CHAPTER - II

REVIEW OF LITERATURE AND METHODOLOGY

2.1 INTRODUCTION

Agriculture has a crucial role in the economic development of India, as it is the backbone of Indian economy. Majority of rural population are depending on agriculture and allied activities. Though more than 60% of population are working in agricultural sector, the contribution from agriculture to national income is less than 20%. It indicates the backwardness of our agricultural sector, which has its own impact on the economic conditions of people depending on agriculture and allied activities. Agriculture is carried on subsistence basis. Since the early-sixties, India has been using a new technology in agriculture. The new agricultural technology was in the form of a package programme, which included the use of high yielding varieties of seeds, assured irrigation and chemical fertilizers, insecticides and pesticides. Because of this technology agricultural production increased considerably, this was known as green revolution\(^1\). Majority of the farmers/ cultivators are in the category of small and marginal farmers. The number and proportion of such farmers has been growing over time. They constituted 69.07 percent of the total holdings in 1970-71 and their proportion increased to 85 percent in 2010-11. The area operated by them has grown from 20.86 percent of the total in 1970-71 to 32.31 percent 1990-91. The share of small and marginal holdings increased to 61.6 percent and 18.7 percent, respectively, by 1995-96, together accounting for 80.3 percent of all holdings\(^2\). Among the different categories of farmers compared with the large and medium farmers, the economic conditions of the small category, particularly the marginal farmer is very worse in our country.
Among the farmers, marginal farmers are facing critical economic problems, because of various reasons like excessive expenditure on domestic consumption, social ceremonies, frequent crop failures, natural calamities and price fluctuations etc. These reasons fail them to pay back their crop loans. Hence, farmers are becoming continuously indebted. Apart from these outstanding loans, farmers borrow money for next crop operation but fail to repay their loans mainly due to the widening gap between the prices of farm inputs and farm produce. Generally, farmers fall into heavy debt to the village moneylenders. The national agricultural policy reported that despite technological and economic advancements, the financial conditions of farmers continued to be unstable. This had a greater impact on small and marginal farmers resulting in suicides in many parts of India. Now the condition of most of the farmers has become worse. In addition to the farmers, another important category in Indian villages are the agricultural laborers.

The underdeveloped nature of agricultural sector has its own impact on the living conditions of agricultural laborer in rural areas. Since the farmers are not getting remunerative prices for their production, they are unable to pay better wages to the laborers. Because of lack of irrigation facilities etc, most of the farmers are not cultivating their farms throughout the year. As a result, the laborers are not getting employment throughout the year. Because of these reasons, more number of poor people are found among laborers in rural areas. Hence the governments at Central and State levels have been implementing many programmes for the development of farmers particularly small and marginal farmers and agricultural laborers. In spite of this, it is a known fact that compared with other categories, the economic conditions of marginal farmers and agricultural laborers are in worst situation in Indian villages.
2.2 SELECT REVIEW OF LITERATURE

After the mid-sixties, a large number of studies have been conducted in India to evaluate whether the gains of new agricultural technology have trickled down to all the sections of the farming community. Most of the studies concentrated on evaluating the impact of new agricultural technology on the level of poverty, indebtedness, income, consumption expenditure, etc. of the marginal and small farmers. A brief review of some of these studies is presented in what follows.

**Duraiswami (1950)** made an attempt to examine the sub-marginal farmers of Bapatla in Guntur district of Andhra Pradesh. It covered ten farmers who owned up to 2.5 acres of land. The amount of family expenditure per annum ranges from Rs. 380 to Rs. 2050 among the selected sub-marginal farmers. On the other hand, total land income ranges from Rs. 260 to Rs. 1350 among the sub-marginal farmers. The income from land and the expenditure by family are directly related but income was less than the family expenditure. Every sub-marginal farmer has deficit family budget ranging from Rs. 40 to Rs. 700. The study also revealed that there is a scope for increasing income.

**Misra (1961)** conducted a study to analyze the distribution of income among farmers in Orissa. The sample consisted of 240 farm families from 50 villages in Puri district. As many as 26.7 per cent of the families were landless, 10 per cent owned less than one acre, about 32 per cent had 1 to 3 acres, and about 14 per cent had 3 to 5 acres and only rest of the families owned above 5 acres. The study revealed that the crop incomes of majority of the families were low as their landholdings were very small. The study also revealed that the poverty of the people in these areas was quite visible. The causes of the poverty were the low land base, lack of facilities for double and multiple cropping and lack of subsidiary occupations.
Bardhan (1970)\textsuperscript{7} made an attempt to examine the share of agricultural laborers in the general agrarian prosperity during the nineteen sixties; the author concluded that at the end of the sixties more than 70 per cent of the rural population were living below the barest minimum acceptable level of living. The percentage of rural households below the bare minimum acceptable level of living apparently doubled during the sixties in rural India as a whole. This was so in the states of Bihar, Gujarat, Jammu and Kashmir, Mysore and Uttar Pradesh. In Punjab (including Haryana), the throbbing heartland of the green revolution, the percentage of rural population below the minimum level of living, nearly quadrupled between 1960-61 and 1967-68. This was also found true of Assam and West Bengal. Almost in all the states, the percentage of the poor was observed to have gone up significantly.

Shah and Sing (1970)\textsuperscript{8} conducted a study to examine the impact of green revolution on rural employment in North-West Uttar Pradesh. They have concluded that employment of labor, both casual and permanent, is higher on the progressive, medium as well as large farms as compared to the typical and in the tractor-operated progressive farms, there is greater employment than it is in the less progressive ones. Employment in typical farm, per acre, is more than that in tractor-operated farm, which shows a decrease in employment owing to mechanization.

Galgalikar et al. (1970)\textsuperscript{9} conducted a study to examine the pattern of income distribution, saving and expenditure pattern in Jabalpur villages of Parbhani district. The study revealed that the average size of holding in the village was 20 acres. About one- third of the families, i.e., 30 per cent had land less than 10 acres, accounting only 6.35 per cent of the total land in the village. In small farm- size holdings, wages formed a substantial portion of gross income and exceeded net income from crop production. Net income per acre decreased with the increase in
the size of holding. Concerning consumption, the low income and middle-income groups had resorted to borrowing to meet their consumption expenditure. The higher income group spent proportionately less on food grains. The middle-income group spent proportionately more on ceremonies. The study also revealed that the bulk of the co-operative finance was availed by the high-income group.

**Singh et al. (1972)**\(^\text{10}\) to focused on a study in 1971-72 to examine the effect of new agricultural production technology on farm labor in different categories of farms. They also examined the effect of farm mechanization on labor employment in different agricultural operations in different categories of farms. The extent of seasonal variations was another aspect of the study. The pattern of labor used in different months indicated that the variability in labor employment decreased as the level of adoption of modern technology gave more employment to farm labor. However, the level of mechanization, which, in fact closely related to HYV technology, did not give any evidence of reduction in labor use.

**Pawar and Gayakwad (1974)**\(^\text{11}\) conducted a study to analyze the employment, income and expenditure of the small farmers in Maharashtra state. The study was based on information obtained from the two samples of small farmers separately for the years 1964-65 and 1971-72. The study revealed that the workers in the families of the small farmers do not get sufficient work on their own farms and therefore, they are forced to seek employment outside the farm. The wage rates had increased only by about 58 to 60 per cent during the period, while the family expenditure had increased almost by 103 per cent. Because of increase in the incomes from other sources, the family income has shown an increase of about 101 per cent during the period. During both the years, the family expenditure exceeded the family income. The study indicated that the condition of small farmers has not changed at all during the study period.
Ghosh (1974)\textsuperscript{12} made an attempt to examine the problems and prospects of the marginal farmers and agricultural labors in West Bengal state. The per household and per capita incomes of the marginal farmers were Rs. 2,610 and Rs. 380 respectively. Cultivation of land provided only 54 per cent of their total income. More than 70 per cent of the households were under debt and about 50 per cent of the total borrowings were spent for consumption purpose. The share of institutional loans was very low in their case. The study also revealed that the condition of agricultural laborers was worse than that of the marginal farmers. The solution to the problems of marginal farmers lie in improving the technology of cultivation and holdings are consolidated into one large block or a number of compact blocks to encourage them to form a co-operative farming society.

Bakshi (1978)\textsuperscript{13} conducted a study to analyze the credit requirements of the small farmers in a predominantly rice growing district of Raipur. The study was based on the analysis of 40 small farms in Raipur district of Madhya Pradesh state. The study concluded that about 60 per cent of the small farmers resorted to borrowings. The major source was the money-lender supplying 62.5 per cent of the farmers an average amount of Rs. 860, with the co-operatives faring badly. About 70 per cent of the farmers reported that they wanted more credit, one third of them requiring more than Rs. 1000. This scarcity of working capital, even according to their own view, resulted in poor resource use and poorer returns.

V. S. Vyas and Mathai, G (1978)\textsuperscript{14} analyzed a study of the prospects for expansion of employment in agriculture and rural industry. They argued that even if there were to be a deliberate social intervention in favor of allocating larger resources to agriculture, the labor absorption capacity of Indian agriculture would be limited and the path of rapid rural industrialization too is beset with many pitfalls.
Creation of physical and social infrastructure, changes in the present rural credit and pricing policies and so on are needed to be undertaken to make a dent in rural unemployment.

Dingar and Singh (1980)\(^{15}\) conducted a study the examine income availability of small and marginal farmers, participating in the various schemes of the SFDA project in the Fatehpur district of Uttar Pradesh state, for the year 1978-79. A viable farmer has been considered as one whose agricultural income, i.e., net farm income and income received from subsidiary occupations is sufficient to maintain himself and his family. The findings of the study showed that the amount borrowed made and subsidies given to farmers were higher on the small farms (1-2 hectares) than on the marginal farms (0-1 hectare) on per hectare basis because of larger size of farm business. The study brought out that higher consumption expenditure on the small farms in comparison to the marginal farms within the participant group was due to the large size of family and higher income.

Misra and Mitra (1984)\(^{16}\) examined the problems of the marginal and small farmers in Ganjam district of Orissa state. The sample consisted 323 small farm and marginal farm 412 households in two development blocks of Ganjam district. Nearly 87 per cent of the farmers in this district are either small or marginal farmers. The study concluded that the per capita gross income was estimated at Rs. 614 for small farmers and 525 for marginal farmers. It is estimated that nearly 15 per cent of these families are reported to be having negative net income. Insufficient availability of HYV seeds, fertilizers and pesticides substantially deterred these households to take advantage of new farm technology.
P.C. Joshi (1984)\textsuperscript{17} deliberates that eradication of mass poverty is now becoming the widely accepted normative basis of economic and social thought in underdeveloped countries. In India, for instance, an anti-poverty orientation is no more the exclusive hallmark of politico-economic radicalism. If an anti-poverty premise is considered as the dividing line between radicalism and conservatism, then all trends of politico-economic thought have a radical tone in India. The divergence of these perspectives is most marked on questions relating to the agrarian structure and the rural poor. The study attempts to review these perspectives, which have crystallized in India in the course of lively debates among economists in recent years. The spread effects from the dynamic sub-sector that is growing within agriculture are bound to permeate the backward peasant sector. Thus, in conformity with the principle of percolation from the top to the bottom layers, the backward peasant sector will also acquire properties of dynamism. In this conception, the capitalist and the peasant sectors are assumed inherently complementary to each other. A rigorous scientific statement of the conception has constituted the unstated assumption of scientific research by a section of scholars in India. In India, when the new agricultural strategy was first introduced, the first conception seemed to be implicit if not the explicit, basis of scientific research and policy-making. Subsequently, however, the widest consensus seems to prevail round the second conception. The conception can be said to constitute a minority trend among scientists and policy makers.

Pranab K. Bardhan (1984)\textsuperscript{18} conducted a study on Land, Labor and Rural Poverty and analysed the supply and demand sides in the agricultural labor market. The determination of equilibrium wage and level of unemployment and two-third labor markets where some part of the labor force enters into voluntary labor-trying arrangements with the employers. He concentrates on the determinants of usual
labor force participation by women on the pattern of their seasonal withdrawals from the labor force, and how, in view of this. The standard measures underestimate their underemployments of the use of hired labor and he shows how the agricultural wage rate is sensitive to the demand and supply factors contrary to the implications of the popular theories of determination of wages by custom. He intensively probes cases of labor-tying arrangements cemented with credit from the employer, which reduce the latter’s recruitment cost of casual labor in the peak season, or act as risk-sharing device against the uncertainties of peak wage rates facing the laborers or as an inter temporal barter transaction in the case of a double coincidence of wants between employer-creditors and laborer-borrowers arising out of irregularities of the agricultural crop cycle. Bardhan studied the possible ambiguous relationship between agricultural growth and poverty of agricultural laborers. He studied the institutional environment of persistent poverty and how the nature of production relations makes it difficult for piecemeal policy solutions or isolated remedial efforts to work. In particular, he shows how the absence of credit insurance markets leads to contractual interlinking in land, labor and credit relations, and piecemeal reformist measures tinkering with one part of these transactions without taking care of the interconnections may even worsen the lot of the poor tenant labor-borrower. The same labor market segmentation fractures the process of class formation and class action on the part of the exploited. This underlines the importance of channeling organizational resources of credit and social insurance. The need for similar community organizations for water management, which can rise above or supersede the private property interests of property owners and water lords and thus relieve one of the major constraints on broad-based agricultural growth, is emphasized by this study.
Singh (1986)\textsuperscript{19} conducted a study to analyse the levels of living of the agricultural laborers and the marginal farmers in the rural areas of Punjab. The aim is to study the sources, composition and patterns of income and consumption of the agricultural laborers and marginal farmers in differently developed districts of Punjab. The chosen 450 sample households of marginal farmers and agricultural laborers spread over 3 districts and 30 villages in Punjab. He has formed three categories for a cross category comparison of income and consumption levels or their consumption for the marginal farmers as well as the agricultural laborers. By virtue of being agricultural laborers, the main source of their income is agricultural wages. They boost their income by resorting to subsidiary occupations like dairying, shoe making or trade on a very small scale. However, the value of poverty measure ‘P’ is inversely related to the income levels of the agricultural laborers. In general, there is much similarity in the consumption pattern of agricultural labor households in the rural areas of Punjab. They spend the major part of their income on food grains, milk and milk products, clothes, sugar etc. The agricultural laborer households spend small proportions of the total consumption expenditure on services, marriages and durable commodities and insignificant amount on the education of their children and entertainment. The poverty measure ‘P’ is calculated based on consumption in inversely related to the income levels of the agricultural laborers. The household’s durables account for the major proportion in the value of the total assets of agricultural labor households. About three-fourth of agricultural labor households in the rural areas of Punjab are under debt. The average households and the average per capita income levels of the marginal farmers are marginally lower than those of agricultural laborers in the rural areas of Punjab. The main reason is the socio-cultural milieu there, which forbids the marginal farmers to seek-
employment in the agricultural sector even though such opportunities are available at the village level. There is much similarity in the consumption pattern of marginal farmer’s households in Punjab. As the resource base of the marginal farmers is small, the relative share of total assets is also small. The per capita value of assets is highly correlated with the income levels and the per hectare yield over the income categories across the districts.

G. Parthasarathy (1988)\(^2\) in his article ‘Agricultural Growth, Rural Development and Poverty’ reflects a patient search to ascertain certain facts and analyses them dispassionately. However, no worthwhile research on socio economic problems can be pursued without deep convictions about an acceptable social system. For Parthasarathy, the paramount value by which a social system ought to be judged is equity. He would not accept growth devoid of equity and social justice. In addition, for him this is not simply an ideal to be held aloft for exhibition. He has concrete ideas about policies and programmes, which would help to achieve growth with equity. This concern for truth about social and economic reality is amply reflected in the articles published in this volume. This is the central theme around which his writings converge in India’s agrarian economy, poverty and unemployment. He sees the roots of these maladies in the agrarian structure and examines the manner in which the process of growth has affected the different sections and classes constituting the rural society.

Paul (1990)\(^2\) conducted a study to examine the temporal changes in absolute poverty among farm families in Haryana state during the period 1969/70-1982/83. Four measures of poverty, viz. family count ratio, head-count ratio, poverty-gap ratio and the Sen Index have been estimated using the cross section data for each year. The study revealed that there has been an increase in the level of poverty
among farmers during the seventies. Incidence of poverty had been highest among the small farmers and the second highest among the medium farmers. Poverty did not prevail among the big farmers. The study also revealed that poverty is inversely related to the level of irrigation in the region.

Shankar (1990)\(^{22}\) made a study to assess land ownership, asset structure and income distribution in three villages of eastern Uttar Pradesh. The study revealed that sub-marginal farmers’ income from owned land accounted for merely 26 per cent of the household income, while wage income accounted for 15 per cent. The share of income from services and remittances was 30 per cent and 10 per cent respectively. In the case of marginal farmers, the share of agriculture was substantially higher at 40 per cent, followed by services (18 per cent) and remittances income (11 per cent), wage income (8 per cent). The share of agriculture in the income of the small farmers was 58 per cent and share of wage income declined to 0.04 per cent. The share of income from services and remittances was 11 per cent and 15 per cent respectively.

Kaur et al. (1991)\(^{23}\) made an attempt to examine the pattern of assets and consumption expenditure among rural poor households in Haryana. In all, 230 respondents comprising 95 landless laborers, 50 rural artisans and 85 small farmers selected. The data pertained to the agricultural year 1983-84. The study revealed that 54.78 per cent of the households were below poverty line. The maximum number of households from the category of landless laborers (65.27 per cent) were below poverty line, followed by the rural artisans (56 per cent) and the small farmers (42.35 per cent). The maximum level of consumption expenditure was found in the case of small farmers (Rs. 10594) followed by the rural artisans (Rs. 8777) and the landless laborers (Rs. 7442). The study revealed that an average annual family
income came out to be Rs. 8377, which was maximum in the case of small farmers (Rs. 9763) followed by the rural artisans (Rs. 7955) and the agricultural laborers (Rs. 7360). The small farmers were found to be relatively better off economically as compared to the other two categories.

Report of the National Commission on Rural Labor (1991)\textsuperscript{24} Rural labor comprises persons living and working in rural areas subsisting partly or wholly from wage income. Besides, there are self-employed workers forming part of the petty production system who neither hire labor nor offer their services for a wage. They should also be classified as rural labor, since their living conditions are no better. Rural labor so defined would comprise wage-paid manual workers engaged in agricultural and non agricultural activities, small and marginal farmers, tenants and sharecroppers and artisans. Rural labor constitutes the most marginalized section of our society. It got benefitted least from the 40 years of development. There are wide rural-urban disparities in access to education, health, potable water, food grains available at the fair-price shops, etc. The effects of this are more adverse for rural labor because a disproportionately large share of benefits of social development accrues to the non-labor segment. Thus, even though there are some signs of improvement in levels of living during the 80s, the rural labor have been largely bypassed by the processes of socio-economic development over the last four decades. It is, therefore, necessary to identify the major structural, institutional and planning deficiencies responsible for this state of affairs.

G.K Chanda (1994)\textsuperscript{25} in his study attempts a comparative analysis of employment, earnings and poverty in rural India and rural Indonesia. The author divides districts of India into four types. I those districts where both farm and non-farm sectors are found backward. II. Those agriculturally developed but non-
agriculturally backward districts. III. Both sectors in the district, which are
developed; and IV. Agriculture being poor but non-agriculture being fairly
developed. Using these classifications, he divides 393 districts based on per hectare
agriculture productivity levels in to two district groups. Group I represents a
situation of backward agriculture and group II, a situation of developed agriculture.
His policy conclusion is that in backward areas public investment and infrastructure
must be accorded the highest priority. He also finds that rural institutions in
economically backward areas are generally weak. He observes sharp contrast in
borrowing and indebtedness in three scenarios. In scenario I, money lenders played a
major role, while half of the total borrowing in scenario II and more than 90 per cent
in scenario III, had access to rural credit from public agencies at subsidized interest
rates. This enables him to highlight the reinforcing nature of interaction between
technology and rural institutions. On the intensity of employment and earnings, he
finds that number of days worked per year and levels of earnings are weakly related.
He found the region’s move from backward agriculture to agriculturally developed
economy results per day resulting in a much higher level of income. Accordingly,
the trickledown effect becomes far more progressive when the economy expands
beyond agriculture as in the case of scenario III. He finds that non-farm employment
and earnings are extremely important to the landless working class, availability of
such employment is much higher in scenario III type of development where it is
possible to find non-farm employment inside the village economy itself.

Singh (1996) conducted a study to examine the poverty and indebtedness
among agricultural laborers, marginal farmers and small farmers in the rural Punjab
during the year 1990-91. It covered 450 weaker section households composed of 91
marginal farmers, 115 small farmers and 244 agricultural laborers, selected
randomly. The study showed that average annual income for the small farmers, marginal farmers and agricultural laborers was Rs.17601.17, Rs.8617.41, and Rs. 10922.66, respectively. The main source of income of the small farmers and marginal farmers was found to be farming. The annual consumption expenditure of an average weaker section household was Rs. 14745.71. It was, Rs.11132.39 Rs.20414.86 and Rs.13421.44 in the case of, marginal, small farmers and agricultural laborers households respectively. The proportion of persons living below the poverty line in all the weaker sections was 24.44 based on the per capita distribution of income. Based on per capita distribution of consumption the corresponding figure was 9.11 per cent. The study also showed that 67.56 per cent of the weaker section households in the Punjab state were under debt. The percentage of indebted households of the agricultural laborers was 71.71, while the percentages were 69.23 and 57.39 in the case of marginal and small farmers respectively.

**Mishra (2001)**[27] initiated a study to analyse the incidence of poverty in the backward district of Kalahandi of Orissa state. The study revealed that the percentage of BPL families in the rural areas of Kalahandi district reduced from 85.77 per cent in 1992 to 62.71 percent in 1997. Of these poor families of the district, 23.95 per cent were marginal farmers, 19.59 per cent of the households were small farmers, 41.51 per cent agricultural laborers, 1.80 per cent artisans and the remaining 13.15 per cent were of other categories. The study also revealed that the slow rate of occupational diversification coupled with a high workforce dependency on agricultural sector is one indicator of economic backwardness and stagnation.

**Bhattacharya (2002)**[28] made an attempt to review a paper on rural poverty in India. The Planning Commission estimated the poverty line in 1962 at Rs. 15 as
the monthly per capita expenditure for rural areas at 1960-61 prices to satisfy the
calorie norm of 2250 calorie per day per person, which was eventually revised in
1973-74 to Rs.49.09 to compare to the daily calorie norm of 2400 calories per capita
in rural sector. Bhattachrya adjusted the poverty line to Rs. 49.09 with 1973-74
based on the corresponding price indices for agricultural laborers for different years.
In this paper, the author used head count index, poverty gap index and Sen’s index
to assess the rural poverty in India. On the basis of the updated poverty line, it was
estimated that 190 million people were still below the poverty line during 1999-2000
which was about a quarter of country’s rural population. The study observed that
there was remarkable fall in the rural poverty levels from 54 per cent in 1972 to 37
percent in 1993-94 and further to 26 per cent in 1999-2000. The poverty gap ratio
has shown that the proportion average income short fall from the poverty line, which
was high at 21 per cent in 1972-73, had come down only to 7 per cent in 1999-2000.
The gap between mean poverty line income and actual per capita income revealed
by Sen’s index shows that the index had been gradually decreasing from 0.23 in
1972-73 to 0.07 in 1999-2000. This reveals that the actual income of the people
below poverty line is coming closer to poverty line. The values of the gini-
coefficients show that there was a marginal decline in the rural inequality from 30
per cent in 1972-73 to 26 per cent in 1999-2000.

Kumar and Sen (2002)29 in their study on labor utilization and demand
function of family farms in Sabour black of Bhagalpur district (Bihar) revealed that
total man-days available on the farm were 1716 per year, out of which two-thirds
were contributed by male and one-third by female members. On an average 94 per
cent of the available male labor and 54 per cent of available female laborer were
utilized on the farm. It was found that medium farms utilized 85 per cent of
available person-days on the farm whereas small and large farms utilized 75 and 77 per cent of available labor respectively. The results of the study also revealed that in both the seasons modern crop cultivation utilized more man-days (238 labor units in Kharif and 96 units in Rabi) than in traditional crop cultivation (178 units in Kharif and 77 units in Rabi).

Shah and Sah (2004)\textsuperscript{30} examined the changes in poverty and poverty related factors in South-West part of Madhya Pradesh state. The study revealed that parts of the rural community, particularly the landless and the small and marginal farmers, remain unaffected by even a moderately faster growth rate. The findings indicate that there is a need for establishing basic infrastructure especially for health and education and the crop productivity and market support do not develop at a sufficient rate to impact on the reduction of chronic poverty.

Jayachandra and Naidu (2006)\textsuperscript{31} made an attempted to examine the impact of dairy co-operatives on income employment and creation of assets of the marginal and small farmers. The present study covers 60 families (small and marginal farmers) in Rangampet village of Chandragiri Mandalam in Chittoor district of Andhra Pradesh state. The study revealed that the two categories of farmers have registered an increase in their net income through dairying, but the increase is higher in the case of marginal farmers (25.50 per cent) when compared to that of the small farmers (22.98 per cent). The value of assets has also increased through dairying in both the categories, but the increase is higher in the case of marginal farmers (15.00 per cent) when compared to that of the small farmers (12.50 per cent). Dairying offers a vast scope for increasing the income employment opportunities and assets value of the marginal and small farmers whose marginal and average productivity is low.
Kaur and Singh (2006)\textsuperscript{32} made an attempt to examine the incidence of poverty among the small and marginal farmers in Bathinda district if Punjab state. The sample consisted of 80 small farmers and 60 marginal farmers in 8 development blocks of Bathinda district. By using Head-Count Measure, proportion of persons below the poverty line in all the small and marginal farmers taken together are 19.28 per cent. By using 50 per cent of PCI of the state method, 90 per cent of the marginal farmers and 80 per cent of the small farmers live below the poverty line. By taking 40 per cent of PCI of the state method, 81.66 per cent of the marginal farmers and 67.50 per cent of the small farmers live below the poverty line. According to the fourth measure of poverty, i.e., $ 1 per day, proportion of population living below the poverty line was 91.66 per cent and 82.50 per cent of the marginal and small farm-size categories respectively. All the measures of poverty establish an inverse relationship between the population below the poverty line and farm-size.

Krishna S. Vatra (2006)\textsuperscript{33} made an assessment of the effectiveness of the Employment Guarantee Scheme (EGS) of the Mahararashtra Government in reducing risk and vulnerability to which households are exposed during the lean season or when crops fail due to climatic factors. Further, it is argued that if the National Rural Employment Guarantee Act has to become a successful intervention in poverty alleviation and drought mitigation, it needs to follow a well-defined strategy for building and maintaining assets, rather than becoming a short-term intervention in relief employment as the EGS turned out to be.

Jeromi (2007)\textsuperscript{34} made an attempted to examine the extent of the farm crisis, the rise in indebtedness and various dimensions of suicides of farmers in Kerala state. The study revealed that when the landholding size was less than one acre,
cultivation was marginally profitable and proved to be loss in the case of landholding above one acre, because of hiring of labor. Agricultural crisis was the reason in the case of 38.90 per cent farmers who committed suicide. A majority of farmers i.e., nearly 60 per cent who committed suicide had less than one acre land. The study also revealed that the incidence of indebtedness in the rural areas of Kerala state was higher than the national average.

K. Sundaram (2007)\textsuperscript{35} conducted a study to focus on the changes in the size and structure of work force and the changes in labor productivity, wages and poverty in India in the first quinquennuim of the 21st century. The period between 2000 and 2005 saw a sharp acceleration in work force growth, and, on the obverse side, a slow-down in the rate of growth of labor productivity across most sectors and in the economy as a whole, and, a slow-down in real wage growth in rural (urban) India.

On a comparable basis, the reduction in poverty over this period is shown to be substantially smaller than indicated by other recent analyses. Consistent with the trends in labor productivity and real wages, relative to the 1994-2000 period, the pace of poverty reduction between 2000 and 2005 shows, at best, a marginal acceleration. This period also saw a small rise in the number of working poor and a substantial rise in the number of self-employed and regular wage/salary workers in above poverty line or APL-households

Singh et al. (2008)\textsuperscript{36} made an attempt to examine the indebtedness among farmers in Punjab state. The study revealed that the average gross income for the state as a whole was Rs. 2, 80,694 per sampled farm household. The relative share of livestock to gross family income was 20.60 per cent. It was 40.80 per cent on the marginal holdings and declined consistently to 16.40 per cent on the large holdings. Non-farm income was an important source of relative income for the small and
marginal holdings, where it had a contribution of 22.00 per cent and 28.50 per cent respectively to the total family income. The study also revealed that the proportions of indebted farm households were found to be 88.83 per cent in Punjab state. The percentage of indebted households was the highest (93.23 per cent) in the case of large farmers and this percentage was the lowest (80.37 per cent) in marginal farmers. Further, these proportions were 91.95, 90.85 and 88.67 percent in the case of medium, semi-medium, small farmers respectively. This shows that there was a direct relationship between the percentage of indebted farmers and size of the farm. An average farm household in the state has 61.94 per cent of debt from the institutional credit agencies, while that from the non-institutional sources it was 38.06 per cent. An average farm household in the state incurred Rs. 45,076 (25.2 per cent) and Rs. 1,33,858(74.8) on unproductive and productive purposes respectively.

Vatta et al. (2008)\textsuperscript{37} conducted a study to examine the rural employment and income variations in Punjab. In all, 315 respondents comprising 142 non-cultivating, 31 large, 57 medium, 44 small and 41 marginal farmers were selected. The study revealed that the ownership of land was positively related to the incidence of self-employment or regular employment and negatively related to casual employment. All cultivating and 44.40 percent of non-cultivating households were found to derive income from farming. Agricultural laborer was the source of income for 38.70 per cent of non-cultivating households, around 15 per cent of the small and 15 per cent of the marginal cultivator households. The proportion of cultivating households deriving income from the rural non-farm sources declined from 43.9 per cent and 45.5 per cent for the marginal and small cultivators to 32 per cent for the large cultivators. The study also revealed that the significance of rural non-farm sources of income in the total household income varied inversely with the size of landholding.
Abusalah Shariff (2009)38 made an attempt a study NREGA an ambitious mass employment guarantee scheme implemented since the last four years that intends to sustain income and consumption in Indian rural outback. A large programme, backed by budgetary allocation promises 100 days of manual work to households who register and apply. Failure to provide employment through the gramasabhas creates cash entitlements as a matter of law. This paper analyses official statistics and survey data from seven northern states. The future of NREGA is strongly linked to the cherished national good to strengthen and for a broad base decentralization of local governance. However, there are wide variations amongst the states not only in the level of decentralization but also in the capacity to implement such a large scheme and lack of convergence amongst relevant government departments and functionaries. NREGA has the potential to address both substance of income and to enhance the social welfare of households in rural areas.

Singh et al. (2009)39 studied at length the inadequacies of institutional agricultural credit system in Punjab state. The study was based on a random sample of 600 farm households covering 11 district of Punjab state, comprising 103 large, 87 medium, 153 semi mediums, 150 small, and 107 marginal, farmers and pertains to the year 2005-06. The study revealed that the total loan per farmer household in the state was comprising Rs. 178934 Rs. 68106 (38.1 per cent) from non-institutional sources and Rs. 110828 (61.90 per cent) from institutional sources. The small and large farmers got 65 per cent of their loans from institutional sources and the semi-medium and medium farmers got less than 60 per cent of their loans from institutional sources. The study also revealed that an average farm household in the state incurred Rs. 1, 22,858 (74.80 per cent) on productive and Rs. 45,076 (25.20 per cent) on unproductive purposes.
Ashok Pankaj and Rukmini Tankha (2010)\textsuperscript{40} studied using a field survey. This paper examines the empowerment effects of the National Rural Employment Guarantee Scheme on rural women in Bihar, Jharkhand, Rajasthan and Himachal Pradesh. It argues that women workers have gained from the scheme primarily because of the paid employment opportunity and benefits have been realized through income-consumption effects, intra-households effects and the enhancement of choice and capability. Women have also gained to some extent in terms of realization of equal wages under the NREGS, with long-term implication for correcting gender skewness and gender discriminatory wages prevalent in the rural labor market of India. Despite the difficulties and hurdles for women, prospects lie, inter alia, in their collective mobilization, more so in laggard states.

Gafoor, A. et al. (2010)\textsuperscript{41} conducted a study to examine the paper factors affecting income and saving of small farming households in Sargodha District of the Punjab, Pakistan. Small farmers dominate agriculture sector in Pakistan because 93 per cent of the total farmers belong to the category of small and marginal farmers. The study designed to explore the impact of those variables, which directly or indirectly affect income and savings of these small farmers in the province of Punjab. In this context, stratified random sampling technique used to select district Sargodha from Punjab province. Sahiwal tehsil from district Sargodha selected randomly and then three villages were selected randomly from among these villages. Data collected from these farmers to estimate income and saving models. Log-log form of regression used to estimate income model and multi linear regression used to estimate saving model. In the income model, academic qualification, land holding, agricultural expenditure and number of family members involved in agricultural activities affected the income of these small farmers significantly whereas in saving model, age, academic qualification, heath expenditure, income of
farmers (both from farm and off-farm sources), number of dependent members and
credit installments affected the savings of these farmers significantly. It suggested
that new technology should be provided to small farmers on easy conditions so that
they can adopt new agricultural production practices to enhance productivity and
there by their income and savings.

**Chand et al. (2011)**\(^{42}\) took up a study examine on Farm size and
productivity; understanding the strengths of smallholdings and improving their
livelihoods. Using CSO estimates of agricultural output and input cost have
computed the per capita income from agriculture per hectare of land, which comes
to Rs. 6655, at 2004-05 prices. According to them, “this income when compared
against the Planning Commission norms of poverty line for rural area shows that a
farmer operating less than 0.64 ha. area will be under poverty, while as per the
Tendulkar Committee norms, a minimum 0.8 hectare of land area is needed to keep
a farm family above the poverty line, if this family lives only on agricultural income.
This implies that 62 per cent of farmers in India, who own less than 0.80 hectares of
cultivable land, would be under poverty if they do not have an opportunity to earn
income outside agriculture.

**Mahendra Dev, S (2012)**\(^{43}\) in his this paper examined on the role and
challenges of small holding agriculture in India. It covers trends in agricultural
growth, cultivation pattern, participation of small holding agriculture, productivity
performance of small holders, linking small holders with markets including value
chains, role of small holders in enhancing food security and employment generation,
differential policies and institutional support for small holders and challenges and
future option for small holding agriculture including information needs. It also
provides lessons from the experience of India on small holding agriculture for other
countries.
Ajit kumar Singh (2013)\textsuperscript{44} conducted a study to analyze the paper income and livelihood issues of farmers in a field study in Uttar Pradesh. This paper has discussed the income levels and livelihood issues of farmers based on a large field study in Uttar Pradesh. The study has shown that agriculture is not able to provide sustenance to a large number of farmers in this state. This study was multistage stratified random sample design adopted. The total sample consisted of 24 districts, 42 blocks, 84 villages and 3474 farm households. Out of the total farm households surveyed, 60 per cent were marginal farmers, 25 per cent were small farmers, 11.4 per cent were medium farmers and 4.4 per cent were large farmers. The per-day per-capita income from agriculture has been found to be Rs 15 for marginal farmers, Rs 31 for small farmers and Rs. 45 for medium farmers and Rs.84 for large farmers for 2011-12. Thus, all marginal farmers, who constitute over three-fourths of UP farmers, fall below the poverty line of Rs. 22 if they depend solely on agricultural income. Given the inadequacy of agricultural income to meet household expenditure, the small and marginal farmers have to devise livelihood strategy and their survival. The study has suggested a multi-sectoral integrated strategy of promoting agricultural and non-agricultural activities in the rural areas embedded in the local conditions, resources and institutions to meet the challenge of sustainable development in the state.

2.3 PRESENT STUDY

The marginal farmers and agricultural laborers are still in the clutches of poverty and indebtedness. The manifestation of the agrarian crisis in the farm of suicides has reached dangerous levels especially in Kurnool District of Andhra Pradesh. The gravity of the problem as well as its causes pointed out that most of the suicide victims were cultivators and belong to the category of small and marginal
farmers. Suicides were attributed to a number of reasons, ranging from poverty to crop failure, indebtedness, marital discord and alcoholism, but predominantly it was mainly due to the economic crisis that the peasantry, in general, are facing and which has led them to borrow heavily. The heat has been felt more by the small and marginal farmers. Hence, it is thought that it will be useful to conduct a study on the problems of marginal farmers in Kurnool district of Andhra Pradesh so as to enable to find solutions for improving the economic conditions of marginal farmers and other related category of households in selected villages of Kurnool district. The present study is a modest attempt in this direction.

2.4 OBJECTIVES OF THE STUDY

The specific objectives of the present research study are:

1. To make a comparative study of the economic conditions of marginal farmers and agricultural laborers in selected villages of Kurnool district.

2. To analyze the assets and liabilities situation of sample households.

3. To study the consumption pattern of sample households.

4. To assess the impact of poverty alleviation programmes on sample households.

5. To study the problems of marginal farmers in getting credit and other requirements

2.5 HYPOTHESES

1. There is no significant difference in the levels and pattern of employment and income of marginal farmers compared with agricultural laborers in sample villages.
2. The assets and liabilities do not vary significantly between the two sample groups.

3. There is no significant difference in the pattern of consumption between the two sample groups.

4. The impact of poverty alleviation programmes is nominal on the sample households.

2.6 METHODOLOGY

2.6.1 Selection of Samples

Kurnool District (one of the drought prone districts of Rayalaseema region in the state of Andhra Pradesh) has been purposively selected for the present study because of considerations of proximity and familiarity. Based on the agricultural developmental levels, the district is broadly divided into three categories namely highly developed, moderately developed and less developed areas. From these three areas, it was thought appropriate to make a comparative study between the highly developed and less developed areas. Accordingly, one mandal each from the highly developed area and less developed area with representative characteristic features are randomly selected. In the next stage from these two mandals one village from each mandal has been randomly selected and from each of these villages the final sampling units (marginal farmers) have been randomly selected for field study. To make a comparative study the households with close characteristic features in terms of economic conditions i.e. agricultural laborers are also selected from both the villages. The selection of samples is presented in table 2.1.
Table 2.1

Selection of the Sample Households

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Category</th>
<th>A. Koduru</th>
<th>Thernekal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(Developed village)</td>
<td>(Less developed village)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total households</td>
<td>15%Sample households</td>
</tr>
<tr>
<td>1</td>
<td>Marginal farmers (Less than 2.5 Acers)</td>
<td>316</td>
<td>47</td>
</tr>
<tr>
<td>2</td>
<td>Agricultural laborers</td>
<td>429</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td><strong>Total Households</strong></td>
<td><strong>745</strong></td>
<td><strong>112</strong></td>
</tr>
</tbody>
</table>

*Total Sample Households: 300

It can be observed from table.1 that out of the total marginal farmers and agricultural laborer households of 745 from developed village and 1254 total households from the less developed village, 15 per cent i.e. 300 households (112 from the developed village + 188 from the less developed village) are randomly selected for final field survey.

2.6.2 Collection of Data

The data relating to the present research study are collected from two sources, Secondary source and Primary source. The Secondary source of data has been collected from the publications like Rural Labor Reports, Census Reports, Economic Survey’s, World Labor Reports, Plan Documents and internet etc. The Primary data has been collected from the sample households through a pre-tested structured schedule for the agricultural year 2012-13.
2.6.3 Analysis of Data

The data collected from different sources are processed and analyzed by using various statistical tools such as percentages, averages, dispersion, t-test, etc. graphs and diagrams are also used at appropriate contexts in the study.

2.6.4 Scope and limitations

The study pertains to the agricultural year 2012-13. It is a period of normalcy and represents the general agricultural situation of the district. This present one is a cross sectional and not a time-series study. The time-series analysis could not be attempted due to problems of generation of reliable sources to make strong inferences from any cross sectional analysis. This is not an exception to this rule. The tools and techniques employed in this study, both descriptive and inferential, are of the standard type.

2.6.5 Concepts

Marginal Farmer: A person with a land holding of 2.5 acres or below is a marginal farmer whereas in the case of class-I irrigated land, the ceiling will be 1.25 acres and whose major source of income is agricultural production.

Agricultural Laborer: A person with or without land other than homestead and deriving more than 50 per cent of his income from agricultural wages is an agricultural laborer.

Household: A household is a group of persons normally living together and taking food from a common kitchen. All members of the family share responsibility equally in the household affairs. However, the size of a family varies from household to household.
Total Household Income: It consists of farm business income and income from non-agricultural sources, i.e., dairying, self employment, wage employment, rent on leased-out land, pensions and remittances.

Farm Business Income: Farm business income is the total value of farm output minus all paid out costs.

Consumption Expenditure: Consumption expenditure consists of expenditure on non-durable items, durable items, services and marriages and other socio-religious ceremonies.

Assets and Liabilities: Household assets consist of durable and other assets. In the case of marginal farmers, we have separately estimated the value of household assets and assets meant for use in productive process. A major part of liabilities is loans current and outstanding taken for consumption and other purposes. Their value is taken as reported by the household.

2.6.6 Chapter Scheme

The thesis is organized into Seven Chapters. First Chapter is devoted to cover introduction issues like land ownership pattern, trends in the distribution of land holdings economic conditions of marginal farmers and agricultural laborers etc. discussed along with the general agricultural situation in the country. The Second Chapter covers about the research problem, methodology followed and literature review. The agricultural situation in Kurnool district including the district profile is discussed in the Third Chapter. A comparative analysis of marginal farmers with agricultural laborers covering the economic aspects like income levels and expenditure pattern etc. is discussed in the Fourth Chapter. In the Fifth chapter
aspects like asset structure, nature of agricultural credit market in sample villages, credit operations and loan overdue problems etc. of sample households are discussed. Poverty alleviation programmes implemented by the government for the upliftment of sample households are discussed at length in the Sixth Chapter. A brief summary of findings and conclusions along with policy implications are incorporated in the last i.e., the Seventh Chapter.

REFERENCES


