CHAPTER – 2
REVIEW OF LITERATURE

Since the introduction of the improved technology in agriculture, the labour problems have been engaging greater attention of economists. Research has been conducted on various facets of agricultural labour force i.e., its composition, employment, wages, incomes, social status etc. Some of the studies conducted are reviewed here to seek some guidelines for the current research. But, before reviewing the studies, it will be quite appropriate to review the important findings of the two Agricultural Labour Enquiries conducted during 1950-51 and 1956-57, and the two Rural Labour Enquiries made during 1964-65 and 1974-75.

According to the first Agricultural Labour Enquiry of 1950-51, the agricultural labour households constituted 30.39 percent of rural labour households. These declined to 24.27 percent as per estimate of Second Agricultural Labour Enquiry (1956-57). This figure was 21.79 percent according to First Rural Labour Enquiry of 1964-65, but rose to 25.3 percent in Second Rural Labour Enquiry of (1974-75). The underestimation of agricultural labour households is partly attributed to change in definition of agricultural labour household from 'work' in First Agricultural Labour Enquiry to 'income' in Second Enquiry. During the First Enquiry, agricultural labour household was one in which either the head of the family or fifty percent or more of the earners reported agricultural labour as their main occupation. While in the Second Enquiry,
it changed to one in which the major source of income during the previous year was agricultural wages. The definition of this term in First Rural Labour Enquiry was the same as in Second Agricultural Labour Enquiry. However, estimated number of rural households increased from 58.9 million in 1950-51 to 66.6 million in 1956-57, 70.4 million in 1964-65 and 82.1 million in 1974-75. Thus the First Rural Labour Enquiry says, "This indicates that there has been a shift away, relatively speaking from agricultural wage occupation." But the validity of this inference can not be checked for want of data on the increase in employment in non-agricultural sectors.

The average number of the agricultural labour households increased from 4.3 percent in 1950-51 to 4.4 percent in 1956-57, 4.47 percent in 1964-65 and 4.77 percent in 1974-75. The average number of earners per household was 2.00 in 1950-51, 2.20 in 1956-57, 2.01 in 1964-65 and 2.34 in 1974-75.

All male labour, casual and attached taken together, found employment in agriculture for 189 days in 1950-51, 194 days in 1956-57, 217 days in 1964-65 and 193 days in 1974-75. Total wage-paid employment including non-agricultural employment amounted to 218, 222, 242 and 246 days in a year, at the time of four enquiries respectively. In case of women, employment in agriculture was 120 days in 1950-51 and 138 days in 1956-57, 149 days in 1964-65 and 138 days in 1974-75. The Summary Report of First Rural Labour Enquiry (1964-
65) says, "there has been a steady increase in the number of days of wage-paid employment in case of labourers belonging to agricultural labour households." But these figures are not comparable as no 'norm' was taken for a working day in First Agricultural Labour Enquiry while in Second Enquiry a normal working day was considered as of 10 hours. The trend of agricultural employment declined during 1974-75. The self employment figures for casual and attached workers were 75 and 20 days respectively in 1950-51 and 40 and 16 days respectively in 1956-57. While in 1964-65, the figure for casual and attached labour combined was 30 days. These figures are also not comparable as the 1950-51 data were of inferential nature, being the residual days left over after deduction of wage employment and unemployment from 365 days. But in the First Rural Labour Enquiry, self-employment data were collected under two heads i.e., "Cultivation" and "Other than Cultivation."

The figures of unemployment in case of casual and attached workers were 128 and 68 days respectively in 1956-57 as compared to 90 and 19 days respectively in 1950-51. The unemployment days for both casual and attached combined were 47 in 1964-65. But these figures are even less satisfactory than those of employment. In the First Enquiry (1950-51), unemployment data were collected only for those adult males who reported wage-employment in each month. It was assumed for the non-reporting workers that they were self employed for half the period and unemployed for the other half. In Second Enquiry
(1956-57), data on unemployment was obtained by deducting employment and self employment from 365 days.

The average daily earnings from agricultural employment of adult male labourers belonging to the agricultural labour households were Rs. 0.96 in 1956-57 as against Rs. 1.09 in 1950-51. These increased to Rs. 1.43 in 1964-65 and to Rs. 3.24 in 1974-75. The average daily earnings in case of women were Rs. 0.95 in 1964-65 as compared to Rs. 0.59 in 1956-57 and Rs. 0.68 in 1950-51. These rose to Rs. 2.27 during 1974-75. The average daily earnings from non-agricultural employment per adult male labourer was Rs. 3.27 in 1974-75, Rs. 1.54 in 1964-65 and Rs. 1.07 in 1956-57 and Rs. 1.08 in 1950-51. The average daily earnings from non-agricultural employment showed an upward trend in case of women. These were Rs. 0.61 in 1950-51, Rs. 0.62 in 1956-57 and Rs. 2.12 in 1974-75.

The average annual income of an agricultural labour household declined from Rs. 447 in 1950-51 to Rs. 437 in 1956-57. However, this income evaluated in whole-sale prices comes to Rs. 660 in the First Rural Labour Enquiry Report (1964-65), which gave an increase of about 50.9 percent over 1956-57. This showed an improvement in the income of agricultural labour households, but the increase of 65 percent in the Consumer Price Index for Agricultural Labourers was more than the increase in income during two periods i.e. 1956-57 and 1964-65. So, there must have been some deterioration in the level of real income of
Agricultural Labour Households between the Second Agricultural Labour Enquiry and First Rural Labour Enquiry. No direct information about the average annual income of agricultural labour households was available in the summary report of Second Rural Labour Enquiry 1974-75. However, if we assume that all the earners in an agricultural labour household are male adults, then by multiplying total wage-paid employment (215) days by the number of average earners per agricultural labour household which was 2.34 and again multiplying the product by average daily earning of adult male (3.24), we get an average annual income of an agricultural labour household for 1974-75 at Rs. 1630.05. The corresponding figure worked out in the same manner comes out to be Rs. 692.65 for 1964-65. This means that average annual income of agricultural labour households had increased by more than 135 percent during the two periods. But the consumer Price Index for Agricultural Labourers had increased by more than 157 percent during this period.

It showed that real income of agricultural labour household had also deteriorated during this period. But this deterioration might be due to exceptional rise of 85 points in a single year in consumer Price Index i.e. from 283 in 1972-74 to 368 in 1974-75.

The percentage of indebted households to all agricultural labour households was 44.5 in 1950-51, 63.9 in 1956-57 and 60.6 in 1964-65. The problem of indebtedness among agricultural labour households had become more acute during 1974-75, with 66 percent of households...
under debt. The average debt per indebted household was Rs. 105, Rs. 138, Rs. 234.87 and Rs. 584 at the time of four enquiries respectively. The proportion of average debt utilised per household for consumption purposes increased from 46.4 percent in 1956-57 to 53.3 percent in 1964-65, but decreased to 48 percent in 1974-75. The share of loans for productive purposes decreased from 18.8 percent in 1956-57 to 11.9 percent in 1964-65 but increased to 12.7 percent during 1974-75. Money lenders remained the single major source of borrowing for labour households. They accounted for 36.5 percent in 1950-51, 34 percent in 1956-57, 30.6 percent in 1964-65 and 48 percent during 1974-75.

In 1950-51, the average annual expenditure was Rs. 461 and it rose to Rs. 617 in 1956-57, the average annual income for the two years was Rs.447 and Rs.437 respectively. The deficit would seem to have been met from past savings, sales of stocks and loans incurred etc. These figures are indicative of a steady deterioration in the economic condition of agricultural labour households during this period.

2.1 REVIEW OF RELATED STUDIES

Some of related studies have been reviewed below from the conceptual, methodological and policy point-of-view in order to establish the research gaps over a period of time.

Studies Relating to Other States

Panday (1967)³ studied the pattern of employment of hired labour in agriculture in Seorahi Block, District Deoria, Uttar Pradesh. His study
was based on a sample of 40 farm families randomly selected from five villages of Seorahi Block. He assessed the effect of demand factors on the pattern of employment of hired labour in farm production as compared to that of family labour for different social groups. The study concluded that there was a problem of unemployment among hired labour in agriculture and during the slack season there was not sufficient subsidiary employment. The main drawback of the study was that it examined only the farm families and not agricultural labour households.

Singh (1967)\(^4\) conducted a sample survey in Pakari Khurd Village of Azamgarh district (Uttar Pradesh) during the year 1961-62. His study showed that while low income households earned a significant proportion of their incomes from sources other than farming, high income households were totally dependent on farming. The annual household incomes of backward castes were lower than that of high castes. Among low-level income families, expenditure exceeded income whereas medium income groups were able to strike a balance between income and expenditure and high income groups had a surplus of income over expenditure. The lacuna in the study was that it was based on a sample collected from a single village only. The sample based on a single village cannot truly represent the population of a whole district.

Karalayar (1969)\(^5\) analysed income and expenditure patterns of 150 farmers and farm labourers in Vellayani, Kerala. The study showed that low income families' expenditure on food accounted for 74.4 percent
of their monthly expenditure, about 8 percent on clothings, 4 percent on fuel and lightening and 3.4 percent on housing and remaining on household requisites, education and miscellaneous items. The study concluded that with the increase in family income, the food expenditure tended to decline.

Goswami and Bora (1970)\(^6\) assessed the utilisation of existing labour force in rural areas in the Nowgong district of Assam on the basis of farm management survey of 150 farm families selected from 15 villages in 1968-69. The study found that the rate of utilisation of labour was highest in case of adult farm servants followed by family adult males and females. By using a norm of 300 man days (8 hour-day) as full employment for an agricultural worker, it was found that on an average 14 percent of the workers engaged mainly in agriculture were surplus. The study suffered from many limitations, the major being the nature of the sample. All the 150 families in the sample were farm families. Agricultural labour families were not included in the sample. The methodology adopted for calculating excess labour also left much to be desired.

Jha (1970)\(^7\) conducted a survey of 924 labour families in Champaran District of Bihar during the year 1959-60 and presented a detailed analysis of the structure of rural labour force. Although employment on regular basis was not very common in the district, there was an implicit attachment of labour to individual farms. Out of the total
labour force, 25 percent were permanent labourers and 75 percent worked as casual labourers. The average number of days of employment for an agricultural labourer worked out to be 261 days in a year. Out of this, 48 days were utilised for non-farm work. The study found that out of 924 labour families, 700 had been agricultural labourers from previous generation.

Mishra (1970)^8 made a study of agricultural labour market in Gujrat in 1960-61. Data from 17 districts of Gujrat revealed that the demand for labour was a function of the capacity and the requirements of producers in addition to wage rate. The variables of per capita income, irrigated area and crop pattern reflected the capacity and requirements of producers. Each of these variables was found to have a significantly positive relationship with demand. All the variables taken together explained 87 percent of variations in the demand for labour among districts of Gujrat. It was found that wage rate did not effect the supply of labour. The prevalence of excess supply situation in the labour market precluded the possibility of supply behaving as a function of wage rate.

Wills (1971)^9 used a linear programming model to examine the implications of the general acceptance of new technology on agricultural employment and incomes in Bisante development block in Budaun district of U.P. It was assumed that new technology locally unavailable in 1967-68 will generally be adopted by 1972-73 and the resource productivities on farms using the new inputs in 1967-68 will generally be
representative in 1972-73. The results indicated that the widespread adoption of new technology substantially increased agricultural wages particularly in October-November post-Monsoon harvest period. Despite the rise in agricultural wages, agricultural incomes of landless labourers increased less than those of land owners. The results were not conclusive as several limitations were imposed by assumptions made and data used.

Krishnaji (1971)\textsuperscript{10} made a comparable study to compare methodologies adopted by Directorate of Economics and Statistics and the Second Agricultural Labour Enquiry to estimate agricultural wages. He compared 1956-57 Directorate of Economics & Statistics data regarding agricultural wages with that of Second Agricultural Labour Enquiry (1956-57) and showed that the wages according to the former source were higher. While the two sets were not comparable, it was concluded that Directorate of Economics and Statistics data conform to peak season wages. The analysis of the trends in real wages revealed that the wages had gone up by between 25-50 percent in different areas. Price increases in the same period were 33 percent showing that living conditions of agricultural labourers continued to be the same or worst than before.

Singh (1972)\textsuperscript{11} conducted a study during 1970-71 covering a sample of 60 farm labour households in Hussaianabad block of Palaman district in Bihar. The data were collected during the first week of six
seasons of two months each. The results showed seasonal fluctuations in the incidence of unemployment. Although a worker was employed for 154 days (8 hours day), his employment was spread over 305 days irrespective of the hours of work done each day. About one third of the productive potential of the labour force was estimated to be under-utilised. The scope for increasing the employment of farm labourers by an increase in irrigation facilities and extension of the area under high yielding varieties programme was suggested.

Jose (1972)\textsuperscript{12} examined the level of fluctuations and trends of wage rates for agricultural labour in Kerala state by using official published data and to see the extent to which the phenomenon observed in the two I.A.D.P. districts Allepey and Palghat. The main findings of the study were that the rise in the real wage rate believed to have taken place between 1960-61 and 1967-68 appeared to have been far less in magnitude than indicated by earlier studies. Secondly, there were substantial variations in the long-term movement of real wage rates among different villages. In some of the villages, the real wage rate had declined.

Bardhan (1972)\textsuperscript{13} based his study on village and state level cross-comparisons of variations in agricultural wage rates and certain basic factors effecting demand and supply in the states of Madhya Pradesh, Uttar Pradesh, Bihar etc. The analysis indicated that irrigation or multiple cropping did generate a positive response not only in wage income but
also in daily wage rate. The worst possible combination of factors was in the areas where the labour market was flooded by the landless labourers, the level of agricultural productivity was stagnant and non-agricultural employment opportunities were small. This was more or less the case in many parts of Madhya Pradesh, Eastern, U.P., Bihar and numerous pockets in almost every state.

Pandey (1973) studied the problem of low wages of landless agricultural labourers through an empirical analysis of wage determination in a predominantly wheat grown region of India covering 83 districts in the North-Central wheat zone. Multiple regression analysis was used. The labour market was shown to function well in the contemporary setting of Indian agriculture. Demand variables were found to be much more powerful than supply variables in determining agricultural wages. The former showed high coefficients in districts where the pressure of population on cultivated land was high. Supply variables were relatively more important in districts where the pressure of population was low. This suggested that the real solution to the problem of low wages of agricultural labour lies in the development of agriculture itself.

Parthasarthy (1974), Rao and Rao collected data on employment and unemployment of rural labour in Godavari District of Andhra Pradesh for the year 1971-72. Two poverty levels (per capita income of Rs. 450 and Rs. 300) were related to the eight variables viz. (a) possession of
land (b) size of family (c) worker dependent ratio (d) average wage (e) presence of female workers (f) average level of employment (g) regional variations and (i) caste. About 62 percent of households were found to be poor. It was shown that an increase in the employment per worker by a day would increase per capita income by Re 0.65 while increase in the wage rate by a rupee would increase it by Rs. 121.25 per annum.

Pant and Baghel (1974)\textsuperscript{16} examined the spatial and temporal pattern of agricultural wages that prevailed in different districts of Madhya Pradesh between 1960-61 and 1970-71. With the help of simplifying assumptions, the relationship between factor proportions and wage rates were analysed in the context of agricultural development. Fitting a multiple regression with wages as the dependent variable and output per capita (rural) and mechanisation units per agricultural worker as independent variables, cross-sectional analysis showed a positive relationship between the two sets of variables, though the regression coefficients were not significant. Similarly, the regression equation with wages as dependent variable and land concentration ratio and index of urban industrial complex as independent variables also showed a positive relationship, though the regression coefficients were not significant. It was concluded that agricultural output growth and agricultural wages, in general, had a positive but weak relationship. In 14 out of 43 districts in Madhya Pradesh, real wages declined and among the rest, the rate of growth of real wages was low.
Powar and Goyakwad (1974)\textsuperscript{17} studied trends in real wages based on farm studies conducted by them in Ahmed Nagar district of Maharashtra for the years 1964-65 and 1971-72 and found that average wage-rate received by an adult male worker was Rs. 2.17 in 1964-65 and Rs. 3.42 in 1971-72, an increase of 57.10 percent. But no attempt was made to indicate quantitatively the rise in the cost of living though it was said that the commodity prices and cost of living increased in the same manner. Agricultural employment, both on owned farms and on others' farms, of an adult male worker increased, though the total employment declined due to fall in employment in non-agricultural occupations. The gross income from crop and livestock production increased at a faster rate than income from wages.

Singh, Iqbal and Kunwar (1974)\textsuperscript{18} based their analysis on the data obtained from two clusters of villages, one under the influence of new technology, and another in a backward area in Kanpur district. They found that between 1964-65 and 1973-74, money earnings of permanent agricultural labourers (landless) rose from Rs. 720 to Rs. 1440 per annum in the new technology area and Rs. 277.20 to Rs. 714 in the sub-technology area. This showed that money earnings increased at a faster rate in new technology area. The authors failed to provide figures on the trends in prices of items of consumption. So the trends in real wages were not clear.

Misra and Gupta (1974)\textsuperscript{19} made a study of the trends in money
wages, real wages and productivity. It examined the wage productivity relationship during 1960-61 to 1968-69 and identified the factors determining the wage level during 1968-69 in the districts of Gujrat. Both linear and exponential relationships between selected variables and wages were estimated. Productivity increased at the rate of 1 to 3 percent over the period in most of the districts in Gujrat. But the real wages declined in all the districts. The coefficients of productivity were found non-significant in all the districts. It concluded that changes in productivity have not at all influenced the real wages. Linear and exponential functional relationships were estimated between selected variables viz. (1) land concentration ratio (2) percentage of irrigated area (3) pump sets per thousand acres (4) tractors per thousand acres and (5) number of agricultural labourers per acre of cultivated area and wages for the cross-sectional district-wise data for the year 1968-69. All the variables included had the expected signs. But the availability of pump sets and agricultural labour alone turned out to be significant with a positive sign for former and negative sign for the latter.

Rath (1974) examined the changing picture of unemployment of agricultural labourers based on the Second Agricultural Labour Enquiry (1956-57) and the 25th Round of N.S.S. (1970-71). The employment data for the first set of N.S.S. rounds was used to indirectly explain the differences between the findings of two enquiries. The study found that 6.7 percent of adult male’s total time was spent on unemployment i.e. in
seeking or being available for work, 12.5 percent of the time was not available due to sickness etc. They were in gainful employment for 82 percent of their time. With certain assumptions, it was estimated that male labour force was unemployed for about 6.8 percent of the time in 1970-71 as compared to 14 percent in 1956-57. But this difference was due to different methods of measuring intensity of different activities.

Bhalla (1976)^21 based his study on the field survey conducted during 1972-73 covering three regions in Haryana namely (A) Karnal district–Green Revolution area, (B) most of Hissar and parts of Rohtak district where the new technology has been much less widely adopted and (C) arid region. The study showed that new technology greatly increased the demand for labour, especially permanent labour in the Green Revolution areas. It improved the inherent bargaining position of agricultural labourers in these areas. Their standard of living had gone up. In arid region, where most labourers were causal workers, direct consumption loans from various sources still predominated. The study also provided information about the number, composition and household origin of agricultural labourers in Haryana.

Connell et al (1976)^22 have attempted a quantitative analysis of the data from forty Indian Villages (including 16 village studies from Delhi Centre covering the states of Punjab, Uttar Pradesh and Himachal Pradesh) surveyed by three Agro-Economic Research Centres. This village level study analyses the individual migration in four stages: (a) a
discriminant analysis to identify village characteristics which are associated with migration; (b) a correlation analysis to find the individual socio-economic variables which are correlated with migration; (c) a regression analysis to find the pattern of relationship between migration rate and relevant socio-economic variable; and (d) an analysis of migrant characteristics.

The results of regression analysis show that both village-based and urban-linked factors induce migration. The important village factors (push factors) are land shortage, low fertility of land, skewed distribution of land and the resulting high proportion of landless agriculturists. The major urban factors (pull factors) are sale of produce (indicating commercialisation of agriculture), cash cropping, access to towns and literacy rate. The overall explanatory power of push factors is 49 percent to 65 percent of the total variation in migration propensities between villages. The pull factors explain about 70 percent of the variation in the migration rates. Typically push factors are collinear but the pull factors vary independently.

The study has, no doubt, quite successfully carried out a detailed macro-economic analysis of the determinants of rural out-migration and has led to some far-reaching conclusions. But the usefulness of the study was restricted by certain limitations of data and procedure; the data used were somewhat out of date as it belonged to fifties or early sixties; the data were from secondary sources and were also not completely
comparable; micro-economic procedure is more appropriate in investigating the cause of individual migration.

Garg and Singh (1976) concluded a study of 50 landless agricultural labour households selected randomly from 5 randomly selected villages, in Mawana block of Meerut district (U.P.). Their study found that an agricultural labourer was employed for 300.2 days while female and child labour got employment for 227.1 and 230.5 days respectively in a year. The annual income per landless agricultural labour household was Rs. 5672.57. The study indicated that rearing of milch cattle and selling of milk was a good subsidiary occupation for supplementing income and increasing self-employment in the area.

Pandey (1976) analysed the trends in wages and income and pattern of consumer expenditure and indebtedness of agricultural labourers in India. He based his analysis on Agricultural Wages in India published by the Ministry of Food and Agriculture, National Sample Surveys and three labour enquiries conducted during 1950-51, 1956-57 and 1964-65. The study revealed that wage rates of agricultural labour increased significantly during 1956-57 and 1970-71, especially in Kerala, Haryana and Punjab. But the real wages did not show any improvement except in Haryana and Punjab. In some states, real wages had rather declined. The average annual income of agricultural labour households increased in both money and real terms. This was due to improvement in employment. There was no saving and 80 percent of total expenditure
was on food items. The major part of the income of agricultural labourers was from wage-paid employment and only 20 percent of income was coming from subsidiary occupations. The study revealed that, in most of the states, overall economic profile of agricultural labour was that of subsistence living.

Raghavulu (1976) made an analysis based on the secondary data from the 18th and 25th Rounds of N.S.S. (1963-64 and 1970-71) and official sources of information. He showed that the major part of income of agricultural labour was derived from wages which were uncertain and unstable. Though minimum wages had been fixed by the state from time to time, the wages in operation showed a great deviation from the prescribed Minimum Wages. In real terms, the wages paid to agricultural labour in Karnataka were much lower than what should have been paid in accordance with the price rise. The seasonal variations in the wages paid to agricultural labour in Karnataka were not quite sharp.

Jose (1978) in his study: “Real Wages, Employment and Income of Agricultural Labourers” challenged the frequent assumption that agricultural wage rates were directly determined by the supply-demand conditions in rural labour market, and that changes in the market situation could be measured by the movements of wage rates. He argued that in the Indian context, factors other than wage-rate might be crucial in the determination of earnings of agricultural labour households. National level data on relative earnings for 1963-64 and 1970-71 were examined,
which compared indices of income with those of agricultural wage rates. It showed the inadequacy of wage rate indices to explain the trends in income.

Panikar (1978) found that agricultural labourers in Kuttandum (Rice belt of Kerala) faced acute unemployment and under-employment. In the selected labour households, open unemployment rate worked out to be 33 percent of labour force. Among those who were employed, a person, on an average, got work for little over one third of the number of days in a year. Naturally, the total earnings among these households were low, inspite of the fact that the wage rates in this region were comparatively high. Thus, the per capita income among sample families (Rs. 445) was less than half of the state per capita income (Rs. 909). The study revealed that the average intake of energy among the sample families was only 66 percent of the requisite minimum of 2200 calories per day per capita. The study concluded that the incidence of undernutrition and malnutrition was a reflection of very low level of income which in turn was due to inadequate employment opportunities.

Sharma, Murti and Singh (1988) studied the extent of income inequality and poverty in the tribal areas of Himachal Pradesh. Their study aimed at investigating how the gains of development efforts have been shared by different sections of the society. Their study was based on multi-stage stratified random sampling. Four tribal areas of Himachal Pardesh viz., Kinnaur, Lahaul, Spiti and Pangri formed the basis of their
study. Sample size comprised of 110 households from Kinnaur, 115 from Lahaul, 63 from Spiti and 81 from Pangí. Poverty line was defined on the basis of an income of Rs. 6400 per annum. Those with income of Rs. 4800/- per annum were considered as severely poor. In order to assess the inequality of income, they used Gini index, coefficient of variation, standard deviation etc. The findings of the study indicated very high income inequalities and widespread prevalence of poverty in all the tribal areas of Himachal Pradesh. The rich were very rich and the poor were very poor. Inspite of concerted efforts made by Central as well as State Government, the gains of development had been unequally distributed. It was also evident that many anti-poverty programs like Integrated Tribal Development and Integrated Rural Development had not succeeded in achieving the desired goals.

Gupta and Prajapati (1998) examined the seasons for migration in Chattisgarh region of Madhya Pradesh. There study is based on sample data collected through multi-stage random sampling techniques. The study brought out that lack of job opportunities was perceived as main reason for migration by more than 30 percent farmers in each category of the sample farms. They found that during the kharif crop, it was not possible for them to get a job in their villages which forced them to out-migrate in search of job. Lower wage rates at their native places with large-sized families were the main reasons for migration by the farmers.
Zachariah, Mathew and Rajan (1999) conducted study to assess the impact of migration on Kerala's economy and to analyse its characteristics. The principal source of data was a large-scale sample survey, conducted during March-December 1998, of 10000 households selected from 200 Panchayats / Municipal wards (at the rate of 50 households per Panchayat / Municipal Ward ), comprising all the districts and all the taluks of the state. The study concluded that the number of persons going out of Kerala has been increasing ever since the 1940s. The composition of the migration flows had changed in the 1980s from predominantly out-migrating to predominantly emigration. Out-migration had been on a declining trend, and soon, net out-migration could turn negative. Until the period of the study, the new number of emigrants from the state had always been more than the number of return emigrants. However, the number of out-migrants from the state had remained lower than the number of return out-migrants in several future years. More importantly, net emigration and net out-migration had both been on a downward trend during the previous years. Emigration will continue to increase for some more years, but return-emigration would increase at a faster rate, resulting in a period of net negative international migration. During the past 10 years, NRI bank deposits had been increasing at a healthy 20-25 percent per year. The number of return-emigrants might increase rapidly in the coming years.

Jayaraj and Subramanian (2002) conducted a study on child
labour in Tamil Nadu. They conducted the study in order to obtain an estimate of the overall incidence of child labour, inter-regional and inter-caste variations in the incidence of child labour in the state. In order to construct a picture of the extent of child labour and its spatial and group-related dispersal, they used two sources of data, (a) various rounds of the survey on employment and unemployment conducted by NSSO pertaining to the years 1972-73, 1977-78, 1983 and 1987-88 and (b) population census data for the year 1981. They concluded that the magnitude of child labour in Tamil Nadu is disturbingly large (11 percent of workforce). The occupations significantly associated with employment of child labour has some peculiar characteristics such as a high degree of casualisation of workforce, a high level of illiteracy among workers, low wages etc. A disproportionate burden of the overheads of child labour is borne by girls relative to boys; by rural children relative to urban ones; and by SC\ST children relative to non SC\ST. The study is based primarily on secondary data. It is more descriptive and less analytical. It has ignored the socio-economic causes and effects of child labour.

Balasubramanian, Tamizoli and Murugakani (2002)\textsuperscript{32} conducted a study in a village in Tamil Nadu to analyse the labour-use patterns and determinants of labour absorption in a mixed farming system. The strong role of hired women labour in agriculture, cropping patterns and market linkages have been given a gender prospective. The impact of the employment on the intra-household power relationship has also been
discussed. The study was conducted in a village called Pudupatty in Dindigul district of Tamil Nadu. All 184 farm households of the village were interviewed. 73 women agricultural labourers were separately interviewed for the purpose. Main findings of the study were: hired labour was widely prevalent in all types of farms including small and marginal farms. Well defined market linkages have emerged in which organised industries and commissioned agents enter into agreements to buy the crops from the farmers. They provide credit, materials and training. The hired female labour is an important component of production system. The skilled women labourers were more able to negotiate wages. Besides this, women from the dalit community were able to negotiate higher wages as compared to non-dalit women. This study has one major shortcoming. It is a case study conducted on a single village. In case of agricultural labour, huge variations are found from village to village. Therefore, conclusions drawn on the basis of a study of a single village cannot said to be applicable to the whole population.

Rawal (2004)\textsuperscript{33} analysed the 'siri' system of labour hiring as it was practised in western part of contemporary Haryana and attempted to record the changes that have taken place in the nature of employer-employee relationships under the 'siri' contract. He examined the problem of unfreedom and bondage faced by 'siri' workers. The study was based on sample survey. From the village of Birdhana in the
Fatehabad district, primary data was collected with the help of a questionnaire by direct interview method. The village falls in the area where the practice of hiring long term workers had survived despite very substantial growth of agriculture since the mid-1960's. The study attempted to identify factors that had contributed to the survival of 'siri' system in this part of Haryana despite the fact that siri's have become almost extinct in rest of the state. The case study of Birdhana suggested that two features of agrarian economy of Birdhana, large size of holdings and availability of labour displacing technology, made it beneficial for the land owners to hire workers through the ‘siri’ system. On the other hand, severe unemployment among casual workers, forced them to work as 'siris' on extremely oppressive and exploitative terms.

Zachariah and Rajan (2007)\(^4\) published a working paper based on the results of the 2007 round of the Migration Monitoring Studies (MMS) being conducted by the Research Unit on International Migration of the Centre for Development Studies (CDSMRU). The CDSMRU conducts periodical sample surveys on migration covering the entire State of Kerala. The MMS (2007) was based on a sample of 10,000 households selected at random from all the 14 districts and all the 63 taluks of the state, by using multi-stage random sampling technique. The study concluded that contrary to expectation, the international migration situation in Kerala had remained absolutely stationary during 2003-07. The number of emigrants, return-emigrants, non-resident Keralites and
the proportion of Kerala households with a non-resident Keralite each in 2007 were the same as they had been in 2003. Mobility in Kerala had become, so to say, immobile. The era of large-scale emigration from the state seems to be largely over. Internal migration was not very static. It had started declining. Then more persons were coming to the state than were going out. Contrary to common thought, unemployment had declined by a whooping 40 percent during 2003-07. Simultaneously, employment had increased by over 3 lakh persons, with a 100 percent increase in the private sector and 20 percent increase in self-employment. Remittances to the state had toed the expected line with a consistent increase of 33 percent during 2003-07. Remittances formed about 20 percent of the state's NSDP and were 30 percent more than the state's annual revenue receipts.

**Studies Relating to Punjab**

Tandon (1970)\(^{35}\) in his study analysed the causes and effects of rural-urban migration in Ludhiana district. It also studies the characteristics of migrants from different socio-economic groups in the rural areas. The data were collected from forty-six households of two purposively selected villages of Ludhiana district, one near the city, easily accessible and well-connected by roads and rail with Ludhiana city and other comparatively distant, remote and not so well-connected.

The study found that there was larger migration of people from the villages near the city as compared to the distant ones. Availability of high
wage-paying industrial employment and easy accessibility of the village were two powerful factors facilitating city-ward migration. Migration did not affect the rural family income adversely. In most cases, the family income remained unchanged and in some others it increased. Out-migration also necessitated and facilitated some reorganisation of farm business to offset the possible decline in family income.

By and large, land-owing families showed eagerness to send out young, educated members to eke out an honourable, independent living by taking up whole-time employment suited to their levels of education, skill and capacity. Most of the migrants from landowning households, being educationally better equipped, obtained jobs of teachers in educational institutions or clerks in government offices and private establishments. Migrants from landless households, on the other hand, got employed as fitters, postmen, drivers, soldiers, peons, etc.

The study also emphasises that planned industrial development must involve a planned movement of workers from agriculture to industry and allied occupations which requires rationalisation of employment pattern through measures like decentralisation of industries, development of cheap means of transport, etc. These measures will reduce cost of movement and also make the migrants available for farm activities during peak periods.

Rudra (1971) conducted a survey of permanent farm servants and casual agricultural labourers as substitutes for family labour in
Punjab and there was a positive association between farm size and employment of permanent and casual labourers. The study further showed that pumps and tubewells created demand for casual labour and replaced permanent servants but tractors created demand for permanent labourers and replaced casual labour. The study was confined only to substitutability between man and machine and it ignored other factors affecting employment in agricultural sectors.

Mehta (1973)37 analysed the pattern of migration in the Bist Doab (which included the districts of Jalandhar, Hoshiarpur and Kapurthala region of Punjab) during 1951-61. It used the secondary data as provided by Census of India. The study highlighted the excessive outflow of people in Bist Doab. Since the beginning of the twentieth century, the area has been experiencing (a) out-migration of agricultural population for agricultural purposes and (b) emigration to foreign countries. During 1951-61, too, the region witnessed a considerable excess of out-migration over in-migration. This was evident from the fact that population of the region increased at a much lower rate (14.7 percent) than the natural rate of increase (24 percent). The out-migration and emigration, which were thus simply a continuation of the process started earlier, were induced mainly by small and declining size of land holdings and inadequate opportunities in the non-agricultural sector. The development of new agricultural lands in other parts of Punjab and also in the adjoining states were instrumental in stimulating migration of
agricultural population from the region. Emigration was mainly due to the past tradition of emigration among the people of this area through which they had become aware of the benefits of going abroad. Out-migration was both from rural and urban areas of Bist Doab and was largely to other parts of Punjab. About one-fifth of the out-migrants moved to other states of India. Emigration was mostly to the United Kingdom, Canada, East African Countries etc. Excessive out-migration and emigration from Bist Doab had resulted in depletion of economically active work force.

Grewal and Bal (1974) examined the trends in real wage rates separately for three operations, viz, ploughing, weeding and harvesting for the state of Punjab during the period 1956-1972. Linear trends were fitted to the data collected. On the whole, the real wages showed no increase during the period. In order to see whether the wage rates during the period of Green Revolution (1967-1972) was significantly greater than those during the earlier period, the analysis was repeated by using dummy variables for allowing changes in the intercept as well as in the slope. The analysis revealed that the rise in wage rates was highly significant during the Green Revolution period while in pre-Green Revolution period, the rate of growth of money wages just kept pace with the cost of living.

Ram and Singh (1974) conducted a study “Wages and Employment of Agricultural Labourers in Uttar Pradesh and Punjab”, based on data obtained from studies in the Economics of Farm
Management and Census of India, 1971. Their study showed that the size of agricultural labour force was very small and average cultivated land was rather large in Punjab. In Uttar Pradesh, the position was just the opposite. The annual earnings of an agricultural labourer in Uttar Pradesh was around Rs. 250 in comparison with uncomparable high figure of Rs. 2200 in Punjab.

Chawla (1974) studied the effect of Green Revolution on the volume of employment, wage earnings and wage rates of agricultural labourers in Amritsar district of Punjab at three points of time 1966-67, 1970-71 and 1973-74. The study was based on the data collected from 120 farmers out of which 40 were small (upto 12.5 acres), 40 medium (between 12.5 and 25 acres) and 40 large (above 25 acres). The study revealed that the wage earnings, wage rates and employment of casual labourer has gone up since introduction of HYV technology. The demand for permanent labour had gone up on all farms. The annual earnings of permanent farm labourers increased by 38 percent from Rs. 1630 in 1966-67 to Rs. 2260 in 1973-74.

Pandey and Dixit (1974) made an analysis of the changes in labour productivity and wage rates in Ferozpur district of Punjab using Farm Management studies for two periods 1954-57 and 1966-70. The study showed that production functions containing hired labour as an explanatory variable gave better results than those based on total labour. There has been some upward shift in the productivity of labour during the
period but this effect was not stable from year to year. During this period the wages rose by 130 percent while consumer prices index increased by about 93 percent.

Singh and Sidhu (1976)\textsuperscript{42} based their study on the data available in the “Studies in Economics of Farm Management, Ferozpur District 1960-70” and another study conducted in three out of fifteen villages selected for Farm Management Studies, 1967-70. The data for 1974-75 was collected from 15 agricultural labour households from each of the selected villages. Comprising a total of 45 labour households. The study indicated that per household per annum income of agricultural labour increased from Rs. 2277.46 to 4333.28 and per capita income increased from Rs. 391.17 to Rs. 916.12 over the period of 1971-72 to 1974-75. Their study further revealed that there was a slight increase in the share of income from livestock and livestock products and income from service and pension. They deflated household and per capita incomes by consumer price index for agricultural labourers and found that real per household expenditure rose from Rs. 2204.90 in 1971-72 to Rs. 3354.84 in 1974-75. However, the real expenditure per household increased by 15.12 percent.

Sain and Kundu (1977)\textsuperscript{43} studied the movement of agricultural wages after the Green Revolution in states of Punjab, Kerala and West Bengal. It was found that both money wage rates and real wage rates rose the maximum in Punjab. In Kerala, the rate of increase was lower,
although the workers were more organised there. In West Bengal, real wages dropped. The principal factors responsible for these variations were differences in pace of adoption of H.Y.V. crops and advanced technology, facilities and encouragement by government etc.

Mann and Singh (1977) based their study on secondary data from the project “Cost of Cultivation of Principal Crops in Punjab State” and the primary data, collected from 50 farmers (upto 4 hectares) and 30 agricultural labour families from three agro-climatic zones of Punjab for the year 1974-75. The study found that the earnings of agricultural labourers were the highest for those employed on share basis system followed by contract system and casual basis system in all the three zones. The average per annum earnings being about Rs. 3200, Rs. 1800 and Rs. 1600 respectively. The number of employment days per agricultural labour were 339 days for share croppers, 335 days for workers working on contract basis and 233 days for casual workers. On an average, agricultural labour was employed for 294 days. There were less variations in the income of agricultural labourers than that of cultivators.

Laxminarayan (1977) studied changes over time in the socio-economic conditions of 26 agricultural labour households in village Bhatian (Punjab), 25 agricultural labour households in village Mirka (Haryana) and 18 households in village Purana Pandey (U.P.). The study found that literacy rates did not appear to be increasing in agricultural
labour households. The study noted that the category of agricultural labour was only a small fraction of total income in these households. The Green Revolution appeared to have contributed in increasing agricultural income. Income of agricultural labour households had increased faster than the prices.

Manmohan Singh (1979)\textsuperscript{46} conducted a study which covered six villages of Ludhiana district. It revealed that 80.5 percent households were found to be earning less than Rs. 1500 annual per capita income in March 1977, 66 percent were earnings less than Rs. 750 and 33 percent households were below the poverty line according to the norm developed by Dandekar and Rath. The study further revealed that in a sample of 311 households in four villages only 8 persons were found who were seeking work but had no work. Of these, 7 were between 12 and 16 years of age and one a matriculate of 20 years. All were landless labourers.

Bhalla (1979)\textsuperscript{47} examined the real wage changes in the Punjab state as a whole and for each district, for the period 1961-1977 and measured the strength of (a) success of Green Revolution and (b) influx of workers into agricultural labour force, which may account for the trend. The study found that the real wage declined for most of agricultural operations between 1965 and 1968 and again in 1974, 1975 and 1977. The peak real wage rates for the entire period appeared during the years 1969 to 1973. Although male labourers gained over the period 1961 to
1977, the increase in the real value of their wages was much smaller than the growth rate of output. Output went up more than 2½ (250 percent) times its level in 1961, but real wages, at best, rose by 15 percent. The real wage rates went up for all operations only in five districts while in two districts these declined for four out of five operations during 1961-77. The results of the regression analysis of cross-section data showed that the variable that better explained variation in real wages was ‘productivity’ per male agricultural labourer. This variable captured the impact of two factors which had been working in opposite directions during the past decade. These were rising agricultural productivity and the enhanced supply of wage paid labour. Together, these forces accounted for 50 percent of the inter-district variations in real wages during early 1970s.

Jit (1980) conducted a study on the economic profile of agricultural labour in Punjab. He selected a sample of 270 households by using the multi-stage random sampling and the study concluded that the economic conditions of the agricultural labour households were better in agriculturally developed areas despite the higher concentration of labour force there. In some of the zones, higher population of labour force depressed the wage rates. Mechanisation of agriculture in Punjab has not so far adversely affected the employment opportunities for labour.

The above study is confined only to local agricultural labour.
Migratory agricultural labour is kept outside its scope. But most of the farm labour in Punjab has migrated from other states like Uttar Pradesh and Bihar. As such, this study does not present a true picture and this makes the study practically less important.

Harjinder Singh (1980) attempted to examine the extent and pattern of rural-urban migration in Punjab during 1961-71. The study was based on secondary sources of information. The study showed that rural-urban migration in the state during 1961-71 was about one lakh which was lesser than 1.45 lakh net rural migration during 1951-61. Proportion of migration to total increased urban population also fell from 27.0 percent during 1951-61 to 15.75 percent during 1961-71. Intensification of agricultural activities and the efficient road network were the main factors responsible for the lower rural-urban migration during 1961-71.

Other findings of the study were:

1) Smaller urban centres in the state registered out-migration, while bigger urban centres experienced in-migration.

2) Market towns which experienced tremendous growth during 1951-61 due to the cash-cropping etc., showed a decline in growth rate during 1961-71 since industrial activities did not take place in these towns.

3) Towns along Grand Trunk Road (Doraha, Ludhiana, Phagwara, Khanna, Jalandhar and Sirhind) experienced higher rate of in-migration.
4) Urban centres, mostly in south-west Punjab (Sangrur, Longowal, Sanour, Rama Mandi, Bathinda and Abohar) experienced moderate rate of in-migration.

5) Urban centres along the Shivalik Hills and Pakistan border (Dera Baba Nanak, Amritsar, Gurdaspur, Ferozpur, Taran Tarn and Majitha) experienced lower rate of in-migration.

6) The rural areas of Jalandhar, Ludhiana, Hoshiarpur, Ropar, Ferozpur, Amritsar and Sangrur districts were identified as areas of out-migration.

7) Rural-urban migration in Punjab during 1961-71 was influenced by pull factors (high percentage of urban population to total population of the district, higher proportion of non-agricultural workers to total workers, proximity to bigger urban centres and high literacy rate of population) as well as push factors (high population pressure on agricultural land and nearness to Pakistan border).

Grewal and Sidhu (1981) conducted a study on the pattern of employment and wage structure in Punjab agriculture. A sample of 240 agricultural workers was taken with the help of a multi-stage random sampling. They concluded that the male agricultural labour was employed for an average of 270 days a year, whereas female labour was employed for about 131 days. The agricultural season from July to December were regarded as months of intensive employment, whereas February, March and June were months of less employment.
opportunities. The average daily wage rate for female agricultural labour including meals was Rs. 12.50, whereas it was Rs. 11.65 for male workers. Composite annual income for male agricultural labourer was Rs. 4300, whereas for female labour it was Rs. 1593.50. The increased technical break-through has resulted in increased employment opportunities and higher wages.

The above study is primarily descriptive and not analytical in the sense that it explained only the results based on facts and figures. It does not establish cause and effect relationship i.e. it does not take into account various explanatory variables e.g. it inferred that technical break-through resulted in increase in employment opportunities. But, how ? The study failed to explain. Further, it also inferred that average daily wage rate for female agricultural worker was higher than that of male workers. The reasons of such empirical paradox have not been explained. Moreover, migratory labour has not been included in the study.

Sharma (1982) studied the impact of migratory labour on the rural economy of Punjab state. His study was based on the multi-stage random sampling. The study revealed that most of the migratory labourers worked on contract basis during the peak season in the form of groups but they worked on casual basis on daily wages during the lean season. About 13 percent of them employed as farm servants on permanent basis. The total earnings of the migrants varied from Rs. 400 to Rs. 2200 per month. Most of the farmers were willing to keep
migratory labourers on permanent basis as they were considered to be more honest, docile, submissive and unorganised. Majority of the native agricultural labourers had expressed that the migrants had rendered them jobless and limited their employment opportunities and depressed their wage rates.

Ghosh (1983)\textsuperscript{52} conducted a study on under-employment in rural Punjab. Ghosh discussed the whole array of problems relating to under-employment. This study revealed that, in the three zones studied, under-employment ranged between 15 to 37 percent. Under-employment very often is a function of full employment norm and no single criterion measuring under-employment seems to be absolutely methodologically fool-proof. But he failed to use a multi-dimensional approach to study the problem. It is, therefore, better to use a number a criteria simultaneously for the purpose of making a meaningful comparative study to help the formulation of an effective policy. He also failed to include migratory part of the agricultural labour in Punjab.

Oberoi and Manmohan Singh (1983)\textsuperscript{53} in their study, made a comprehensive analysis of rural-urban migration in Punjab, particularly in the Green Revolution belt of the Ludhiana district. The study was based on the primary data generated in two different household surveys, one conducted in 26 selected villages of the Ludhiana district covering 2124 households and the other in the city of Ludhiana covering 2617 households. They concluded that rate of out-migration from rural areas
was higher than the in-migration rate. The average rate of migration for economic reasons was 4.51 percent for out-migrants and 2.53 percent for in-migrants. It suggested that some of the shortage of labour reported in the rural region might be due to the out-migration and not solely because of technological changes in agriculture. They also found that rural out-migration was dominated by the poorest and the richest. This result was contrary to the common belief that these two classes normally do not migrate; the rich need not migrate and the poor cannot afford to migrate. The study also revealed that out-migration of dynamic members from the cultivating households did not adversely affect the process of adoption of new technology in agriculture.

Though the study proposed to analyse both causes and consequences of rural-urban migration, but, nowhere during the course of discussion the determinants of migration were separately stated and analysed.

Sidhu and Grewal (1984)\textsuperscript{54} conducted a study on migrant agricultural labour in Punjab. They correlated the influx of migrant labour with the wages and employment conditions of local agricultural labour in Ludhiana, Patiala, Faridkot and Amritsar districts of Punjab. Both primary and secondary data have been used to achieve the objectives. The simple averages, OLS techniques have been applied to the data and they concluded that more than 90 percent of the local agricultural labour did not view the influx of migrant labour (from other states) favourably as
competition from migrant labour depresses the wage rates and narrows down the employment opportunities for local agricultural labour. Ludhiana and Patiala have the highest concentration of migrant labour, hence wage rates for both casual and permanent labour are relatively low, whereas in Faridkot and Amritsar wages are relatively higher because of less concentration of migrant labour. The average per annum wage was as low as Rs. 2166.67 and Rs. 2083.53 in Ludhiana and Patiala districts during 1977-78 as compared to Rs. 2250 and Rs. 2667.67 per annum respectively for Faridkot and Amritsar. Even during 1983-84 similar trend was seen when average per annum wage was Rs. 3333.33 and Rs. 3410 respectively for Ludhiana and Patiala districts as compared to Rs. 3666.67 and Rs. 3500 for Faridkot and Amritsar.

They concluded that the influx of migrant labour is never welcome by the local workers. Moreover, with migration of workers, local labour supply is surely bound to decrease the wage rates. Besides, this study presents a one-sided picture by ignoring the economic impact of migration on the migrated labour itself.

Gian Singh (1986) studied the level of living of agricultural labourers and marginal farmers in three districts of Punjab-Ludhiana (from high productivity region), Bathinda (from medium productivity region) and Ropar (from low productivity region). Both primary and secondary data have been used in this study.

He stated that there was similarity in the income patterns of
agricultural labourers and marginal farmers, across the income categories and districts. Agricultural wage was the major source of their household income and it was supplemented by subsidiary occupations like dairy farming etc. The workers falling in the high income group primarily consisted of permanent labour whereas the low income group mainly belonged to casual labour. There was more permanent labour in Bathinda, whereas in Ludhiana and Ropar, casual labour was more popular. There was similarity in consumption pattern of agricultural labourers and marginal farmers in all the three districts. Agricultural labour spent major portion of its income on food grains followed by expenditure on milk and milk products, clothes, sugar, 'gur' etc. The average propensity to consume (APC) was more than unity in case of both agricultural labour and marginal farmers.

Similar to the previous study, this study is also more descriptive and less analytical. Moreover, only income and consumption pattern of agricultural labourers has been discussed. Economic conditions is a broad term. There are social factors which do affect the consumption pattern of the labourers. Such factors have been ignored in this study. Moreover, the average propensity to consume has been worked out more than unity. The author has not explained the position of the workers as how they meet the deficit of income over consumption. Moreover, the reasons for such a high APC have also not been explained.

Paul (1989)\textsuperscript{66} conducted a study on rural-urban migration in
Punjab. The study was based on the primary data generated in a rural sample survey organised in two districts of Punjab, viz. Ludhiana and Sangrur. The study showed that 88.7 percent of migrants were educated as against 30 percent of non-migrants. More than 56.7 percent of the out-migrants had high or higher education, while the corresponding figure for non-migrants was about 7 percent. The study concluded that rural out-migration in Punjab was mainly restricted to the educated people. The high growth rate of agricultural labour and the declining capacity of the farm sector to absorb surplus labour added to the unemployment and under-employment in the sector. And education has acted as a catalyst to induce out-migration from the rural areas of the state. The data also revealed that significantly more males from medium farm groups and significantly less from small and large farm groups tend to migrate.

The above study is descriptive and not analytical. Paul has divided the rural population only into two categories: cultivators and non-cultivators. It should be noted that cultivators are only a part of the rural population. There are other groups of artisans such as carpenters, blacksmiths, goldsmiths, weavers etc. which form an important part of a rural economy. They have been ignored in the study.

Gupta (1991)57 conducted a study on migration of agricultural labourers from the Eastern to the North Western region i.e. from Uttar Pradesh and Bihar to Punjab and concluded that majority of the migrants have no housing problem but they faced problems of social participation
and frustration and were not well adjusted in the new socio-cultural milieu. Their food habits had changed from rice to wheat and maize. The adoption level of the local language was low while the change in the dress was apparent. Most of the immigrants had cordial relations with the locals. However the former felt deprived vis-a-vis the latter with respect to wages, working hours and levels of living. The employer farmer preferred to employ migrants as they were ready to work on low wages for longer hours and were more submissive than the locals.

Khurana (1992) conducted a comparative study to analyse employment patterns in the agricultural sector of Punjab and Bihar. His study is primarily a secondary data based study. The study brought out that due to influx of migrant labour during peak season in Punjab, the demand for attached farm servants had considerably declined. On the other hand, in Bihar, low demand for labour in agriculture, coupled with increasing supply of labour due to high population pressure, had kept the wage rate low. Migrant labour in rural Punjab has tended to depress the money wage rates for the rural labour. Regarding the consumption pattern, the study revealed that a Punjab agricultural labour household made a higher expenditure (27 percent) on items like vegetables, fruits, meat, fish, egg, clothing, footwear, medicine, health and education against only 11 percent by Bihar agricultural labour households on such items.

Chahal, Dhawan and Raj (1995) studied the non-farm
employment and wage-pattern in rural Punjab. In this study, an attempt was made to examine the structure of non-farm employment and wages at the micro level in rural Punjab. For this, Billaspur village in the Ludhiana district was purposively selected. A census method was used to collect data on specially designed schedules through direct interview method during the year 1994-95.

This study showed that the proportion of employment in the farm sector to non-farm sector was 0.62 : 0.38. The pattern of employment in agricultural sector indicated that farm sector accounted only for 18.72 percent of total employment in the selected village, followed by allied agricultural activities. The relationship between literacy and employment in agriculture showed an inverse relationship. The wage earners, on an average, got employment for an average of 316 days in a year.

The above study is a case study conducted on a single village selected according to 'convenience'. Hence the study involves all types of sampling errors. There are huge variations in socio-economic structure among different villages in Punjab. Hence, inferences drawn on the basis of a study of a single village can not be applied to the rural Punjab as a whole.

Singh (1995) studied the relationship between agricultural development in Punjab and the influx of agricultural labour from other states to Punjab. His study revealed that the local agricultural labourers were being marginalised because of extensive use of machinery and
influx of migrant labourers. Competition among the local and migrant workers has resulted in the stagnation of wage rates for the past one decade. The influx of migrant labour has also depressed the trade union movement among agricultural labour.

Harpreet Kaur (1998) conducted a socio-economic analysis of child labour in Punjab. She conducted a case study in the District Ludhiana based on multi-stage random sampling. For the purpose, she interviewed 50 child workers. Her study indicated that the working children were mainly hailed from Bihar. They were between 11 and 14 years of age, mainly illiterates and belonged to low and backward classes. The problems faced by such children were identified as: long working hours, unfavourable working conditions and ill-treatment by employers.

The study conducted by Harpreet has two major drawbacks. She studied the problem of child labour only in agricultural markets. It narrowed the scope of the study. It should be noted that most of the rural child labour is engaged in the farms and not in the markets. Agricultural marketing being highly seasonal, child labour do not migrate merely to work in these markets. Secondly, main work in agricultural markets involves heavy loading and unloading. Therefore, a negligible number of children are employed in such markets making. The fact makes the study less significant.

Kaur, Gupta and Jindal (1999) studied the socio-economic and
psychological impact of migration of farm workers in rural Punjab. The study revealed that most of the migrants were males, landless, married, under heavy financial debt and belonged to large families. By working in Punjab, these were able to improve their socio-economic status and debt position. In Punjab, they faced the problem of language and social seclusion. The native agricultural labourers did not like the influx of migrant labour as it adversely affected their employments opportunities and brought bad habits of smoking and chewing of 'jarda' (Tabacco) to Punjab.

Chand (2002) conducted a case study of sugar industry in Punjab to study the impact of migrant labour on the trade union movement in Punjab. The study revealed that degree of unionisation was low among workers in sugar industry and still lower among migrants. About 2/3rd of the migrants in sugar industry were seasonal workers. They were generally assigned semi-skilled and unskilled jobs. Generally, skilled migrants were permanent employees. The workers, trade union leaders and management personnel felt that there was no need for a separate union for migrant workers as the problems and interests of the workers were the same. The native workers felt that migration had a negative impact on the employment opportunities for the local labour as well as on the wage rates in the labour markets. The employers were of the view that migrant workers were of a docile and submissive character and hence were easy to handle.
Bharti (2010) conducted a study to explore the economic conditions of the landless labourers in the midst of the agrarian crisis in Punjab. Her study is based on direct interviews with the agricultural labourers during her field trips to around 20 villages in Sangrur, Bathinda, Barnala and Mansa districts of Punjab during May and June, 2010. The study brought out that the farmers were the biggest sufferers of Punjab’s agrarian crisis. But, they were not the sole sufferers. With reduced work days, stagnant wages and deep in a debt trap, the lower caste landless labourers of Punjab were also committing suicides along with the farmers in almost equal numbers on this landscape of so-called prosperity. The study further revealed that a total of 2890 farmers and agricultural labourers from just two districts, Sangrur and Bathinda, committed suicides between the year 2000 and 2008. About 87 percent of those who lost their lives were either small farmers or agricultural labourers. A total of 1757 farmers and 1133 agricultural labourers committed suicide in Bathinda and Sangrur. The average annual income of the labourers who committed suicide due to debt was Rs. 19,419. But, the average debt owed was Rs. 70,036. The average debt-income ratio was thus 3.6:1. The study inferred that the Green Revolution’s technological leaps might have brought prosperity and fortune for some, but not for the agricultural labourers. It, in fact, added to the economic and political clout of the Jat landowning class in general, while further widening social inequality and those inequalities have reached such a level that total
share of landless labourers in rural income has declined to 10.5 per cent of the rural economy of Punjab. And, in contrast, the share of the rural rich in the total rural income has increased to 50 per cent. Further, the study brought out that with shortened maturity period of wheat, the advancement in harvesting technology and extensive use of herbicides, the peak earning season of agricultural labourers have reduced to one week, which used to be a month till a decade back. About 67 per cent of agricultural labourers get 10-20 days of work in a month. This is the main reason that average monthly income of agricultural labourers are far less than their counter-parts in non-agricultural activities. Pitted against machines, labourers on an average are given 1.6 quintals of wheat for an acre of harvesting, costing Rs. 1800, while it takes seven people to harvest an acre a day. The main drawback of the study is that it is based on the field visits of the researcher. No scientific sampling procedure has been adopted to collect primary data. Most of the observations of the study are based on the secondary information, rendering it less original.

Singh (2011) conducted a case study of Hoshiarpur and Kapurthala districts of Punjab to study the dynamics of international migration from rural Punjab. His study is based on the systematic random sampling technique. The Doaba region of Punjab was purposively selected because the region has the highest rate of international out-migration, followed by the other two regions Malwa and Majha respectively. Two of the four districts of Doaba region, namely
Hoshiarpur and Kapurthala, were selected for the purpose of the case study. Out of a total of 1386 villages in district Hoshiarpur, 14 villages were randomly selected while out of 618 villages in district Kapurthala, 6 villages were taken as representative villages. A total of 500 households were selected for the purpose of sample survey. The study revealed that the household capabilities play an important role in determining the patterns of international migration that is propensity, choice and intensity of migration. Besides land capability, social network capability is also among the main determinants of international migration. There exists gender bias against women in international migration owing to unique socio-cultural milieu of rural Punjab. Female migrants from rural Punjab are primarily dependent movers such as spouses, parents, children or sisters in the international arena; they are rarely market-led independent movers. Further, the study revealed that illegal migrants account for one-third of the total migrants. Regarding the factors behind migration, pull factors are more effective in case of migration flow to developed countries, while in case of developing countries, push factors are more responsible. Further, a normal, positively skewed and negatively skewed relationships were observed between economic status and the category of migrant households that is illegal, permanent legal and temporary work permit households respectively. The main drawback of the study is that the focus of the study is vague. The study revolves around the diversified aspects of international migration, rendering it rather insignificant.
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