Chapter-2

Review of Literature
Chapter - II

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Women's work participation has been affected by various socio-economic factors and traditional role expectations. Women do various types of works and their household works are mostly invisible and not-recognized. We can classify the work done by women in terms of paid and unpaid work. This gives us an idea to understand the significance of women's work both in the family and in the society.

A brief review of past studies on women employment, which are on wages and labour utilization, is presented here. It covers the review of different aspects such as women labour participation in crop production and animal husbandry activities, level of employment of women labour in agriculture, demand for women labour and wage earnings and alternative sources of employment and migration during off-season etc.

Agarwal Bina (1985) studied the official source of macro data on female work participation is severely impaired by biases and inadequacies on a number of counts which lead to an under counting of females both as workers and as those available for work. Therefore, it is important to take into account of such biases which are affecting female work participation rate.
Sinha (1972) studied the Indian context the definition of “worker” varies from one census to another and such changes are likely to affect more on the volume of female work force as compared to male work force. The definition of ‘work’ underwent many changes since 1901 and more particularly since 1961 census. In 1951 census, the economic status and means of livelihood of every person was ascertained and the population was divided into three classes viz., self-supporting persons, earning dependents and non-earning dependents. Here the self-supporting person was the one who was in receipt of an income and that income was sufficient at least for his/her own maintenance. Thus till 1951 census, a person’s earning either directly or indirectly was the main aspect to consider her/him as a workers or non-worker. In 1961 census, the persons classified as ‘workers’ were either seasonally employed who had done some regular work of more than one hour a day throughout the greater part of the working season, with or without remuneration or were in regular employment and had been employed during any of the fifteen days preceding the day of enumeration. Thus, the 1961 census favoured the inclusion of females as ‘workers’.

In the 1971 census, the definition of ‘workers’ was particularly, biased against the inclusion of women. Only those who reported themselves as participating in economically productive work as their main activity were counted as ‘workers’. This meant that women, whose main activity was domestic work due to the cultural biases was reported as being ‘domestic work’, were counted as
'non-workers', eventhough, they may have contributed a significant amount of labour time in the fields. The seasonal and task specific nature of women’s work in agriculture would also have contributed to women being so classified under this definition (Sinha, J.N., 1972).

In a review paper of Anker (1983) pointed out a number of reasons for this under-reporting of female labour force participation. It includes ambiguous and ill understand definitions of labour force participation, quality biases of interviewers, biases of male respondent, lack of knowledge on the part of proxy-respondent and poorly constructed questionnaire.

A study carried out in North India by Anker, Khan and Gupta (1988) observed that when many of the above factors were put to test, it was revealed that among all the reasons, the poorly designed questionnaire contributes maximum biases in the underestimation of female participation in labour force.

Ruth (1982) has a strong opinion that the concepts and methods used in the West are inadequate in underdeveloped countries. she says that concepts and methods of reckoning labour force participation based on contemporary western experience have proven inadequate when applied to developing countries where workers are self employed rather than wage earners to work seasonally rather than year round.
Nirmala Banarjee (1991) was of the view that census and National Sample Survey etc., indicate that there are sharp differences among various regions of India regarding the extent of women's participation in economic activities. These estimates have now been seriously challenged on the ground that much of these differences are more apparent than real and arise out of failure of official concepts of employment and productive work, to capture the reality of women's contribution to household economy and survival. The differences arise due to the differences in the nature of what constitutes women's work in each region and regional specifications in terms of social and financial attitudes towards women's work.

Ashok Mitra *et al.* (1980) says female who works in household, cultivation, household industry, livestock, fishery or in dairying etc., are subjected to wide fluctuations in registering female work participation in census survey. Thus, such fluctuations cannot be entirely due to substantial differences in perception of the respondent as to what constitutes economic contribution by way of female work participation in these subsistence sectors. He gives an economic explanation for the census under counting of women's contribution is seen as equal to or more than the subsistence requirements of the family, they are seen as economically active.

Chauhan and Oberoi (1990) in their study conducted on Gaddi tribal women of Bharman tehsil of Chama district found that the role of tribal women
worker in the farm operation was of immense importance. The proportion of women participation was more than 70 per cent. The participation of women in almost all farm activities except ploughing of fields, marketing of grains, irrigation and application of pesticides and fungicides implied that our technology transfer projects should take care of remaining major crop production activities where participation of farm women was ensured so as to achieve successful results.

Kapur (1991) highlighted the role of women in rainfed farming in the states of Maharashtra and Gujarat making use of the primary data. It was disclosed by the study that men did all operations that needed more muscle power such as ploughing, threshing and stocking, women did such jobs that were highly strenuous such as weeding, delicate and time consuming jobs like planting seedlings, picking fruits, splitting, winnowing etc. They were also entrusted with the tedious job of preparation of farm yard manure and manuring each plant at the root.

Usharani et al. (1993) conducted a study to examine the gender differential in work participation in various operations of crop and livestock enterprises in semi-arid areas of Rajasthan. In the study female labour days of 8 hours were converted into man-equivalent days. One day work of woman was taken as equivalent to 0.75 man day. The major female labour absorbing operations are weeding, harvesting and threshing. Farm women spent about 85 per cent (on large farms) to about 89 per cent (on marginal farms) of their time in these operations
only. The overall women participation rate in dairy enterprise was as high as 94 per cent as against 6 per cent only for men. The women work participation was minimum on marginal farms (86.24%) and maximum on large farms (99.12%) indicating positive relationship with the size of the holdings. In all farm size groups, female labour use was 58 per cent of the total labour use.

Beohar et al. (1999) have examined the contribution of women in paddy cultivation in the Chatisgarh region of Madhya Pradesh. Female labour use, both family and hired, formed nine per cent of the total female labour hours used in the farm size groups below two hectares and it was about 16 per cent of the total in the size group 2.01 to 4 ha and 23 per cent in the size group 4.01 – 6.00 ha. In the large size-group (6 ha and above) where no female family labour was employed, the hired female labour constituted 52 per cent of the total female labour used and 38 per cent of the hired female labour was used in sowing and transplanting. Both family and hired women labour was mainly engaged in sowing, transplanting, inter-culture, harvesting, transporting and winnowing. In operations like transplanting, inter-culture and harvesting the use of female labour hours was more than that of male labour.

Birari et al. (1999) in their paper have examined the pattern of employment and participation of women in agricultural activities in Maharashtra. The proportion of family women labour was the highest (14.20 per cent) in Western Maharashtra, while the proportion of hired women labour was the maximum of 65
per cent in Vidarbha region. Women accounted for 18 per cent of the total labour employment in livestock management in the state. The share of women in total employment under special activities such as incidental farm work, farm work other than crop production was about 35 per cent. Nearly 50 per cent of the labour requirement for agricultural activities was contributed by women in the study area.

Chauhan (1999) in his paper has examined the contribution of Gaddi tribal women in farm and household economy. The findings of the study revealed that the contribution of women was more than that of men in the activities performed near to their dwellings, which is reflected through more labour days put in crop production, cattle rearing and handloom weaving. The share of women in farm and off-farm income came to the extent of 27 per cent and 12 per cent of the total household income respectively, making an overall contribution of 24 per cent on an average in the household income which did not include their contribution as home maker.

Kumar et al. (1999) in their study they have examined the role of women in the adoption of Integrated Pest Management (IPM) technology in cotton, based on primary data collected from the tribal belt of Kinwat, Nanded district of Maharashtra The participation of farm women in the activities like weeding, harvesting and hand picking (only in IPM) was 100 per cent. The participation in fertilizing the fields, seed sowing and field preparation in IPM practice was 71.76 and 65 per cent and the corresponding figures in non-IPM practice were 76, 78
and 57 per cent. The study showed that two-third of farm operations in cotton were done by farm women. The contribution of women in terms of total labour days was 93 per cent in IPM practice and 88 per cent in non-IPM practice. IPM adoption has doubled the opportunity for employment due to increase in productivity of cotton.

Mishra et al. (1999) in their paper have examined the extent and proportion of women labour participation in paddy cultivation and gap in wages between men and women about in Kymore Plateau and Satpura hill region of Madhya Pradesh. The participation of women labour was higher in transplanting of paddy, interculture and harvesting while, operations like preparatory tillage, sowing, manuring and fertilizer application, irrigation and threshing operations were performed jointly with men. The use of women labour (both family and hired) in paddy cultivation constituted 53 per cent of the total human labour employment.

The hiring of women labour was highly associated with the increase in the size of farm. The result of the study also showed that the wage gap was more than 71 per cent between men and women for all operations. The study suggested that diversified farming such as dairy, poultry etc. can help to increase the employment opportunities of women.

Pandey et al. (1999) in their study have attempted to examine the extent of temporal changes in the pattern of employment of rural women across crop and
animal husbandry activities in Hisar district of Haryana. Cotton, paddy, wheat and rabi fodder were the major crops while weeding, harvesting/picking, threshing and winnowing as well as transportation were the major operations which absorbed female labour in Haryana. The findings suggest that concerted efforts are needed to develop better technologies for agricultural operations such as transplanting, weeding, harvesting/picking and cleaning of farm produce to reduce the physical burden and drudgery of the women. Operations such as cleaning of cattle, re-collection of refuse, compost, bio-gas production etc. in which women are actively involved need to be more skill based rather than labour oriented.

Panghal *et al.* (1999) in their paper have studied the efficiency of men and women labour in performing different crop operations in major crops of Haryana. The study revealed that women labour participation was quite high in operations like transplanting, weeding and picking. Women labour was also found relatively more efficient than men labour in these operations. There was no participation of women labour in irrigation and ploughing operations in all zones of Haryana and almost in all the crops.

Saraswati (1999) conducted a study on the time utilization pattern and participation of women in sericulture enterprise in non-traditional areas of Karnataka in the year 1998-99 with a sample size of 173 farm women spread in Dharwad, Hubli and Kalaghatagi taluks of Dharwad districts. The researcher tried to evaluate the works performed by men and women in agriculture. It was found
that majority of indoor activities like storage of leaves, feeding, harvesting and cleaning and storing of cocoons were carried out by farm women, while disease management and temperature and humidity maintenance were looked after by men. Among the outdoor activities more than 90 per cent of the women took care of planting, application of manures, weeding and pruning, while land preparation, pest and disease management and fertilizer management were attended by men.

Sharma et al. (1999) in their paper have attempted to study the magnitude of female labour participation in agricultural and livestock enterprises and also the contribution of female labour to farm income. Cobb-Douglas production function was used to study the resource elasticities and Euler's theorem was applied to estimate the income. In the cultivation of major crops and in livestock rearing, the contribution of female labour to total Labour requirements was more than half except for marketing operations. It was as high as 75 per cent in the case of inter-culture and harvesting. In case of livestock enterprise also, the contribution of female labour was around 70 per cent for indoor activities. The result further showed that the contribution of female labour to total income in all the operations was higher than that of male labour. The study suggests that training should be given to females of tribal area in farm/non-farm operations for enhancing farm/gross household income.

Shiyani and Nakariya (1999) in their paper have examined the gender differences and the role of women in groundnut and wheat production in South
Saurashtra zone of Gujarat. The results of the study indicated that the women played a greater role in the production of groundnut and wheat. The share of female labour used in groundnut and wheat production were 46 per cent and 31 per cent respectively of the total human labour utilization. Harvesting and hand weeding were the two major operations performed predominantly by women in the cultivation of both the crops accounting for 49 per cent and 55-61 per cent respectively. In activities like sowing, primary tillage, application of manures and chemical fertilizers and irrigation, women played a supportive role. There was a greater demand for hired female workers particularly for weeding and harvesting operations in the case of groundnut production and for irrigation, harvesting and weeding activities in respect of wheat production. The study suggests that the new technologies should address the requirement and skills of women in farm sector.

Singh et al. (1999) in their study have attempted to examine the women’s work participation and to estimate the gap in employment of women in different categories of households in agriculturally more developed and less developed districts of Bihar. The analysis of the survey data showed that the female workforce formed 23 per cent of the total female population in agriculturally more developed situation and about 32 per cent in the agriculturally less developed situation. An analysis of gap in employment of female workers revealed that employment gap was relatively higher at 56.25 per cent in the less developed region than in the more developed region (48.96%) indicating higher employment gap on landless households in both the situations (70% and 87%, respectively).
Singh et al. (1999) in their study have attempted to examine the educational status and the extent of participation of men and women in different farm and non-farm activities in three randomly selected clusters of villages in Hissar district of Haryana at two points of time, 1985-86 and 1997-98. The study revealed that 14 per cent of the adult female members were engaged in wage earning activity and 86 per cent were involved in own farm activity. The participation of women in crop cultivation was quite high ranging from 33 per cent of the total workforce in small farms to 26 per cent on large farms. Women continued to work 11 hours a day in both the periods. The mechanization of ploughing, harvesting and threshing operations have reduced the level of employment of both male and female workers by about one-third in 1997-98 as compared to 1985-86.

Subrahmanyam (1999) in his study on ‘Female labour absorption in Andhra Pradesh Agriculture’ has examined the relative change in female labour demand, the extent of income increase due to technological adoption, the variability of labour absorption across agro-climatic zone and also the effect of farm size, cropping intensity and cropping pattern on the demand for labour in agriculture. The analysis was based on two sets of primary data relating to Andhra Pradesh. The introduction of HYV seed and mechanization in paddy, has resulted in a steep increase in the demand for female labour by 85 per cent. Paddy, cotton and chillies have higher demand for total labour as well as female labour. Sugarcane has the lowest demand for female labour. This difference in demand may be attributed to cropping intensity and cropping pattern.
Tripathi (1999) in his paper has examined the level and pattern of women's contribution in hill economy of Tehri district in Uttar Pradesh. The employment pattern of human labour revealed that annual contribution of women in crop production was 230 days/ha accounting for about 80 per cent of total labour employment. The contribution made by women for field preparation, manuring and sowing was 41 per cent higher over male's contribution and it was as high as 142 per cent in rice crop. Women contributed 45 per cent of the weeding and hoeing operations and 10 per cent of harvesting and digging operations. Female labour employment in fruit production accounted for 64 per cent of the total labour employed and in milk production they contributed more than 82 per cent of the total labour employed. The regression analysis revealed that the contribution of female labour in the production of crop, fruit and milk and to gross farm income was positive and significant, indicating that the contribution of women in these enterprises was remarkable at the existing level of resource use.

Varghese et al. (1999) in their paper have attempted to assess the magnitude and direction in the participation of rural women in agriculture in Rajasthan and also the operation wise labour use in crop production according to different agro-climatic regions of the state. The rate of change of female participation in agriculture in eight out of the nine agro-climatic regions of the state was higher for the decade 1981-91 as compared to 1971-81. The rate of change in female participation in agriculture in 1981 over 1971 was about 47 per
cent and it was 90.65 per cent in 1991 over 1981. Inter-culture and harvesting were the two operations where the share of females in labour use was higher than that of males for both cereals and wheat in Rajasthan. The study concludes that the increased participation of female work force in agriculture when linked with managerial and decision-making process may facilitate to achieve the goal of sustainable development of agriculture with more ease and certainty.

Bora et al. (2000) in their study have examined the role performance of farm women in animal husbandry activities in the selected villages of Tezu Development Block of Arunachal Pradesh. The study identified a total of eighteen roles performed by women. They were fodder gathering, feeding the animals, carrying fodder to the home, cutting and boiling of fodder, watering to the animals, grazing of animals, grinding of feed, bathing of animals, cleaning of sheds, grooming milking of animals, heating of milk, selling of milk, care of newborn animals, care of sick animals and vaccination of animals.

Sinha et al. (2000) in their study on the involvement of farm women in jute production technology, found that farm womens’ contribution to collecting weeds, weeding by Khurpi and uprooting of weeds was 85, 87 and 100 per cent respectively. Also the involvement of farm women was quite high in land preparation (37.5%) than male (33.00%) and in inter-culturing 77.33 per cent as against 11.00 per cent by male. Women’s contribution to certain jute specific operations like thinning, carrying jute stick to rating tank and fibre extraction was
90, 88 and 88 per cent, respectively. The findings conclude that since the involvement of farm women is very high in jute production, training with regard to new technology should be given to increase their efficiency for doing these operations in skilled manner.

Sindhu and Jayan (2004) in their paper have attempted to study the work participation of women in coffee cultivation in Wayanad district of Kerala. Stratified sampling method was used and data were collected from 75 women farmers. Work participation of women engaged in the cultivation is assessed using WPI (Work Participation Index). WPI scores showed that gleaming collection (57), harvesting (52) and weeding (50) are the three farm operations in which women contribute more than half of the labour required for the particular operation. For activities such as planting (48), post-harvest operations (48) and jungle clearing (42), women contribute nearly about half of the labour actually required to complete the work.

Thresia (2004) conducted a study of women agricultural workers in Kodumba village of Palakkad district in Kerala. The study revealed that tedious manual activities such as transplanting of seedlings, weeding, harvesting, transporting, threshing, drying of hay etc., were wholly done by women. On an average, they got three and half months of work in a year. Their annual income from work was about Rs.5,250.
Kachroo (2005) in her study has examined the economic contribution of female labour in farm and non-farm sector towards family income in rural Jammu and Kashmir State. A three stage stratified random sampling procedure was followed with two development blocks of Jammu district viz., R.S.Pura and Bishnah. The study revealed that the percentage share of rural women in cultivation income was 43.86 per cent in R.S.Pura and 47.93 per cent in Bishnah. In dairy farming, their contribution was highest, that of 73.83 per cent and 74.66 per cent in R.S.Pura and Bishnah respectively. The wage employment of these farm women was either nil (R.S.Pura) or negligible (Bishnah-5.80%) as compared to their male counterparts. The share of females in total agricultural income was 44.76 per cent in R.S.Pura and 50.44 per cent in Bishnah. This implies that women do not lag behind in contributing the agricultural income on par with men, but it is not accounted for. Women's contribution towards non-agricultural income was found to be 1.55 and 2.37 per cent respectively in R.S.Pura and Bishnah. The overall contribution of females towards household income was 2124 per cent in R.S.Pura and 27.18 per cent in Bishnah.

Dhillon et al. (2007) conducted a study in three agro-climatic zones of Punjab on the involvement of farm women in agricultural and allied activities. Multistage stratified random sampling technique was used to select the sample of 120 farm women. The results of the study showed that the age of the farm women ranged between 24-56 years. Majority of the respondents belonged to the age
group of 35-45 years. Majority of the respondents were illiterate. Majority of the farm women (42.5%) belonged to the families having 0-6 family members. Majority of the families in zone-III (62.5%) were holding large farm size of more than 10 acres, followed by zone-I (37.5%) and zone-II (22.50%).

Usharani et al. (1993) conducted a study to examine the gender differential in work participation in various operations of crop and livestock enterprises in semi-arid areas of Rajasthan. In the study, female labour days of 8 hours were converted into man-equivalent days. One day work of woman was taken as equivalent to 0.75 man day. On an average, about 220 man-equivalent days per household were spent in agriculture and out of that 127 man-equivalent days per household were spent by the females and the remaining 92 man-equivalent days per household by the males.

Sajjad (1998) conducted a study on the employment of landless labourers in Aligarh district of Uttar Pradesh. The study revealed that on an average landless labourers were employed for 52.9 days during the kharif season. Male labourers worked for 68.3 days while the female labourers worked for 37.5 days. During the rabi season the landless labourers were employed for 71.3 days. Males worked for 82.7 days and females worked for 59.8 days. Out of the total female labour days 35.4 days were employed in harvesting, 19.6 days in weeding, 14 days in inter-cultural operations and 10 days in sowing.
Birari et al. (1999) in their paper have examined the pattern of employment and participation of women in agricultural activities in Maharashtra. The study revealed that women labour both owned and hired had contributed 61.58 per cent of the total employed days required in the process of crop production per farm at the state level. Among the various regions of the state, Western Maharashtra regions provided the highest per farm employment of 311 days during the year for both male and female workers.

Chauhan and Sirohi (1999) in their paper have examined the impact on female employment of the Intensive Cattle Development Programme in three districts of Haryana. The results indicated that in the case of beneficiary households the female participation in dairy farming was 108.5 man days, 158.37 man days and 151.42 man days per year for small, medium and large herd size farm categories, constituting about 50 per cent, 52 per cent and 42 per cent of total man-days of employment respectively. The female participation among the non-beneficiary households was lower at about 96 man-days as compared to beneficiary households. The results reveal that the employment generation in this sector resulting from the implementation of ICOP has benefited the females more than the males.

Dahiya et al. (1999) in their study have focused on the participation of women in various farm and non-farm activities in the rural areas of low, middle and high hill zones of Himachal Pradesh. The participation of women is
considerably higher in farm sector because of occupational shift by men towards secondary sector and tertiary sector, low literacy rate and poor skill levels of women constraining them to stay in the farm sector. The participation of women worker in productive economic activities was 155 days per annum in low zone. 225 days in mid hills as against 182 days and 776 days respectively for men. In high hill zone their participation was at par per annum. Their participation in crop production was below 2 hours per day in all three zones except during October and November on large farms. The participation of women in paid economic activities was 4 to 5 hours, with nil participation in farm activities during January to March in mid and high hills. The study suggests the need for launching extensive outreach programmes for upgradation of technological skill for both women and men, acquiring newer skills by women, improving their literacy levels, for imparting training to women in subsidiary occupations in the non-farm sector and for stricter enforcement of public policies in the country for gender equity and women empowerment.

Kumar et al. (1999) in their paper have examined the status and utilization of female labour force in dairy enterprises and other activities and the magnitude of their contribution in family labour, income from dairy enterprises in middle Gangetic Plain Region of Bihar. Female labour participation in dairying enterprises revealed an average use of 48 man-days of female labour per milch animal in NMPT (New Milk Production Technology households) while it was 34
mandays in OMPT (Old Milk Production Technology households) on per annum basis. With regard to the magnitude of participation of women in different economic activities, the dairying accounted for 22 per cent in the case of WMPT households. The corresponding figures for OMPT households were 21 and 22 per cent respectively. Rural women remained occupied for about 3,378 hours in the case of NMPT households and 3,069 hours in the case of OMPT households including domestic chores. The study suggests that policies must be oriented towards enhancing the skills and training of farm women in various technologies of milk production and processing in order to increase productivity and income of the households.

Rajesh and Kombairaju (1999) in their paper attempted to analyze the female labour participation and examine the impact of technological changes on female labour employment in rainfed agriculture in Tuticorin district of Tamil Nadu. It was observed that technology adoption had positive impact on female labour employment. Cotton crop created better employment opportunities accounting for 77.12 man days/ha as compared to Cumby (37.93 man-days/ha) and Cholas (44 man-days/ha). But the percentage of family female labour to total labour decreased with the increase in the level of adoption of technology.

Saikia (1999b) in her work Effect of Cropping pattern on female labour in Assam has studied the work pattern of female agricultural labourers who hired out their labour for wages. The study was conducted in Jorhat district of Assam.
Thirty landless agricultural labour households were selected for the study. The period of study was 1980-81 and 1993-94. The average employment of female agricultural workers increased from 89.26 to 104.43 days during the period mainly for rice cultivation. The employment pattern of farm women in agriculture showed a sharp increase in the peak seasons of transplanting and harvesting and steep decline in lean period. For the female labour the total employment was 160-68 days including non farm employment for 43.6 days. The extent of unemployment was 89 days. If the labour time spent on allied activities which provide an additional employment of 21.5 days is accounted, employment status of farm women can be improved.

Singh et al. (1999) in their study on the impact of changing cropping pattern on women's participation in crop production in Farrukhabad district of Uttar Pradesh examined the socio-economic structure of the selected farm workers households and worked out the level of employment of female farm workers engaged in crop production on per household basis. The total employment of agricultural labourers in 1993-94 was 176.36 days per farm, which increased to 236.29 days in 1998-99. The share of female workers in the total employment increased from 84 days to 112 days per farm during the corresponding periods due to increased intensity of cropping and production of new crops like sunflower, late potato and late wheat in the cropping pattern of farms. The study concludes that with the increase in intensity of cropping and introduction of labour intensive
crops in the cropping pattern of the farmers, the rate of participation of female workers has increased to a considerable extent.

Shiyani and Vekariya (2000) conducted a study in South Saurashtra, Gujarat on the operation wise women labour utilization pattern in groundnut and wheat crops. The study revealed that women played a greater role in production of groundnut than that of wheat in the study area. Hand weeding and harvesting were the two major operations performed predominantly. On an average, groundnut production requires 66 days of labour per hectare of which women provide 46 per cent. But in the case of wheat production, only 54 labour days are required of which women provide 33 per cent. In groundnut production women labour contributed 55 per cent to total weeding work and 50 per cent to total harvesting work. Two-third of the women who works at harvest are hired labour. In the case of wheat crop women contributed 61 per cent of the total weeding work and 49 per cent of the total harvesting work. A greater degree of seasonality for female workers and for hired labour is very much evident. The study suggests that the design of crop technologies be sensitive to its inevitably gender-specific effects.

Kumar and Sen (2004) in their study on labour utilization and demand function of family farms in Sabour block of Bhagalpur district (Bihar) revealed that total man-days available on the farm was 1,716 per year, out of which two-thirds was contributed by male and one-third by female members. On an average 94 per cent of the available male labour and 54 per cent of available female labour
were utilized on the farm. It was found that medium farms utilized 85 per cent of available man-days on the farm whereas small and large farms utilized 75 and 77 per cent of available labour respectively. The results of the study also revealed that in both the seasons modern crop cultivation utilized more man-days (238 labour units in Kharif and 96 units in Rabi) than in traditional crop cultivation (178 units in Kharif and 77 units in Rabi).

Yadav and Kaushik (2006) have conducted a study in Rewari district of Haryana state on the role performance of farm women in wheat crop. The study revealed that the total days of different activities in a season ranged from one day to 20 days, maximum days being spent on weeding followed by harvesting. The total time spent by women was maximum on harvesting (75 hrs), followed by weeding (50 hrs), irrigation (24 hrs) and storing (10.5 hrs). Least time was spent on threshing, winnowing, plant protection, fertilizer application and sowing (less than 10 hrs/season). The study concludes that as women mostly do jobs that are tedious, monotonous and requiring manual labour while technical activities are taken over by men, women need to be trained in technical aspects as well to handle farming operations independently.

Chawla (1999) has attempted to examine the changes in educational and employment status of female labour in rural areas of Amritsar district of Punjab at two points of time i.e., 1990-91 and 1997-98. The data was collected from 200 female workers based on three stage random sampling procedure. The
employment of female labour in the primary sector declined from 60 per cent to 53.5 per cent, but it showed upward shifts in secondary and tertiary sectors. The number of illiterate female workers declined from 44 per cent to 39 per cent between 1990-91 and 1997-98 with a proportionate increase in the number of literate female workers. Their share in the family income from primary, secondary and tertiary activities showed increase from 12,15 and 18 per cent in 1990-91 to 15,17 and 20 per cent in 1997-98.

Anjugam et al. (2000) in their paper have analyzed the performance of agricultural labour market in Madurai district of Tamil Nadu with the objective of studying the demand for and supply of agricultural labourers in wet and garden land areas of the district. The results showed that woman labour use was higher in garden lands than in wet lands. Regression analysis showed that in wet lands one rupee increase in the net income per farm was found to increase the demand for hired casual labourers by 0.0040 manday/hectare, increase in the net cropped area was found to increase the demand by 358.44 man days. In garden lands an increase in cropping intensity by one per cent was found to increase the demand by 0.97 man-day, an increase in net cropped area by one hectare was found to increase the demand by 110.95 man-days and one rupee increase in net return per farm was found to increase the demand by 0.0066 manday. The study suggests that to improve the demand for hired labour, irrigation facilities and better prices for farm products essential. Also the wage rates should be increased and to facilitate this labour cooperatives are to be formed.
Ghanekar (2000) has made an attempt in her paper to examine the characteristics of agricultural labour market and the economic status of the labourers. After the starting of lift irrigation scheme in 1980s, the village exhibited a trend towards increased commercialization and monetisation, structural changes such as increased numbers of female workers as agricultural labourers and increased casualization of the labour force along with increased individual bargaining capacity of the labourers.

Jain and Singh (2000) have conducted a study on the trends in tenancy and labour use pattern in Punjab Agriculture. The study revealed that human labour employed on per cultivated hectare showed a decline in all the size-classes except the marginal farms and so was the case of casual hired labour. Female and child labour employment on the farm for crop production also showed a decline and its employment for crop production declined with the increase in farm size. Major share of women and child labour used in the farm was supplied by family itself since the migratory labour mostly consists of male labour.

Ray and Haque (2000) in their paper have examined the employment per acre, operation wise labour use and wage differential between migrated contract labour and local hired labour employed. The study revealed that in Hoogly district of West Bengal contract male and child labourers migrated to the study area and were employed predominantly in sowing and harvesting seasons of boro and aman paddy. No female contract labour migrated to the study area. Poverty was the main
reason for migration. Besides, lower wages and low employment opportunities also caused migration.

Singh and Singh (2000) have made a comparative study of contractual and casual labour arrangements in agriculture in the Tarai region of Uttar Pradesh based on data collected from 75 labour households. The study revealed that both males and females worked as casual labourers in various activities. The group labour that consists of 5 to 8 male and female workers of a village and the family engaged themselves under the contractual arrangements. They were found to be engaged in inter-culture, earthing and harvesting of sugarcane, transplanting, harvesting and threshing of paddy crop and harvesting and threshing of wheat crop. For the harvesting and threshing of wheat, kind payment is made on the basis of produce while in sugarcane and other crops cash payment is made on per acre basis. The study shows that wages earned through contractual arrangements are higher (40 and 38%) in the case of male and female workers as compared to casual employment on farm.

Singh et al. (2000) have conducted a study in 12 sample villages in Gwalior district with a view to examine the employment behaviour of rural labour and its effect on rural labour market. The study revealed that, as a consequence of farm mechanization and rural development programmes more male labour started moving from agricultural to non agricultural occupations obtaining higher wage rate / earnings per annum and more employment. The scarcity of male labour thus
resulted in higher demand for female labour at an attractive wage rate thus causing a gradual feminization in agriculture.

Tomer et al. (2000) conducted a study to examine the family and hired labour employment in various crops and regions of Haryana state. The study was conducted in irrigated and semi-irrigated zones of Haryana. The study revealed that per hectare labour use was higher in the irrigated area. Hired labour (casual and contract) use was higher than family labour use in the irrigated zone. Hired labourers were mostly migrants from labour surplus states. The migrant labour caused a reduction in the wage rate in the rural labour markets of the state.

Tuteja (2000) has conducted a study on the effect of contractual labour arrangements in agriculture on women workers in rural Haryana. The practice of employing contract labour, adversely affected casual as well as self employed women agricultural workers. They got low paid jobs due to competition from migrant male labour. The study highlights the urgent need for assessing and modifying labour policy and rectifying the neglect of analysis of women worker’s position after the prevalence of contractual labour arrangement.

Solanki and Sharma (2001) in their study ‘Impact of Economic Reforms on Rural Employment-A case study of Jhakam Irrigation Project, Rajasthan’ revealed that there is a significant impact of economic reforms on rural employment through irrigation. The ‘with and without approach’ of impact analysis was used. A sample of 100 farmers were selected for the study from two villages, 50 each
from irrigated command area and unirrigated command area. The study revealed that the total labour use in crop production activity in the command area was higher compared to non command area. The use of family labour, attached labour and casual labour were also higher in the command area. The share of female workers in total labour absorption in crop production was found to be 42.45 per cent per farm in the command area compared to non command area. The labour in the non command area which was left out of irrigation suffered diversification from crop production and diverted to other activities in search of gainful employment.

Singh et al. (2005) have conducted a study on labour wage discrimination in agriculture. The study was conducted in six states using stratified random sampling technique. The results of the study showed that women worked less hours per day compared to men. The allocation of time by women in the six states varied from 7.3 hours per day in Ranchi (Jharkand) to 9.5 hours per day in Adilabad (AR). The work performed by women are weeding, spraying (assisting to men), irrigation, harvesting, threshing, drying up of pods grains etc. Wage disparities were found to be higher among men and women in agriculture. Labour wages of male over female in agriculture were found to be higher (47%) in Ranchi (Jharkand) and lower (31%) in Coimbatore (Tamil Nadu). The CV of labour wages of male over female in agriculture was 42.1075 while in others (non-farm) it was 32.875.
Kumar (2007) had conducted a study on the trends and determinants of female employment in agriculture. The study was based on data taken from population census of Registrar General of India for the year 1981, 1991 and 2001, the proportion of female workers increased by 4.76 per cent points. The number of women agricultural labourers increased by 3.46 per cent points during the same period. The economic factors such as presence of male agricultural workers in the area, cropping intensity, agricultural output as indicative of income level and index of modernization all together determine 46.5 per cent of variation in RFWPR as agricultural workers.

Vithob et al. (2008) in their study examined the wage differences between male and female agriculture labourers and their migration. The study has been done in Shorapur taluka of Gulbarga district in Karnataka. The study revealed that some jobs are reserved to female labourers in agriculture viz chilli, cotton, groundnut picking, transplanting and weeding. The slack season wage rate was Rs.15 to 20 per day and the peak season wage rate was Rs.25 per day for female labourers. The study suggests that provision of irrigation and adoption of labour intensive cropping patterns may help to improve the conditions of female labourers. Also there is a need for comprehensive policy and minimum wage to promote welfare of the rural female labour class in the study region.

Rao (1995) had conducted a study on rural farm and non-farm employment in West Godhavari district. The results of the study revealed that agriculture plays
a leading role in generation of employment. The share of male workforce in agriculture tended to decline, while its share in non-agricultural employment has shown an increase. Sajjad (1998) in his study on the employment of landless labourers in Aligarh district of Uttar Pradesh has revealed that due to the distress phenomenon of unemployment the labourers undertook non-farm work either inside the village or as daily commuters to nearby city area or as seasonal migrants to some far off urban centers. Inside the village they worked as loaders, rag pickers, basket makers, constructional workers, in match industries, pot makers and as weavers. Male labourers got employed for 51-70 days where as female labourers got employed for 30-50 days. The wage rates were higher compared to agricultural sector. Male labourers got Rs.30-35 per day as wages and female labourers got Rs.20-25 per day as wages.

Puha Zhenki and Jayaraman (1999) conducted study on the role of informal groups in increasing women’s participation and employment generation among rural poor. The groups were selected from two different project areas viz. Chitradurga district in Karnataka and Periyar district in Tamil Nadu. The study revealed that in terms of occupational pattern of members, agricultural labourers constituted 70 per cent of the membership of the group. The additional employment generated through the informal group lending worked out to 172 person-days per member undertaking supplementary activities such as animal husbandry, poultry etc. and non-farm activities like petty shop, kirana shop, flower
selling business etc. provided employment to a greater extent. The annual employment available for the group members increased to 85 per cent during post-group formation period when compared to pre-group formation period. The informal groups of rural poor with active intervention of NGOs, adequately supported by training and financial assistance ensured and also significantly improved women’s participation both from economic and social aspects.

Bryceson (2002) examined the multiplexity of livelihoods in rural Africa. The income diversification efforts of most rural dwellers over the past decade have been directed at meeting daily needs amidst declining returns to commercial agriculture. Individuals and households have experimented with new forms of livelihood, expanding their non-agricultural income source, while retaining their base in subsistence farming.

Elumalai and Sharma (2003) in their study on non-farm employment for rural households in India have found that the employment of wage labour has been declining in agriculture, while it is increasing in non-agricultural activities. The non-farm activities provide opportunities to earn income during the slack season in agriculture. The study also revealed the multi activity nature of the workers. About 62.13 per cent of the person-days spent in agriculture as principal activity by the rural male, also spent 3.35 per cent and 4.34 per cent of the person-days as self-employed and wage labour in non-agriculture respectively. The per cent distribution of male workers in non-farm employment in 1999-00 was the highest in Kerala followed by Himachal Pradesh and the per cent distribution of rural
female workers in non-farm activities was the highest in West Bengal followed by Kerala. The study concludes that augmenting rural investment in the development of non-farm sector will increase the income of rural households and thus reduce poverty.

Kalamkar (2003) in his paper on agricultural growth and rural non-farm sector in Maharashtra has observed that due to continuous increase in the labour force and the declining growth rate of agricultural output in Maharashtra, the casualisation of the labour force in hired labour has been increased. Diversification of agriculture by introducing new varieties and increase in protective irrigation raised absorption of labour and generated better employment potential. The study revealed that there is a need to divert agricultural labour to the non farm sector activities for employment and value addition in agriculture by developing processing units in the rural area itself.

Kumar et al. (2003) in their paper have examined the shifting employment pattern in the rural India. The study revealed a declining trend in rural farm sector employment. With continuing population pressure, small and fragmented agricultural holdings, highly unequal land distribution structure, increasing application of labour saving farm production technologies etc. Agriculture alone cannot provide the ultimate answer for rural unemployment and under employment. Non farm as well as off farm activities have backward as well as forward linkages, which can enhance the overall productivity as well as income and employment in rural areas.
Muniyandi et al. (2003) studied the ‘Changes in Rural Non-Agricultural Employment in India’. The present study examined the changes in the labour force and workforce participation rate, sector wise distribution of this workforce, employment status of this workforce in the two sectors and the relationship between the level of poverty and employment in India. The analysis of the study was mainly based on the NSSO Data gathered over different rounds. The study revealed that the labour force participation rate in rural area (male and female) and in urban areas (female) during post reform period showed a decline, while the urban male labour force participation rate showed an increase. The workforce participation rate of male and female in urban and rural areas showed a marginal increase in the post reform period. The sector wise distribution of workers in rural areas indicated that workforce participation rate in agriculture sector has been declining and that in non agricultural sector has been increasing. The study emphasizes the need for encouraging the workers to establish non farm enterprise by providing appropriate training facilities at a reasonable rate of interest.

Thresia (2004) conducted a study of women agricultural workers in Kodumba village of Palakkad district. The study revealed that due to under-employment problems in agriculture, women had to seek alternative employment opportunities for a major part of the year. Almost 70 per cent of the women had no other means of income than agriculture. The rest 30 per cent workers depended on work at construction site, tile making, firewood lifting, fence making and milking, preparation and sales of edible items and bangles etc. They got job ranging from 15 to 100 days a year.
Tuteja (2005) did a study on rural non-farm employment in Haryana. The results of the study showed that at the all India level the female WPR increased from 26.7 per cent in 1991 to 31.0 per cent in 2001. But the WPR of females showed a slower growth rate due to declining employment in agriculture as a consequence of mechanization. In the period from 1981-2001 the share of agricultural labourers increased by 2 percentage points in the total workers. At the same time female agricultural labourers showed a decline from 47.7 per cent to 43.4 per cent. In the same period the proportion of female workers in farm sector as a whole also showed a declining trend from 88.5 per cent to 79.9 percentage. At the same time female workers in the non-farm sector showed an increasing trend from 11.5 per cent to 20.10 per cent. In laryana state the employment of workers in farm sectors showed a decline from 76.48 per cent in 1981 to 65 percentage in 2001. At the same time there was an increase in the non-farm sector employment from 23.52 per cent to 35 per cent.

Vithob et al. (2008) in their study examined the wage differences between male and female agriculture labourers and their migration. The study has been done in Shorapur taluka of Gulbarga district in Karnataka. In the study area labour migration took place only from dry land area during rabi and summer because of season’s inadequate employment days. Almost 90 per cent of female labourers migrated to the urban areas for about 85 days and earned wages at the rate of Rs.40 per day. The study suggests that provision of irrigation and adoption of labour intensive cropping patterns may help to improve the conditions of female labourers.
References


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Chapter-II


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