time use pattern in household tasks were identified in various research studies. It was reported that the age of full time and employed homemakers was found to be negatively correlated with the use of time. Size of family affected the time spent on sleeping and taking rest, personal care, management and marketing, dish washing, house cleaning and care of family (Sarswati 1962). Manning (1976) found that size of family and liking of task affected the time spent on homemaking activities. Age of homemakers, family type and family size were closely related to total time used for all household activities (Grewal, 1980).

Kaur (1982) revealed that size and type of family, income and main family occupation affected the use of time while

education of woman had no effect on use of time. George and Bafna (1983) observed that small family size, paid help, interest in household work, time and labour saving devices, help from other family members and speed of work were reported by homemakers as aids in completing their work. Sandhu (1985) found that besides age of woman, family type and size, education and family income too affected the time spent on all different household tasks. Size of land holding and use of labour saving devices were the factors included by Kaur, 1986; while observing the use of time in household activities. Devi and Reddy, 1984; scrutinized data to find out significant differences, if any, in time used by rural women belonging to different socio-economic categories. No significant difference was noticed in time utilization pattern between three socio-economic categories regarding food preparation and house keeping.

Age as a variable was found to be positively affecting the time spent on food and kitchen management, fetching fodder and negatively affecting the time spent on personal grooming, care of children, care of house, fetching water, care of clothes and care of animals. Family size was found to be positively affecting the time spent on personal grooming, care of house, food preparation and negatively affecting the time spent on care of children, fetching water, care of clothes, care of animals and fetching fodder (Sharma, 1991).

1b. Participation of Women in Agricultural Tasks

A large number of farm women are engaged in farming operations either as cultivators or helpers to cultivators or agricultural labourers. The contribution of farm women in agriculture is roughly estimated to be 50 to 60 per cent in our country. Work participation rate for females is higher in rural than in urban areas. In Himachal Pradesh work participation rate in rural areas is 42.96. About 79 per cent of economically active women are engaged in agricultural production and allied activities.

1b. (i) Extent of Participation of Women in Agricultural Tasks

Literature showed that rural and tribal women participated in most of the agricultural operations like land preparation, sowing, raising of nursery, uprooting of seedlings, transplanting, weeding and hoeing, harvesting, threshing, preparation of compost, irrigation, fertilizer application, winnowing, transportation, storage and sale of produce. (Kaur, 1982; Munjal, 1984; Kaur, 1986; Singh and Sharma, 1988; Sangwan et al., 1990; Tantray, 1991; Sharma, 1991; Seetharam, 1992).

Research studies showed variation in level of participation of women in various agricultural operations. Munjal (1984) and Sangwan et al., (1990) observed that women from all categories had the highest level of participation in storage activity. Tantray (1991) observed 100 per cent participation of women in harvesting and picking of crops. Participation of women was

generally found to be low in irrigation, chemical weed control, fertilizer application and sale of produce (Munjal, 1984; Singh and Sharma, 1988).

Nil participation of women was reported by Singh and Sharma 1988; Chauhan and Oberoi, 1990 in ploughing the fields. In general women provide the major share of labour for transplanting (80-90 per cent), weeding (75 to 80 per cent), harvesting (80 per cent) and threshing (65 per cent). They do virtually all the husking and play major role in seed selection and storage (Reddy, 1988).

Findings of the studies by Menon (1976), Kaur (1982), Singh and Sharma (1988), Chauhan and Oberoi (1990) indicated that involvement of women in agricultural activities ranges between 25 to 80 per cent. Boserup (1970) described the agricultural system of southern Ghana as a female farming system. Although the division of labour in traditional farming is such that men do the initial difficult task of clearing the land and felling trees, the women shoulder time consuming farm work such as planting, subsequent weeding, harvesting and carrying of produce to home from farms. In the Northern half, clearing the land, weeding and harvesting are all done by men and women do the planting.

Women participated more in agricultural operations than their counter parts-men. Kumar and Singh (1983) reported that women were employed for 51 days against 19 days by men. Sikka and Sawrup (1988) found that agriculture and animal husbandry in hill regions was mainly done by women only and they put more working

hours in farm activity than men. Similarly, Gautam and Meenakashi (1992) concluded that proportion of women's contribution in agricultural and farm activities in hilly area of Himachal Pradesh was more as compared to men.

1b. (ii) Role of Women in Agricultural Tasks

Chakarvarti (1975) stated that women worked as helpers of men or independently on the farms in rural areas. It was observed that they were generally more efficient than men while carrying out most of the farm operations. Dixon (1982) observed that ploughing and heavy irrigation were men's tasks, sowing was done by men or women or shared, weeding and transplanting were women's tasks; harvesting was frequently shared, and most of the post harvest operations were performed by women in South Asia. Kaur (1982) revealed that most frequently participated activity by women was related to grain storage. Participation in account keeping was the lowest.

According to Devi and Reddy (1984) post harvest role emerged at the first rank followed by pre-sowing and sowing, allied agriculture and inter-cultivation. Guleria and Agnihotri (1985) concluded that although the female participation in the total working force was higher, yet the monetary contribution of females in farm income was lower than that of male labourers due to low farm wages of rural female workers in the study area. Singh and Bhatti (1985) revealed that on the whole, women's share in total farm work was 62 per cent on marginal farms and 59 per cent on medium farms in hilly areas of Himachal Pradesh.

Saikia (1986) highlighted that rural and tribal women in Assam worked in sorting of seeds, uprooting of seedlings, transplanting, threshing and harvesting. It was further revealed that women spent more time in transplanting and harvesting. Tribal women participated in hoeing, weeding and carrying crops to home from the fields. Non-tribal women did not perform all these activities which were usually done by male members. Upper caste women usually did not participate in agricultural operations except supervising labourers. Husking was done by most of the rural women. The allied agricultural activities like kitchen gardening, keeping poultry, goats etc., also were included in daily routine and women spent on an average 2 hours per day in these tasks.

Dak and Sharma (1988) noted dominating role of women in agricultural sector such as preparation of farm manure, harvesting of crops, storage and processing of farm produce. Their supportive role was evident in transplantation, fertilizer application, threshing of crops and transportation of farm produce. Deshpande et al., (1988) reported that 75 per cent of farm work was done by tribal women of Madhya Pradesh.

Sikka and Swarup (1988) studied hill farming of Himachal Pradesh and revealed that on an average women were found to put more working hours on the farm as compared to their male counterparts. The operations like interculture, harvesting, threshing and winnowing were women based. The contribution of women to the total farm income was assessed to be more than 50

per cent. Sangwan et al., (1990) estimated that farm women contributed on an average Rs. 0.88 per day in slack season and Rs. 5.33 per day in peak season in farm activities. Chauhan and Oberoi (1990) studied role of 'gaddi' tribal women in agricultural operations and reported that on the whole, female labour accounted for 42 per cent of the total labour utilized on farms.

Chinnawat et al., (1991) outlined differential roles of men and women in farming system of Amphoe Pharo. Women participated almost equally as men in labour exchange, planting and harvesting of most crops. Women were engaged less than men in land preparation for crop production. On the whole, women worked fewer hours than men in crop production. Principal female farmers spent on an average 35 hrs. per week on house work compared to 11 hrs. per week spent by their male counterparts. Latada (1992) investigated the role of Philippines women played in corn farming and found that as they went through 84.84 hrs. of farm work per cropping, they maintained their regular household chores at a daily average of 12.58 hrs. Despite their displayed capacity, their technical knowledge, project skills and access to resources remained low.

1b.(iii) Time Spent by Women in Agricultural Tasks

Considerable amount of time is spent by women in carrying out various agricultural operations during lean and peak season. Mitchnik (1972) reported that women in Zaire spent between 180 and 312 days in the field and worked 5-6 days per week. During

hoeing and weeding, their time in fields averages between 4 to 5 hrs. a day. Chakarvarti (1975) found that a female spent 15-17 hrs. in a day, out of which 8 to 9 hrs. were spent on farm, 3-4 hrs. in care of animals, and 3-4 hrs. in attending household chores during peak season.

South African women work longer hours in all farm activities including those requiring muscle power. Percentage of total labour of women in hours compared to men was the highest in processing of food crops followed by storage of crops, transportation of crops from fields, hoeing, weeding, harvesting and marketing (ILO, 1977). Fortman (1982) divided African women's work into 3 major categories-domestic maintenance activities, food crops production and cash crop production. Women did almost all domestic maintenance tasks. They were the major producers of food crops. Besides, women also worked as unpaid labourers on their husbands' cash crops. They were assigned the most tedious tasks such as thinning and weeding. Kaur (1986) reported that time spent in agricultural tasks during lean season was found to vary between 1.18 to 4.17 hrs. and during peak season 7.30 to 9 hrs. per day.

1b. (iv) Factors Affecting Participation of Women in Agricultural Tasks

Mitchnik (1972) elaborated on unequal division of labour in Nepal and Indonesia. The daily workload of rural population according to age and sex showed consistently that in rural areas of both countries women worked longer hours than men in all age

groups. Singh and Singh (1981) concluded that middle aged women participated more in agricultural activities as compared to young and old homemakers. On the other hand, Kaur (1990) found that as the age of homemakers increases participation in agricultural activities decreases. Sharma (1980) and Devi and Reddi (1984) pointed out that low economic category of rural women perceived more work for themselves in farm management than the medium and large economic categories.

Marked variation was observed in the tasks in which women participated according to land size strata. Women from small land holding households participated more and in wider variety of agricultural tasks (Sangwan et al., 1990). However, Saxena and Bhatnagar (1985) found that mean time spent in agricultural activities increases as the size of land holding increases.

Kaur (1982) observed that participation in farm activities was significantly related to employment of women, family income, agricultural mechanisation and educational status of women. Devi (1983) reported that women belonging to small farm holdings, lower caste, low socio-economic status, with less education, with less material possession and having fewer urban contacts participated more in agricultural activities. Gulati (1984) conducted a study in a Kerala village and observed that scheduled caste women carried out physically exhausting field work in which high caste women rarely participated. Kaur (1986) revealed that the participation and time spent in agricultural tasks were negatively related with age, caste, size of land holding, per capita income, socio-economic status of the family and level of

mechanisation. Sen (1988) noted that with the lowering of the economic status of the family, there was increase in the performance of heavy agricultural tasks by women.

Reddy (1988) stated that women labour and management roles in agriculture varied from region to region. In Tamil Nadu men uproot rice seedlings and women transplant, while in Kerala both the operations are primarily performed by women. Similarly, women labour and roles varied considerably according to geographic area, the nature of crops grown and also according to class and caste. Throughout the country the high caste women who are generally from land-owning households do not engage in field work, although they are involved in the post harvest phases within the homestead. Most of the field tasks on such farm holdings, assigned to women are performed by hired female labourers from low caste and scheduled tribes.

Thitiprasocrt et al., (1990) conducted the study in Bangkok and found that women of every age apart from their main activities of household chores participated in farming and vegetable cultivation. Regmi (1992) evaluated women's involvement in ethnic groups of Nepal and reported that labour participation had a negative relationship with age, family income and farming experience irrespective of ethnic group.

On the whole, the major variables found to affect women's time use pattern in performing agricultural work were age of the homemaker, family type, family size, income, caste, land holding size (Munjal, 1984; Jain, 1986).

1c. Participation of Women In Allied Activities

Allied activity denotes the production through household industry by rural and tribal women in their free time as leisure time activities or as routine work. A household industry is defined as an industry conducted by the head of household and/or mainly by the members of the household at home or within premises of the houses where the household live in urban area. Further, the industry should relate to production, processing, serving, repairing or making and selling of goods (Census of India 1971). In India there were 10.37 million (2.17 per cent of total workers) workers engaged in household industry out of which 3.06 million (4.63 per cent of total workers) were women. In Himachal Pradesh there were 33 thousand workers (2.14 per cent of total workers) engaged in household industry out of which 4.8 thousand (0.97 per cent of total workers) were women (Census of India, 1991).

All village industries form a family supporting unit ultimately leading to overall upliftment of rural women. It includes pottery, carpentry, tailoring, processing, and preserving non-edible oil soap, leather goods, cottage and handloom industry. The handloom industry is the largest unorganized sector and constitutes an integral part of rural life of our country.

1c. (i) Participation of Women in Allied Activities

A study was conducted on the Kota sarees of Rajasthan by Bhargava (1977) who reported that majority of weavers considered

that weaving was a family tradition and was handled down from their forefathers. Warping was done by women and sizing by both men and women. The weavers also revealed that it is compulsory for the boys to learn weaving as it is considered hereditary occupation. Ahuja (1978) observed that participation of women in allied economic activity was recognized as a socio-cultural phenomenon.

Wijayaratne et al., (1979) studied income generating activities of Sri Lankan women and found that textile weaving was an important household industry. Seventy one per cent of the people were engaged in textile weaving. Jain et al., (1981) reported that tailoring and garment making is preferred by the majority of the respondents as an income generating activity. Other differential vocations suggested were basket making, match making, doll making, mat-weaving, fish - net making, rope making and dairy farming. Some of the respondents have also suggested spinning, sericulture, coir yarn and poultry.

Kumar and Singh (1983) in a study conducted on preferential choices of rural women for income generating projects, found that most preferred projects were flat-knitting, chalk making, circular knitting and soap making in order of importance by the rural women. Saikia (1984) in her study reported that handloom weaving was a seasonal activity for female agricultural labourers and average man days per female weaver were 45.71 days per annum. She further observed that female weavers were not able to get significant benefit from handloom weaving as a source of

subsidiary income. Due to non-availability of basic facilities like marketing and credit facilities in rural areas; and due to high price of yarns, the weaver could not engage in this household industry for major part of the year.

Yadav (1985) concluded that rural women were keen to take up income generating activities. Dari - making, tailoring and knitting were the most preferred activities. A study by Saikia et al., (1986) on role and status of rural women in Assam indicates their participation in weaving activity. The findings showed that women between 20 - 40 years age group, remained engaged for a considerable number of hours in weaving. Weaving was carried out by all the women folk during off agricultural season in tribal villages. They weave all types of clothing for their family members on looms with traditional designs. It was found that average hours engaged in weaving was 5.74 hrs. in non-tribal villages whereas, in tribal village it was 10.30 hrs. per week.

Singh and Gandhi (1987) studied the time utilization pattern of different socio-economic categories in rural Haryana and observed that leisure time activities of women included spinning, knitting and sewing and they spent 4 hrs. and 24 mins. on an average. Singh et al., (1987) observed that about 28 per cent of time was spent on leisure activities such as rest, spinning, knitting, sewing etc. by rural women.

Date Bah (1988) investigated the important industries where women were involved in developing countries of Africa. Food processing was virtually women's domain, not only for consumption

but for sale also. The process followed was tedious and time consuming in nature. Another important activity was fish smoking on Ghana's coast.

Oberoi et al., (1989) in their study of wool en products on tribal farms revealed that handloom weaving was an important component of the tribal economy and women were the chief architects. The various items prepared by them were 'pattu' and 'gardu' i.e., single and double blanket respectively, 'lahang' (long woolen cloth), 'patti' (woolen cloth for gents coat) 'dora' (long woolen cord) and shawl. Most of the households in the study area had one or two indigenous handlooms in their houses to cater to their own needs for warm clothes. Singal (1989) found that majority of women had 1-4 hrs. free time in a day for participating in income generating activities.

Seetharam (1992) observed that about 54 per cent rural and 26 per cent urban women were engaged in marginal occupation in order to supplement the farming income. Sud (1992) observed that handloom weaving on tribal farms was mainly a female dominated activity. The women accounted for about 80 per cent of the total labour in the preparation of woven products. The overall contribution of 'gaddi' women to the total farm income was worked out to be 27 per cent. The highest contribution was found in handloom (80 per cent), followed by care of farm animals (71 per cent), field crops (63 per cent), fruit crops (28 per cent) and sheep (1.50 per cent).

1c (ii) Training for Allied Activities and Constraints Faced by Women

Tellis - Nayak (1971) stated that there are 'grihini' training programmes in different parts of India which have focussed attention on illiterate young women. These 'grihinis' not only acquire education but also develop skills in raising their income.

Dhamija (1975) presented arguments for using handicrafts as means of increasing the economic participation of women and made recommendations for the successful implementation of such programmes. Wijayaratne et al., (1979) also stated that skill of weaving was learnt through formal participation. Kaur (1982) found that 43.9 per cent of respondents wanted that training related to animal husbandry should be given to women also. Various researchers indicated constraints in participation of women in allied activities. Rao (1973) reported that the reason for low work participation of women may be excessive domestic work, unequal wage rates and rigidity in social norms.

Bhardwaj (1982) revealed that constraints which were severely felt by the majority of the respondents from training centres were unsuitability of training programmes, less labour wages and inadequate marketing facilities. Other constraints were irregularity in payment of labour wages and seasonal problems. Thitiprascort (1990) reported in a study of Bangkok women that most women lack the opportunity to participate in occupational training and development programmes.

1c. (iii) Factors Affecting Participation of Women in Allied Activities

Various factors were identified as determinants of women's non-involvement in allied activity. Abidi (1988) concluded that age, physical fitness, psychological pressures, moral and social support and not biological factors like pregnancy and child birth are determining factors. Seetharam (1992) found that employment of women in allied activity was restricted by the factors like adverse impact of farm technology, inadequate educational and training opportunities, socio-demographic constraints and lack of child care facilities.

1c. (iv) Methodologies Used

The perusal of literature showed that interview-cum-recall technique was most commonly used for data collection on time use pattern (Grewal, 1980; Kaur, 1982; Saxena and Bhatnagar, 1985; Kaur, 1986; Singh and Gandhi, 1987; Singal 1989; Kulkarni and Murli (1991). Observation was next commonly used technique for data collection (Kamalamma, 1981; Munjal, 1984; Aujla et al., 1984; Roy and Saini, 1987). It was further observed that time record sheet was a commonly used technique for gathering data on time use (Bafna, 1979; Sandhu, 1985; Gill and Miglani, 1989; Sharma, 1991). Although this method provides fruitful results but it is not a feasible tool for data collection when the respondents are illiterate.

Thus, the review of literature showed that rural women share abundant responsibility in running the family, maintaining the

household, tending of domestic animals and extending a helping hand in rural artisanship and handicrafts. The time distribution pattern of women in India shows the magnitude of total time spent on work among various activities.

Age, family size, family income, occupation of head of family and homemakers, paid help, use of labour saving devices emerged as significant variables affecting time use pattern of women in India. In studies conducted abroad, age of children and liking of tasks were also considered besides the above-mentioned variables. Moreover, more time was found to be spent in care of children and adults in studies conducted abroad than in India.

It is widely accepted that official statistics particularly in developing countries underestimate both women's participation in labour force and their contribution to output.

2. Women's Economic Role Through Market and Non-market Work

Indepth review of literature was undertaken to find research work done in India and abroad regarding economic role of women through market and non-market work.

2a. Women's Economic Role Through Market Work

2a. (i) Reasons of Participation in Market Work

Majority of women participated in labour force mainly for economic reasons. Rao (1983) revealed that more women belonging to lower income groups than higher income groups were compelled to participate in work in order to supplement the family income.

This is particularly true in the case of rural scheduled castes. Kulkarni and Harode (1990) observed that maximum number of homemakers (70 per cent) took up job to supplement their family income. Employment for raising the standard of living, educating children and independent earnings were views expressed by 66.67 per cent, 33.33 and 33.33 respondents respectively.

2a. (ii) Nature Type and Wage Differentials of Market Work

Employment and income pattern was studied by Kumar et al., (1985) and findings revealed that 66 per cent employed days were devoted to agriculture. In agriculture, female labour participation was highest in harvesting, threshing, winnowing i.e. 26 per cent followed by interculture 19.9 per cent and maintenance of cattle 12.7 per cent. In non-agricultural employment, highest contribution was for spinning and weaving i.e. 14.68 per cent. Earnings by women labourers amounted to Rs. 2,489 out of which about 60.30 per cent was determined from agriculture, 28.44 per cent from non-agriculture, and 11 per cent from other sources.

Wage differentials amongst men and women were observed by various researchers. Boserup (1970) and Muller (1976) reported that women's wages were lower than men's in most but not all agricultural settings. In India, women's daily wages range from 52 to 100 per cent of men's. Boserup (1970) further indicated that women (in Africa) contributed about 44 per cent of the family's gross income. In a sample of Yoruba farmers, only five per cent of women received all their requirements from their husbands as compared to 20 per cent who do not receive anything.

Bhatt (1979) revealed that women earned on an average 75 paise per day, which is very low compared to their basic requirements, while one third of women workers did not earn more than 90 paise per day. The data showed that 86 per cent of the women workers thus earned less than Rs. 50 per month. Hart (1980) observed that women in the peak season earned from 64 to 79 per cent of what men earned per hour, while in slack season, they earned only 35 to 50 per cent.

Similarly Patnaik and Debi (1986) also confirmed that women were paid lower wages than males for the same work done. Female contribution is more significant in household activities for which they were not paid. Most of the contribution made by women in the farm sector also goes unaccounted as they were not directly paid.

2a.(iii) Time Use Pattern of Employed Women

Time-use-pattern of employed and non-employed respondents was observed by Parikh (1977) who reported that there was no difference between employed and non-employed home makers' contribution through household production. Only in the area of food, non-employed homemakers' contribution and time spent was more than the employed respondents.

According to Kaur (1982), non-employed respondents were found to spend 9.99 and 14.01 hrs. per day on various household and personal activities against 7.25 and 9.46 hrs. per day contributed by employed homemakers. There was a marked difference in the amount of time spent on various household activities,

namely care of house and care of family members by employed and non-employed respondents.

Similarly Devi and Ravindran (1985) found that a higher proportion of working women spent less time in household work than housewives. Verghese (1986) also stated that full time home-makers spent significantly more time than employed homemakers on daily activities such as meal preparation, laundry and care of family members. Working women were observed to have less leisure-time as compared to non-working women (Soni, 1982).

Time-use-studies have shown repeatedly that the wife was primarily responsible for completion of household tasks, whether or not she was gainfully employed (Walker and Woods, 1976). While employed wives typically spent less time in all household tasks than did full-time homemakers, food tasks continued to be their most intensive and frequently performed household activities (Steidle and Bratton, 1968; Vanek, 1974; Walker and Woods, 1976).

2a. (iv) Economic Contribution of Women Through Participation in Market Work

Percentage contribution of women through gainful employment to total family income ranges from 25 to 95 per cent. Mies (1980) observed that women in Andhra Pradesh work 6-8 hrs. per day in making lace. They are paid 19 per cent less than the minimum fixed wages. Bhatti (1981) pointed out that for a number of households, a major part of the household income, particularly among poorer-families came from the beedis made by women. In households with a total annual income not exceeding Rs. 500, 86

per cent of the income was contributed by women, while in households with a total income of Rs. 500-750, 95 per cent of the income was contributed by women. In the next two higher income groups, Rs. 750-1000 and Rs. 1000-1500, the contribution of women was 79 per cent and 77 per cent respectively. Thus, it was concluded that in 25 per cent of all sample households whose total annual income did not exceed Rs. 1500, women's contribution to household income lay between 77 per cent and 95 per cent.

Mencher (1982) reported that female contribution to household income indicates that (i) regardless of the amount they earn, women contribute a much higher proportion of their earnings to the household than their husbands or males (ii) in absolute terms, the amount contributed by women ranges from 0.53 to 1.21 times more than the amount contributed by males.

Rao and Hussain (1983) reported that though women (in household production in garment export industry) were not able to earn very much through paid work (piece rates), their earnings formed a sizeable portion of income. In 51.54 per cent of the families the level of women's income was upto 25 per cent of the total family income. The average monthly income of a family was Rs. 577. Without women worker's contribution this amount would be reduced to Rs. 423.

Employed women contributed 46 per cent of total monthly income through gainful employment. The contribution of the non-employed women to the estimated family income i.e. an aggregate of the value of household services and production of goods was

Rs. 726.50 for full-time homemakers and Rs. 2096.10 for those employed (Verghese 1986). Kulkarni and Harode (1990) reported that 66.67 per cent of homemakers having private business made contribution of Rs. 50 to Rs. 250/- per month towards their family income. Maximum number of clerks (56.67 per cent), nurses (53.33 per cent), teachers (40 per cent) and doctors (23.33 per cent) added net Rs. 650/- to Rs. 850/- per month to the family purse. Majority of teachers (43.33 per cent) supplemented their family income with Rs. 450 to Rs. 650 net per month. Economic contribution above Rs. 1050 was noted only among the doctors (36.67 per cent) with the exception of one teacher.

2a. (v) Participation of Women in Market Work - Division of Work at Home

A number of factors inhibit the transition from a traditional division of labour to greater role sharing among family members. Among them are the nature of husband's and wife's employment, the status of women's occupation, and the wife's income or earnings relative to the husband's (Farkas, 1976; Model, 1981). Gauger (1973) reported that there was no increase in the husband's contribution to household work when their wives were employed. Soni (1982) observed that working women devoted fewer hours to child care as compared to non-working women. Moreover, working women received considerable help in performing household work from family members and husbands. About 61 per cent rural and 49 per cent urban women reported that they were unable to endure dual responsibility.

Perlmutter and Wampler (1985) examined the effects of sex role orientation and the wife's employment status on the division of housework and childcare. Findings revealed that husbands whose wives work full time report the most sharing; those whose wives work part-time report less sharing and those whose wives are full time homemakers report the least sharing. Only employment status predicted sharing of housework for wives. There was no significant predictor of wives' sharing of childcare, indicating that wives did the same amount of childcare regardless of their employment status.

Verghese (1986) investigated into the cost of gainful employment in the form of job-related expenditure of which paid domestic help and personal expenses were considered. This amounted to Rs. 70.6 for full time homemakers and Rs. 277.50 for those employed. Hence, the net contribution of full-time homemakers was reported to be Rs. 655.9 while that of employed women Rs. 1818.6 per month. Rao (1990) assessed contribution of the wife's and husband's participation in house work. The findings indicated that traditional sex specific division of labour does not appear to have changed very much in the families of working women. All domestic helpers who render services to the working wives were women. The husband has limited participation in shopping and care of children. Working women living in nuclear families are more likely to get greater help from the husbands than those living in extended families. Employment of a full - time domestic help lessens husband's participation significantly.

2a. (vi) Factors Influencing Participation of Women in Market Work

Factors influencing time-use pattern of employed and non-employed respondents was reviewed in various research studies. Kaur (1982) observed that older the homemaker lesser the time spent in household work. With increase in family size, time spent in household tasks increases and vice-versa. Employed homemakers spent more time in nuclear families while non-employed homemakers contributed more time in joint families.

Bose (1985) examined the relationship between tribe, caste and female labour participation among the poor households in Bengal. Findings indicated that female labour participation is influenced by caste factor i.e., it is higher among the lower castes and tribals than in the upper castes and Muslims, though all of them may belong to the same economic class. The decline of many caste based crafts like weaving, mat-making, pottery etc., has put the females out of employment from the fields in which they were skilled. Now the major avenue for employment is agriculture. Ghosh (1985) found that women of upper caste households owning a smaller amount of land are found to be engaged in wage paid activities. An overwhelming majority of women among scheduled castes in the villages remain engaged in multiple activities such as animal care, collection of fuel and fodder etc.

Education, years of marriage and number of children were significantly co-related with employment status. This was reported by Perlmutter and Wampler (1985).

Review of literature revealed that employment of women has an impact on their family life. Employed homemakers contribute significantly to family income through gainful employment. It was observed that time-use of homemakers was affected by personal and family variables.

2b. Women's Economic Role Through Non-market Work

Women have a key role to play in managing the world economy. But today women's work in the family, farm or business is not recognized as productive activity, so women have a long way to go in becoming equal partners with men in the developmental process. Women share a two-fold burden on (i) the domestic front and (ii) on the economic development of the country. Women perform one-third of the world's counted labour and therefore, their contribution to the economic growth of the society is quite substantial.

2b. (i) Estimation of Non-market Work of Women

Estimation of monetary value of women's time in home and farm work was done by various methods such as Market Alternative Individual Function Cost by imputing government wage rates (Chauhan, 1981; Munjal, 1984; Preety, 1991). Another method was Opportunity Cost of time approach used by Malathy, 1988.

Chauhan (1981) compared the monetary valuation of household tasks. Value of household tasks per month was Rs. 327 as computed by government wage rates and Rs. 281 by household servant wage rates. Gage (1975) valued the household work on the basis of Walker's time-use-studies. Dollar value was calculated as the

current wage paid to hire substitute workers to do specific tasks. Hall (1975) found out the average hourly and weekly value of household tasks of part-time homemakers in 2 and 3 person families by using household task data. After applying the wage rates to these hours, it was found that value of household work by homemakers from two person family was $ 92.38 and $ 130.05 per week with largest proportion of $ 26.65 and $ 36.19 in meal preparation.

According to Acharya and Bennett (1982), household income generated by activities other than wage and salary work was apportioned to individuals according to their labour time in that activity as a percentage of total labour time required. Munjal (1984) estimated the monetary value of women's time in home and farm activities by Replacement Cost Method. The estimated monetary value for a 13 hour work day was Rs. 15.15 on an average.

Malathy (1988) estimated the monetary value of domestic work of women through Opportunity Cost of time approach. Women spent 1827 hrs. on an average in a year in production activities. Those who were full time housewives did 2408 hrs. of domestic work. The monetary value of household services done by women was approximately Rs. 7600.

Preety (1991) studied occupational variation among rural households and found economic contribution by applying monthly wage rates which a housewife could afford to pay for each activity. The annual monetary value of time was Rs. 8880.00 for labour, Rs. 7989.00 for service, Rs. 4590.00 for self employed

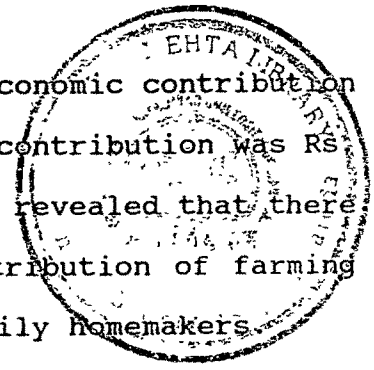
and Rs. 2402.04 for house servant. The estimated value of time for housewife in household activities was Rs. 3211.02.

2b. (ii) Monetary Value of Different Tasks

The estimated monetary value was greatest in terms of food related tasks, followed by care of family members, care of clothing, house cleaning and miscellaneous tasks (Chauhan, 1981). Hall (1975) found that on an average homemakers belonging to the two person and three person family spent 27.9 and 38.6 hrs. per week on household tasks respectively, with largest amount of time i.e. 8.1 and 11 hrs. per week spent on meal preparation. House care and care of family were the next most time consuming activities. According to Malathy (1988) maximum economic value of household services was of food related tasks followed by child care.

2b. (iii) Comparative Valuation of Non-market Work and Economic Contribution

Rana (1986) observed that women of farming families contributed more to family income in activities like meal preparation, dish washing, washing of clothes than non-farming families. Economic contribution of urban and employed homemakers was more than that of rural and non-employed homemakers (Bains 1975). Acharya and Bennett (1982) reported that some female adults contribute one-half of the household income from agriculture, hunting and gathering fruits and one-third of the income from animal husbandry. The study further reported that girls produced more income than boys in all areas, including wage and salary work.



Rana (1986) found that overall average economic contribution by women was Rs. 663.75 per month and annual contribution was RS 7965/- to the family income. Findings further revealed that there were marked differences in the economic contribution of farming (Rs. 765.55) and non farming (Rs. 561.95) family homemakers.

Joshi (1989) reported that as per ILO study the value of unpaid household work contributes 25 to 29 per cent of the total national product in developing countries. The monetary value of household services done by women was approximately Rs. 7600 which was about 42 per cent of the family income (Malathy, 1988) Nikhade and Patwardhan (1990) found that average income from household production was Rs. 107.81 and the contribution in family income was 20.29 per cent.

Preety (1991) observed that on an average housewives spent 3277.01 hrs. per year in household activities followed by 3104.45 hrs. by service women. However, overall estimated monetary value was higher for service women (Rs. 1069.91 per month) in contrast to housewives (Rs. 687.17 per month). It was observed that the same amount of work was done in shorter time by service women than the housewives because of constant pressure of limited time.

2b. (iv) Factors Influencing Participation of Women in Non -market Work

The money value of the contribution of household tasks by husbands, wives and children(12 to 17 years old)was evaluated for each task. It was found that great share of household work both in terms of hours and dollars was from wife whether she was

employed or not. The monetary value of household work tends to increase as the number of children increases and age of youngest child decreases (Gauger, 1973).

The variables considered by Gage (1975) were the employment status of wife and number of children in the family. It was found that the annual cost of household production was highest for the wives having four or more children, no matter whether they were employed or not. The money value of household production was higher for nonemployed ($ 7617) than for employed wives ($ 5330).

Age of the homemakers was found to be negatively but significantly related with their economic contribution for both employed and non-employed homemakers. The other factors affecting the economic contribution were size, type, occupation and income of the family, number of children and labour saving devices owned by the homemakers (Bains 1975).

Walker and Gauger (1973) found that as age of homemaker increased, monthly value of household services also increased. Similar trend was observed in both employed and nonemployed households. Chauhan (1981) reported that monetary value of the time utilization on various household tasks by the homemakers increased as the age of the homemakers increased. But there was a marked decrease noticed as the homemakers reached the age above 40 years. The monetary value of the time utilization on almost all the household tasks was higher in the case of middle income group except for the care of family members in which the high income group homemakers were ahead of other two groups.

Malathy (1988) estimated the average annual value of married women's household services (non-market work) by women's age and reported that maximum contribution was in the age group of 25-35 years. As the age increased the value of household services decreased. However, minimum value of household services was found in age group of less than 25 years. Further, as the education increased the value of household services also increased. Similarly, as the earning of husband increased, women's value of household services also increased.

Hence, it can be concluded from review of literature that women's contribution to family through non-market work in the family, farm and business requires due recognition. Research studies are limited regarding important aspects such as comparative and longitudinal analysis in different settings and standardization of methodologies of estimation of non-market work.

3. Methodologies Adopted for Estimation of Non-market Work

3a. Theoretical Basis of Various Methodologies Used for Estimation of Non-market Work

Importance of estimating the money value of non-market work was recognized long ago. Considerable work has been done on the economics of household behaviour facilitated by the development on the theoretical front of the new consumption theory of Becker (1965). The recognition that households are engaged in production for 'use' also led to increased effort to measure the value of home production and a near unanimous claim to include this value

in national accounts. Another reason for evaluating home time is also to improve on current measures of household economic well-being. The studies conducted on these issues in various countries are contained in a survey by Hawrylyshyn (1976). Another comprehensive collection on various methodologies has been done by Goldschmidt (1982). The growing literature in this area is indicative of the general acceptability of the notion that work performed at home is productive and has economic value.

General theories of time by De Serpa (1971) and Evans (1972) stress that there is no one value of a household's time, indicating the need to distinguish time value by its use. The issue on which there is yet no concensus is the value to be assigned to non-market time. A survey of review of literature indicates that several approaches have been utilized to measure the value of time. The common methods used in practice to estimate the value of non-market work time are discussed below.

The Market Alternative Method is an accounting technique that uses the cost of purchasing comparable services in the market to determine the value of non-market time, whereas the Opportunity Cost Method equates an individual's value of work in non-market activities to the value of alternative activities that are precluded by performing the non-market activity.

3a. (i) Opportunity Cost Approach

The basis of the opportunity cost approach is that the decision to participate in the paid labour force involves

comparing the value of actual or potential output produced in nonpaid labour activities with expected or actual paid labour force earnings and that a rational decision involves selecting the activity that yields the higher earning (McCracken and Brandt, 1990). This approach assumes that individuals act rationally and that the highest paying alternative use of one's time, skill and efforts is a reasonable basis for determining their value in the use at hand. The application of opportunity cost to the measurement of household production is straight forward : (1) homemakers are assumed to be rational (maximizers) (2) thus, if one chooses to be a homemaker, it must be her best alternative and (3) therefore, the value of home production must at least equal the value of next best alternative in the market.

This method has certain drawbacks which arise when one attempts to estimate the marginal value of a person's time in terms of the opportunity forgone, namely wage rate. There is the question of whether the economist's model based on assumption of rationality, maximising behaviour represent the way in which decisions are made in the real world. It is argued that tradition may decide to a great extent what a woman does. It also fails to consider so-called non-economic factors such as family's psychic return of having a happy and well adjusted family. This approach may result in an undervaluation of home production since homemakers' skill often do not have direct relevance to labour markets (Becker, 1981).

3a. (ii) Reservation Approach

In early studies the estimations were done for labour force participants or restricted exclusively to non-labour-force participants from a wage or earning equation estimated over a sample of labour-force participants. Both approaches result in biased estimates because individuals elect to be in the labour force. Recent work has focussed on methods of estimating wage equations that are free of this problem of sample selection or censoring bias (Heckman, 1979). Heckman (1975) developed a relatively simple two step procedure to impute wages for women not in labour force. An alternative measure of the value of household time derived from the opportunity cost of time framework consists of using the actual wage for labour force participants and estimated reservation or shadow wage for non-labour force participants. It has been argued that potential earnings underestimate the value of non-market time of non labour force participants, otherwise they would rationally be in labour force. At the reservation wage, however, an individual is indifferent between time spent in and out of labour force (Ferber and Green, 1983; Heckman, 1979; Zick and Bryant, 1983).

3a. (iii) Replacement Cost / Market Alternative Cost Approach

In contrast to Opportunity Cost, Replacement Cost methodology is a labour value approach. Household production is valued in terms of what it would cost to replace it in the market (Rosen, 1974). This approach, however, does not assume that the output of the homemaker is actually replaced. The relevance of

replacement cost methodology is tied to forgone implicit income associated with lost production. The implicit income derived from home production is the amount of expenditures one would have to make to obtain the lost services. According to this approach the value assigned to home time is the cost of engaging a substitute to perform these functions. This method has been widely used by home economists. While Replacement Cost seems simple enough conceptually, there are a number of variants to consider, namely whether to use an equivalent homemaker methodology (Chiswick, 1982) or a sum of the services approach. In these methods, cost of a single substitute to perform all the functions as well as each task as performed in market have been used. The attraction of this method arises from the fact that Gross National Product aims at measuring output of home production, is best measured by assigning the value of a replacement worker who carries out similar tasks. Moreover, this approach is free from psychic component of housework. Rosen's work (1974) describes this method and also offers support for its application. However, this method has certain practical and theoretical problems. The practical difficulty is due to its extensive demand on data about time use in a variety of activities and the need to obtain the prices of substitutes, faced by each household for these services. There is also the question of comparable quality as to whether one can compare the services being produced in the household with those purchased in the market. This is especially true of certain tasks like childcare where the respondent might regard the hired worker as a poor substitute to her services.

Goldschmidt (1982 and 1987) reviewed monetary evaluation of unpaid household work and used following approaches for estimating the economic value of domestic activities:-

"a. The volume of labour inputs measured by time (e.g., total hours) or number of workers. Based on time-use surveys or censuses, these indicate the consumption of labour resources by domestic activities and labour force activities. However, they do not provide information on labour productivity and thus on the respective contribution of domestic and labour force activities to national income or household consumption.

b. The value of labour inputs : estimated from the volume of labour inputs together with a variety of wage imputations. For instance, the wage of domestic servants, average wages or wages forgone in the market are applied to unpaid labour time expended in domestic activities. Based on time-use-surveys and wage statistics, this method requires information on paid workers able to substitute for the unpaid household worker.

c. The volume of output measured in various physical units (e.g., number of meals prepared, amount of food processed, number of children cared for etc.).

d. The value of output estimated from the volume of output together with price imputations. For instance, value added in meal preparation can be obtained by using the price of equivalent meals purchased in the market after deducting the value of non-labour inputs."

3b. Research Studies on Methodologies Adopted for Estimation of Non-market Work

The earliest known valuation of household services by Michell; NBER, (1919) is based on the simplest methodology i.e. the multiplication of an average annual cost for a hired domestic by number of households in the nation (MAHC). There is no attempt to evaluate the contributions of other members of the households.

Kuznets; NBER (1944) and Lindah (1929) also used above mentioned method in selected families with two or more members.

Clark (1958) used a different approach. He suggested that accurate statistics for complete upkeep of adults and children in homes and institutions are available and used the same by deducting an estimate of purchased goods and services to obtain the value of household services per capita. This assumes that the services provided and their costs are the same in private households as they are in institutions. However, institutional inefficiencies may impart some upward bias.

Morgan et al., (1962) used a different method of estimation. This study evaluates only a very limited portion of household activities, specifically the value of home grown food and home improvements. Values are based on the survey answer to questions such as 'how much money did you save by doing these things yourself' which in principle is the equivalent of the - market - cost - function - approach, but of course, depends on the respondent's knowledge of such costs. Sirageldin (1973) used both the Opportunity Cost of time and Market Cost of Functions Methods, with several adjustments for unemployment, sickness, disequilibrium in work-leisure choice, travel time differences and income from capital effects.

Nordhaus -Tobin (1929 to 1965) made an attempt to modify the traditional Gross National Product measure so as to derive a better 'measure of economic welfare' and used Wage Equal Opportunity Cost Method. The total population of 14 and over was

first divided into five groups : employed, unemployed, housekeepers, schoolgoers and others. For each of these different groups time-use and market wage figures were applied. Walker and Gauger (1973) estimated dollar value of household work using Market Alternative Individual Function Cost Method on their extensive time use surveys. The sample was disaggregated by work - status of wife, number of children in the family and age of youngest child. Market wages were then applied to each task and aggregated for a total annual value by household. This gave a value per unit for the sample.

Weinrobe (1974) attempted to rectify the Gross National Product growth record by showing that output inclusive of housework has grown less than market Gross National Product. The method used is Wage Equal Opportunity Cost but covers only the services of women. He assumed that there is a one-to-one substitution between market work, and house work homes, i.e. that full time female employees do no house work. Hawrylyshyn (1976) summarized various estimates that have been made of the value of household services, the methods used and compared the statistical results. He reported wide variability in the results obtained, much of which can be attributed to the differing methods.

The highest values are obtained with methods based upon the Opportunity Cost for women in paid employment, lower with methods based upon the cost of a single housekeeper, and lowest with methods based upon pricing individual services performed. On the basis of time use studies, three factors are found to affect very strongly the value of services performed : family size, wife's

market - work status, and age of the youngest child. The value of total household services should include not only the wife's contribution, but also that of husband and children, which may amount to as much as a third of the total. The increasing burden of more children, however, appears to fall mainly on the wife, with some relief from older children; the amount of time spent by husbands appear relatively invariant to number of children or work status of the wife.

Three basic methodologies of estimation of household work are summarized by Oli Hawrylyshyn :

Method (I) : WOCT - Wage Equals Opportunity.

Cost of Time : This method assumes that the rational individuals have allocated time to household work so that at the margin its value equals the opportunity cost market wage. This gives :

$$H = (QT \times W) \times 52 \times P$$

where,

H = annual $ value of housework

QT = hours devoted to house-work weekly.

W = opportunity cost wage of relevant individuals (i.e. what the individual could earn in the market).

P = number of household workers.

In the studies using this approach, some disaggregation was done by forming groups such as male - female - children and women's participation in gainful employment. The importance of disaggregation lies in the difference among groups both for opportunity - cost wage (W) and for the hours of house-work (QT).

Method (2) : MAHC - Market Alternative = Household Cost.

This method assumes the hiring of a single individual to do all the housework. The estimated average cost of a housekeeper with full responsibility for housekeeping is said to reflect exactly the value of the services now performed outside the market.

Thus :

$$H = DXN$$

Where,

D = Annual average $ salary of a domestic.

N = Number of households

Again, disagreegation is possible on the basis of different types of households (house size, number of children, income groups, geographic regions, rural - urban etc.).

Method (3) : MAIFC = Market Alternative - Individual Function Costs.

This method assumes hiring a market replacement for each separate function in household. The time spent by householders on each of such activities as cooking, washing, child - care, is valued at the market wage for each of these services. Thus the formula is :

$$H = P \times 52_{1=1} (Q\ Ti, Wi)$$

Where,

QTi = Hours per week devoted to housework function i.

Wi = Hourly rate in market for occupation corresponding to function i.

n = Number of functions in disagreegation.

Gronau (1973) attempted a general formulation of the intrafamily allocation of time. He derived utility function in three situations : the case where the husband divided his time between work in the market and leisure and the wife works both in the market and at home; the case where wife drops out of labour force; and the case where husband enters the home production process. It was concluded that there is a practice to equate the value of time of housewives with that of working women. This practice involves an error of the magnitude of close to 20 per cent in the case of white women and 50 per cent in the case of non-white women. He further showed that the assumption that the price of time is unaffected by changes in age and education of homemakers is not true.

Gronau, (1977) tried to formalize the trichotomy of work in the market, work at home and leisure. Time is used at home to produce home goods that are perfect substitutes for market goods, where home production is subject to diminishing marginal productivity. An increase in the market is indeterminate. An increase in income increases leisure, reduces work in the market and leaves work at home unchanged. Results arrived at are evidence for establishing the distinction between work at home and leisure as an integral part of theory of the allocation of time and household production. This distinction is a pre requisite for any furthur investigation of time use patterns and is useful in the analysis of fertility, marriage, child-care programmes, labour force participation and evaluation of the output of non-market sector.

Chauhan (1981) conducted a study on 'time utilization for household work and its monetary value'. The findings revealed that the home makers spent the greatest amount of their time i.e., 160 hrs. per month on food related tasks followed by care of family members (31 hrs.), care of clothing (17 hrs.), house cleaning (8 hrs.), miscellaneous tasks (4 hrs.) and account keeping (3 hrs.). It was found that size of the family did not have any significant relationship with the time utilization on various household tasks by the home-makers.

The monetary value of the time utilization on almost all the household tasks was higher in case of middle income group except for the care of family members in which the high income group home makers were ahead of other two groups. Ghany and Nickols (1983) studied husband wife differentials in household work time : dual earner families. The four independent variables (wage rate, mins. of paid work, age and education) explained 16 per cent of variation in husband's housework time and 25 per cent of variation in the wife's housework time.

Zick and Bryant (1983), examined the performance of two different techniques that can be used to value non-market time. The estimates indicate different results for the price of non-market time depending on which estimating technique is used. The Reservation Wage Approach provides estimates of average values of an hour of wife's house work time that are higher than the Market Alternative Cost estimates regardless of wife's employment status or the age of the younger child. In addition the Reservation Wage estimates are consistently higher for those who are non-employed

relative to the employed women,when the sample is stratified by age of the younger child,while the results are more mixed for the two groups when Market Alternative estimates are used.

Malathy (1988) estimated the value of household services of women in India by using Opportunity Cost Method. Firstly an earning function was estimated to impute the expected wage of those who do not work in the market. The explanatory variables included were women's education, education variable squared which allows for the effects of schooling on wages to be non-linear, work experience and the experience variable squared to measure the growth of earnings with increasing experience. The next step was to use the estimates of the wage equation to derive the Opportunity Cost per unit (hour) of time for each and every woman in the sample, working and non-working. This wage is then multiplied by the time spent in each non-market activity and this gives the value of household services for every woman in the sample. Accordingly,the value of household services is Rs. 7,517 for a working woman which constitutes around 37% of family income. It is also nearly equivalent to her labour market earnings. For the non-working women in the sample,this value is Rs. 7627 denoting 47% of family income, higher than the contribution of their working counterparts.

Time allocation to different non-market activities is influenced by the way in which households value time spent on a particular activity vis-a-vis the alternative uses of time. An increase in price of time would cause the amount of time spent at

home to decrease if the substitution effect dominates. The findings revealed that as the wife's wage increases she spends less time in work at home, housework and leisure and more time in child care. In case of child care, mothers would substitute their own time for market purchased commodities. The amount of time spent in work at home is not significantly affected by market wage. The substantial reduction in leisure time as wife's wage increases, implies that the wage effect on her market work is positive and that the increased time to market work comes almost entirely from leisure. The study further indicated that young children have a positive effect on work at home, while the older children have the opposite effect.

4. Studies Related to Status of Rural and Tribal Women

4a. Status of Women

Inequality of women in all countries of the world is largely responsible for the present status of women. The status of women in a society is a reflection of the level of social justice in that society. Women are placed at a disadvantage by the problems of double dependence, economic marginalisation, discrimination and burdens of their multiple roles.

4a. (i) Reasons of Low Status

Status of women in general has been discussed by several authorities from different perspectives. However, National Committee on Status of Women, (1975); Nischol, (1975); UNESCO, (1985); Shram Shakti, (1988) have categorically held responsible

the poor literacy and education, confinement of women to household jobs, poor employment opportunities in newly emerging areas due to the lack of skills, economic dependence on man and male domination in the family for the lower status of women in general.

Mann (1987), Simeen (1988); Singharoy (1988); reported that women played an important role when they controlled the productive operations but with the emergence of new productive forces the ownership shifted to men. Therefore, women were relegated to backward position and status. Studies further revealed that women are mostly employed as unskilled labourers at the lowest rate of wage. This low employment and low wage rates were indicative of the lower economic status of female labourers. Mann (1987) has also observed that traditional practices such as preference to male child, observance of purdah, low age of marriage are reasons of lower status of women in different cultural contexts.

4a. (ii) Status of Women in Transition

In the majority of cases, sub-ordination of women to men was calmly accepted as a part of their life. Devi (1980); Abbidi (1988); and Kanhere (1987) corroborated the facts with indications of change in favour of girls' education, developing them for specialized jobs, giving more opportunities for employment, equal status with men and reducing their burdens.

Singh (1972) states that in India rapid change in the status of women is taking place and due to this women are able to

achieve greater equality with men, both within and outside the family, in legal, social, educational, occupational and economic spheres of activity. Sharon (1988) concludes that now to some extent there is a point of departure from the traditional norms of male superiority. In educational qualification, most of the women who scored high on the modernity scale had better education too. On the contrary, Aggarwal (1988) observed that change in the status of educated women in the family does not lead to change in their traditional role. Control over the property by women is closely associated with their status in the family.

4a. (iii) Factors Influencing Status of Women

In India and in other developing countries, a silent socio-economic revolution is taking place in status of women. This is due to increase in number of women employees in diverse occupations and in higher educational attainment. Rani (1976) reports that paid employment gives higher status to women. Better educated women have better employment opportunities and thus have higher position in society.

Hotler (1971) stated that the sociological, anthropological and social-psychological theories, all point out ultimately to change in requirements of economic system as the prime moving force of shifts in sex roles or change in status of women. Andnan and Islam (1981) reveal that the status and emancipation of women in Bangladesh rests on their relations to means of production, role in production especially family based production unit. Madan (1976) observes that the key to an improvement in the position of

a woman at home is her access to an independent income. Sultana (1984) pointed that female labour participation is the single most important factor affecting almost all the indicators of status. The subsistence level of the rural families was not significantly altered as a result of economic contribution of female labour participation. But there was a significant change on the psychological side, namely in the improvement of women's status at home and in the society.

Bhatty (1981) examined the economic contribution of women to the household budget and found that invisibility of women's work continues to be an obstacle in understanding their economic role in the household and in society. The study concluded that the interaction between the economic role of women and their status in the household is positive among the lower castes.

Kaptan (1990) revealed that the level of economic equality and independence are the real indicators to measure the status of women in any society. Sethi (1988) observed that employment of women does not necessarily lead to a change in the work patterns at home. Also, mere fact of women making a financial contribution to the family income does not lead to a change in the existing role structure and ensuring power position to them within the family.

Female wage rate was considerably lower than the male wage rate. The condition of women was distressing being burdened with paid and unpaid work (Kuttykrishna and Kumari, 1989). Grewal (1985); clearly indicated enhancement in the status of employed

women as a result of their increased earnings. Similarly their control on resources also increased their status. This was reported by Rani (1976). Moreover, Basu, 1992 and Mehra, 1992, concluded that women with greater freedom of movement and economic productivity are able to achieve a better life not just for themselves but for their families too.

4a. (iv) Determinants of Status of Women

Research studies have identified various determinants of status of women. Singh (1975) observed that establishment of nuclear families as a result of women's employment naturally means that suitable environment is increasingly set in which women have greater chances to establish their wills. But joint families restrict the freedom of women with regard to movement outside home, decision making on financial matters or running the household. Lal (1979) also confirmed that in the case of joint family the existence of deterrent against female participation in deterrent work is clearly more marked when compared with that of nuclear family. Mehra (1992) viewed 'gaddi' women's position and found that as the traditional form of living is nuclear family type, hence, greater authority is enjoyed by younger women.

Geile and Smock (1977) gave a comprehensive picture of the life options which measure the status of women. These are (a) political expression (b) work and mobility (c) family composition (d) education (e) health (f) cultural expressions. These are the major types of human activities performed in every society. If

there is equality of both the sexes in enjoyment of these life options then women's status is not far behind men.

Vlassoff (1982) studied the status of women in rural India of Maharashtra State to identify variation in modernisation among rural women. The indicators relevant to measurement of traditionalism included female education and attitude towards it, exposure to modern ideas and travel, marriage customs, husband wife interaction, fertility norms, behaviour and caste distinctions. Findings revealed that only 35 per cent of female respondents aged 15-49 were functionally literate. The majority favoured increased education for girls but a higher percentage felt that boys should receive these benefits (97 per cent) more than girls (75 per cent). By the age of 20, 98.5 per cent of all village women were married.

Mann (1987) examined the changing perspective in the status of tribal (Bhil) women. This was searched through their participation in various provisions at the levels of laws and schemes. Women were questioned about their views, awareness and participation towards education, employment, health, nutrition, communication, use of improved agricultural technologies, family planning programmes and showed positive trend. Shah and Thomas (1987) identified the self-perception of deprived women in rural and urban areas regarding health, status and ability to generate income. It was concluded that urban respondents from medium size families had positive perception about their status. Intensity of indices of respondents was more from small families than respondents from large families.

Jahagirdar (1988) studied the status and role of women in Minyong tribe in north east India. The author examined their status and role through factors like work participation, control over the resources and decision making in the perspective of society they lived in. Minyong women's entrepreneurship and their role in the economic productivity are the positive indicators which help directly the developmental process.

Women's literacy, their age at marriage, birth, mortality rates and their access to health care facilities are some of the socio-economic factors that contribute to the status of women. (Nair, 1988). Navachinda and Pitak (1990) examined the status of rural women and found that age of women, self sacrifice for social work, free choice to mate selection, high education, high decision making on social activities, ability in home management and time spent in domestic, social and economic activities and found leadership status of rural women.

Varma (1991) investigated the status of Rajasthani women with focus on three areas : health, elementary education and rural employment and impact of government programmes on these issues. Health was examined on the basis of annual rate of population growth, crude birth rate, crude death rate, fertility rate, infant mortality rate, expectation of life at birth, maternal mortality rate and sex ratio. Education was investigated on the basis of literacy rate, gross enrol ment ratio, dropout rate and employment was adjudged on the basis of work participation rate and position in the organized and unorganized sectors.

Basu (1992) compared status of women in northern and southern regions of India. Status of women was indicated by exposure to outside world and autonomy in decision making place of delivery of children. The data revealed a radical change in women's exposure to the world and autonomy in decision making with their increased education and participation in labour force.

In a study conducted by Population Crisis Committee (1988) of 99 countries representing 2.3 billion women (92 per cent of world's female population) 20 indicators measure women's well being in five sectors : health, marriage, children, education, employment and social equality. The study confirms the important links between the status of women within five sectors.

Ramachandran (1978) has reflected the significant factors influencing position of women in Sri Lanka. Factors affecting status of women were higher age of marriage and compulsory education for girls upto primary stage. He also identified both education and employment which have brought changes in the attitude of women regarding different aspects of family, position of women, marriage, education and employment. Though in practice the traditional norms are not changed yet there is a change in their views.

Bhan and Dak (1986) in a Haryana study have reported that effect of farm mechanisation on the status of women is manifested in their employment and education. Dak and Sharma (1988) has analysed that social and normative framework of Indian society exerts far more restrictive effects than any other factor on

women's work participation rates. Hindu religion also accords dependent status to women. But education, mass - media exposure, urbanisation are some of the factors that are changing their traditional position. Devi (1988) has assessed that right to property is one of the determining factors, by which the status of women is governed in society.

Mandal and Sahoo (1992) observed that status of women in tribal Bihar varies alongwith the differences in the level of socio-economic development. There are conspicuous inequalities between the sexes in all walks of life. Status inequalities of the women in tribal Bihar are based on traditions of their society. Sarkar (1994) studied status of 3 tribal communities from Bihar : Birhor, Lodha and Santal. The analysis was based on socio-cultural dimensions together with the economic set up of communities. In the primitive type of economy the Birhor women have proficient roles and for this they receive due importance in the total economic set up. On the other hand, Santal women live in a well-organized society and women enjoy very high status. They work as the indispensable factor in economic spheres.

4a. (v) Methods and Procedures Used to Ascertain Status of Women

Personal interview was commonly used method of data collection (Sultana, 1984; Dharmvir, 1990). Observations were carried out mainly in reporting case studies (Dharamvir, 1990; Vlassoff, 1982) and questionnaire was the least used method of data collection.

Composite status scale was prepared to determine the level of status (Oppong, 1985; Population Crisis Committee, 1988). Chi-square, Correlation, Regression Analysis, Analysis of Variance and Analysis of Co-variance were the techniques used in determining indicators of status and to differentiate cross-cultural and regional variations.

Various researchers have identified significant determinants of status such as age, education, employment status, family type and indicators of women's status as decision making, control over resources, age at marriage. Perusal of review helped in selection of indicators and determinants of women's status for the present study. It is true that there are some conspicuous literatures on the analysis of the importance of women in the structural and functional view points of the societies concerned. But these are not explanatory as the scholars differ amongst themselves highlighting the status of women.

4b. Decision - Making

4b. (i) Decision-Making Pattern

The mode of decision-making was observed by various researchers. Rani and Bhava (1981) found that major decision makers for most of the decisions were male members.

Sajogya et al., (1980) indicated that in Indonesia decisions are usually shared with men intervening in domestic matters and women in agricultural and economic fields. Matters of purchase of land, moving to new house, education of children and their

marriage are discussed together, though the husband's decision is final.

Singal and Goel (1986) reported that majority of families (55 per cent) took the decision regarding expenditure on food and 45 per cent on clothing expenditure jointly. Decisions about saving and investment were taken jointly by 74 per cent of families. Though most decisions are taken jointly by husband and wife, the former enjoys upper hand in some cases. This was stated by Yadav and Gandhi (1988) and Verma (1990) that participation of farm women of Haryana in agriculture and animal husbandry was generally of medium level while their participation and consultation in household activities was high in majority of cases.

Punia et al., (1990) observed that in all agricultural practices the maximum percentage of decisions were made by the husband. Kataria et al., (1992) identified the decision makers of home and farm related tasks and found that both husband and wife participate increasingly in them. Wife now a days participates in decisions related to financial matters which was rare in the past. This shows women's status in terms of their participation in decision-making improving over a period of time.

In 60 to 65 per cent cases the decision is taken jointly by men and women in the household, in the area of education, admission of children in school, selection of occupation for children, selection of mate for children, expenses to be incurred on marriage of children, observance of rituals and social

ceremonies. In all other areas, except child care and allocation of housework, the decisions are made largely by men in the household.

4b. (ii) Extent of Participation by Women in Decision Making

Independent decisions making by women were reported by few researchers. Castillo (1976) in Philippines and Vagel (1978) in Japan reported that most of the decisions on major expenditures were mainly in the hands of women who decided savings, investments, banking, budgeting and spending allowance of husband.

Decision-making on matters related to education of children is another indicator of authority of women. The highest percentage among career women as well as domestic women is 61.0 and 41.33 per cent respectively. Liucianan and Goanazaliz (1976) hold the view that the decision-making pattern in Phillippines is more authoritative.

Extent of participation of farm women of Karanataka in decision making was more in religious, health and hygiene practices in home areas. Spencer (1981) found that women of west Africa play a minor role in household decision-making as well as decisions relating to borrowing of money. Women share equally in the proceeds of sales of the cash crops as well as in the profits derived from retail trade.

Awasthy (1982) stated that decision - making role of women is limited to purchase of articles of food consumption, clothing,

hous ing etc. Rani and Bhave (1982) hold the opinion that there is a definite gap between the actual and desired roles played by women. Sizeable majority of rural women wanted to participate actually in all four areas of decision-making namely farm related tasks, expenditure pattern, education of children and marriage of their children.

Bajwa (1984) observed that percentage of women in decision making was higher for sale and purchase of food articles. Higher number of homemakers decided on health practices, meal planning, sanitation and cleanliness. Homemakers had more say in child rearing practices, child health care, child education and birth ceremonies, social obligations and religious activities. Women had no say in money matters, interest, loans or buying land. Less say was observed in matters like going to fairs, celebrating festivals, going to movies and playing games.

Pandey (1986) and Verma (1990) had analysed that participation of farm women of Haryana in agriculture and animal husbandry was generally of medium level while their participation and consultation in household activities was high in majority of cases.

Nikhade and Ninje (1990) conducted a study to find the perception and involvement of women in decisions related to agricultural work and found that fifty per cent of women were consulted in harvesting, ploughing, application of manure, sowing, selection of varieties.

Raju and Rani (1990) analysed decision-making role of women in agriculture and participation was observed as active, dominant, passive and independent decisions. It was observed that 51.78 per cent women showed keen interest in choosing a given crop. The passive participation was dominant in all the categories of respondents regarding type of sale of produce. Active participation was found regarding choosing crop and frequency of spray of insecticides. Dominant participation was observed regarding labour employment. Khan and Harode (1991) found higher percentage of 50 to 58 per cent of women in decisions related to account keeping, buying land, equipments and storage and low percentage of 16.66 to 23.33 per cent in land preparation, sowing and irrigation.

4b. (iii) Participation in Market Work and its Impact on Decision Making by Women

Standing (1985) conducted a study of poor working women in Calcutta and found that most of the women turned their earnings over to the household head to manage and their employment had little effect on their status or decision - making power in the household.

Karlekar (1986) stated that three fourths of the Balmiki sweeper women in Delhi reported that their husband's earnings were turned over to them and that they were responsibile for day-to-day decisions; all reported that the major financial decisions on loans, purchases, travel and family labour deployment (including the women's own employment) were taken by men. The study further reported that Balmiki women's earning ability led

neither to economic independence nor change in the traditional structure of male female relationships within the family. An earning wife had no right to spend her salary on herself; all earnings went into the common kitty for running the home. A man on the other hand, invariably kept back some money for his personal expenses.

Bardhan (1985) suggested that wage employment may actually improve a woman's bargaining position within her family. Similarly Parthasarthy (1988) reported that female wage earners may have a better position within the family because their contribution to the family has more visibility and their independent earning capacity gives them more bargaining power. All of these studies also confirm that women wage workers have a greater say over family resource allocation than women who do not bring in outside income.

In a study of 40 agricultural labourer cultivator households in a dry backward region of Andhra Pradesh, Bidinagar (1986) found that women who worked for wages had a greater role in household decision-making particularly over the allocation of food than those who did not.

4b. (iv) Factors Affecting Decision Making Pattern of Women

Various research studies have identified the factors affecting women's decision-making pattern. Munjal et al. (1986) found that in more number of joint families, decisions were taken jointly on all aspects except education and occupation of

children whereas, more number of nuclear families were found to be taking decisions jointly. Devi (1980) reported that in farm aspects, age and marital status were the two independent variables which were positively associated with the decision - making. Duby et al., (1982) observed that education, land holding size and herd size has no relationship with role of women in decision - making.

Singal and Munjal (1986) found that women's participation in decision making was highest in lower income group. More decisions were found in income group of Rs. 2001 to 4000 per month. Punia et al. (1990) found that complexity of practice, family type and stage of family affected her participation and role.

Zend and Harode (1991) investigated factors influencing participation of housewives in decision-making and found that education of housewives influenced their extent of participation in decision-making regarding financial allocation, saving, child education and purchasing practices. Factors such as age affected decision - making related to family income while family size and income made impact on decision - making related to child education. Housewives belonging to age group of 21 to 30 years and 51 to 60 years recorded low participation in decision-making related to financial allocation.

Harode et al., (1992) investigated the participation of farm women in agricultural decision making in the context of their age, education, land holding and family income. Results denoted that advancing age and education lead to high level of

participation. High level of participation was observed in decisions related to storage 22.78 per cent and harvesting 17.78 per cent.

Review of literature revealed research studies on decision - making pattern and other indicators of status of rural and tribal women. Various aspects of women's status and decision-making pattern were assessed by social scientists but there was lack of research studies based on empirical data.

5. Relevant Literature on Household Development

The women folk constitute the nerve centre of families, vital section of societies and the backbone of the nations. The significant and largely unused reservoir of talent and work power of women needs to be placed in such a position as to make its contribution to the development process and to the levels of living and productivity of society. There is compelling evidence that improving women's productivity can have important effects in terms of growth and distribution and should be seen as an essential element of household development. The perusal of research studies have been focussed on economic contribution of women and improvement in their household development.

5a. Economic Role and Household Development

Maternal income had a significant positive effect on child nutrition (weight for age), while income from other family members showed a slightly negative correlation as observed by Kumar (1978) in his study of near landless rural families of

Kerala. Further, the importance of women's role in the allocation of resources for child welfare is observed in the effect of wage income on child nutrition. In case where the mothers are in labour force, it is their own wages that primarily account for the positive wage income effect on child nutrition.

Bhatty (1981) reported that the ability of poor Muslim women in Allahabad to earn through 'bidi' production improved their levels of living. A study of women's roles in three very poor families in Madras (Kalpagam; 1988) found men and women sharing the income earning responsibility and even some of the housework. Nevertheless, as in the very poor rural households studied by Sharma (1980); Mencher (1982); Mies, (1986); and Kalpagam, (1988); found that ultimate responsibility of running the household, of everyday getting at least a minimum amount of food for all, of entertaining friends and relatives, of finding funds for emergencies and then servicing that debt, lies with the women.

Banerjee (1985) cited that women earned over 40 per cent of the family income in nearly half the cases and over 60 per cent in a quarter of the cases under study. As the share of total income contributed by a woman increased, so did her control over the management of family income. NIUA (1988) reported that about 20 per cent of the women covered by the NIUA in three Northern cities were the sole economic supporters of their households. Nearly 25 per cent earned over 90 per cent of the household's income and nearly half earned 50 per cent of the household income.

A study of 80 scheduled caste sweeper women in Delhi found that an average women contributed 42.6 per cent of total family income (Karlekar, 1986). Home based garment industry workers in Delhi are also reported to contribute a major share to family earnings (Rao and Hussain 1983).

The contribution of women workers in Bombay slums was found to be 34 per cent of family income (Everett and Savara, 1983). On the other hand, Karlekar (1986) reported that a Balmiki woman's earning ability led neither to economic independence, nor change in the traditional structure of male - female relationships within the family. An earning wife had no right to spend her salary on herself; however all earning went into the common kitty for running the home. A man, on the other hand, invariably kept back some money for his personal expenses. Bardhan (1985) suggested that female agricultural wage workers may have more say in determining intra-household-resource-allocation than women who perform domestic work or unpaid family labour in prosperous households.

Although women's lower wage rates and fewer days of paid employment meant that their annual incomes were generally between one half and one third of their husband's earnings, women's contribution to the household budget was greater in six of the 20 villages and about equal in another five. On an average, women contributed 98 per cent of their earnings towards family maintenance while men contributed only 78 per cent, keeping substantial amounts for personal use. This pattern is not confined to the South. Micro-level studies from Panjab and

Himachal Pradesh (Sharma 1980), Madhya Pradesh, Uttar Pradesh, Maharashtra and Assam (Gulati, 1984; Dasgupta, 1987) and Andhra Pradesh (Mies, 1986), all report similar patterns of household budget management : men are expected to (and do) keep aside a part of their earnings for personal consumption and entertainment expenses, while women contribute almost all their earnings to family maintenance leading to overall household development. Bidinagar et al., (1986) found that female labour market participation had a statistically significant positive effect on the energy intake of young children suggesting that women's paid employment not only brought more income into the family, but gave women more control over its disposal.

Walker and Ryan (1988) in a study of six villages in semi-arid regions of Andhra-Pradesh and Maharashtra found that, per capita consumption expenditure, of children of mothers who participated in the daily hired labour market had significantly higher intake of certain key nutrients than other children. Knaub et al., (1988) examined the lifestyle satisfaction in a seven-state survey investigating the effects of off-farm employment on farm families. Findings revealed that women's off-farm employment appears to influence women's lifestyle satisfaction more than men's.

From the review of available research studies it is concluded that there is a dearth of mirco-level studies that investigate the impact of women's economic contribution on various aspects of household development such as food, housing, health and leisure time availability.

5b. Women and Development

Development for women means development for society. Achieving this means identifying critical points in the economic process where intervention by policies and programmes can have the greatest impact. It means a sharpening of focus on the policies that can address them directly.

5b. (i) Indicators of Development

The impact of women in rural development is the combined effect of public policies and also other development in society which cannot be traced to public policies. What is at issue is the nature of this integration and the impact of national development programmes on the quality of life of women. The impact of national development programmes on the quality of life of women is judged by trends in such indicators as :

- Visibility reflected in participation rates and rise in proportion of rural working women, employment and wages for women, literacy, sex ratio, mortality of female children, overall incidence of poverty. (Parthasarthy, 1988).

A composite index of level of social well being of women in India has been given by Nun (1990) : Literacy, male female difference in literacy, female education, sex ratio, female deaths, married females, widows, divorcees female work participation, female cultivators, employment in public sector and private sector.

5b. (ii) Impact of Development Programmes on Women

Position of poorer households; legislation which set social norm for minimum remuneration for labour and also against discrimination of women in labour market, besides provision for facilitating the active participation of women in policies which provide easier access to fuelwood, cooking, energy and drinking water supply, nutrition, health, education policies and understanding to cope with adapted perception of legitimacy of inequalities of treatment (Sen, 1988). These policies need to be mutually reinforcing to have the desired impact on rural women. The observed trends pertaining to women in development in rural areas include both the impact of public policy and changes which could not be attributed to public policy.

A study conducted by Sinha, (1992) concluded that among the problems that besieged the TRYSEM include identification of beneficiaries and opportunities, value and content of training, availability of infrastructure and monitoring and evaluation. The study suggests that unless these bottlenecks are meaningfully removed, development of women through development programmes would remain a far cry. Similarly, impact of employment guarantee schemes (Dandekar, 1983) and impact of planned policies (Sharma, 1980; Law, 1985) have also been investigated and these scholars have advocated making several improvements in these schemes so that greater participation of rural women in economic and income generating activities is ensured.

Dixon (1982) assessed the impact of development projects on women with the following indicators :

1. Physical well-being : Includes access to food, water and fuel, housing, environmental quality, medical care, personal safety, rest and leisure.

2. Economic well-being : Income in cash, kind or trade in relation to cost of living, access to credit, land and water, technology and technical assistance.

3. Social well-being : Includes knowledge, power in terms of decision-making, prestige.

A study conducted by National Institute of Rural Development on the impact of Integrated Rural Development Programme on 175 female beneficiaries in four states showed that in all of the states the average incremental annual income from the IRDP assets was over Rs. 2000. This suggests that women are usually able to put the credit received to productive use. Productive activities in which women usually participate have been identified as vegetable vending, tailoring, knitting and livestock breeding.

The National Commission on Self-Employed Women (1988) conducted a study on the impact of IRDP and findings revealed that the target of including 30 per cent female beneficiaries in 1985-86 and 15.13 per cent women in 1986-87 has not been achieved. Thus, although some progress has been made, women's access to credit under IRDP is still only half of the 30 per cent target and even farther from being equal with men. This is

not only due to lack of motivation on the part of the field staff but also because of the 'household approach' taken in the program, which stipulates that only the head of the household can borrow through the IRDP. The commission was also not able to calculate a national statistics on the contribution of women's income to the household's other earnings. The commission members inquired about this; with self-employed women workers the commission found that an alarming number of families survived solely on women's earnings (from 20 per cent to 60 per cent).

In India, several women-specific programmes have been initiated and special provisions have been made in development programmes. Thomas and Khan (1990) observed the development programmes being implemented in Wayanad district, Kerela, and the situation of women beneficiaries (N=94) and men beneficiaries (N=106) has been studied. It is encouraging to note that in terms of education, income and political participation, women beneficiaries tend to be more or less at par with their male counterparts. However, such is not the case in socio-cultural affairs, exposure to development programmes and development participation. A similar trend is also observed with regard to the programme impact of ICDS. The evidence is thus recurrent that the condition of women beneficiaries is changing, albeit at a noticeably slow pace.

Khan and Thomas (1987) stated that while development programmes have attempted to change the quality of life throughout the country, selective schemes have been launched to

better the conditions of the weaker section and tribals. The findings revealed that tribals are way behind the non-tribals in socio-economic conditions.

Review of studies by Singh and Singh (1981); Grewal (1985); and Devi (1988); focussing on the impact of development programmes on employment of women provided favourable information as all the studies indicated that it had increased employment opportunities. Further analysis of the study by Grewal (1985) in Haryana revealed that only 20 per cent adopted tailoring as a profession and they were mostly landless labourers. The IRDP assistance had increased the employment from 65 days to about 200 days in tailoring. Those who did domestic tailoring only and their main occupation was still agricultural labour got employment for about 80 days in a year. Those who had not adopted tailoring as a profession but used in home consumption only saved approximately Rs. 200 per year.

5b. (iii) Constraints in Development

Lack of proper perception of the women's role in development, appreciation of the importance of the role of women that is recognized and visible and its relationship to the development process, social attitude towards women are some of the bottlenecks which stand in the way of women's development and their participation in the development process. Chakarvarti (1981) has divided bottlenecks and barriers into two parts :

(i) Bottlenecks that exist on the part of women themselves.

(ii) Constraints related to policies and programmes which stand in the way of women's participation in developmental efforts.

Forward looking strategies for the advancement of women to the year 1988-2000 by CWDS have cited the obstacles to women's participation in development as poverty, population, growth, rising divorce rates, increased migration, growing number of female headed households and traditional attitude. All these factors have negative impact on women.

According to Adhikary (1981), these are the following obstacles in women's participation in development; illiteracy, ignorance, superstition, social taboos, frequent child birth, obstacles created by husband and family members, resistance given by opinions of leaders, economic reasons such as poverty and lack of time with women to participate in development programmes.

Jain (1986) stated that burden of work is arduous due to dual role - familial and non-familial. Modern technologies adversely affect income earning occupation, widespread illiteracy and ignorance dilute the impact of educational programme on their lives and position.

A critical review of the above studies in India and abroad makes it clear that scholars while studying various dimensions of women's involvement in productive tasks focussed more attention on time utilization pattern but there is lack of research studies

which standardize the monetary valuation of economic role performed by women particularly in rural and tribal areas. Similarly, a gap in research studies is evident which establishes relationship between economic role and status of women; and economic role of women leading to improvement in their household development. Studies on changing socio-economic condition of rural and especially tribal women in the context of economic role performed through market and non-market work and participation in development programmes are negligible in Himachal Pradesh.