REVIEW OF LITERATURE

The review of literature promotes a greater understanding of the problem and its crucial aspects. It also provides comparative data on the basis of which to evaluate and to interpret the significance of one's findings. A survey of related literature implies locating, reading, and evaluating reports of research as well as casual observation and opinions that are related to the individuals planned research project. The importance of review is well explained by Borg et al., (1983) in the following words. The review of the literature is an important part of the scientific approach and it’s carried out in all areas of scientific research whether in the physical, natural, or social sciences. It provides the means of getting to the frontiers in the particular field of knowledge.

2.1. POVERTY MEASUREMENT STUDIES

Rajaraman (1960) measured the changes in rural poverty and inequality in Punjab on the basis of the NSS (National Sample Survey) consumption expenditure data (16th, 17th and 25th rounds). The author has constructed poverty line especially for the Punjab region by using Linear Programming Technique. The study estimated that in money terms, the poverty line was a monthly per capita consumption expenditure of `16.36 for 1960-61 and `33.86 for 1970-71.

The results revealed a rise in the percentage of population below the poverty line and it had increased from 18.4 per cent in 1960-61 to 23.28 per cent in 1970-71. The larger increase in poverty was among the agricultural labourers.
Ramamurthy (1960) estimated the number of the poor and the changes in the standard of living of the people in Tamil Nadu for the period 1960-1970. The study utilised NSS Consumption Expenditure data and took it as a proxy for measuring income. The poverty line was fixed for the study based on nutrition intake of 2,400 calories and it was estimated that ₹15.30 and ₹19.12 per capita (at 1960-61 prices) was necessary in rural and urban areas respectively to be above the poverty line. The study revealed that nearly 46.45 per cent of the rural population and 33.14 per cent of the urban population were living below the poverty line in 1960-61. In 1969-70 these percentages were 46 in the rural and 37.3 in the urban areas respectively.

The author found that the two important factors that contributed significantly for the rise in the extent of poverty were the rising prices of wage-goods and the stubborn increase in population. The study also identified the poor as small farmers, agricultural labourers and other workers engaged in the unorganised sector. The author suggested provision of wage-goods as a measure to reduce poverty.

Bhattay (1968) used Sen’s index of poverty and considered five poverty levels in terms of per capita annual income in 1968-69 (₹180, ₹240, ₹300, ₹360 and ₹420). The study revealed that the inequality in the distribution of per capita consumption expenditure was uniformly less than the inequality in the distribution of income. Considerable variation in inequality in consumption expenditure was found in States between one occupation and another. Of the three occupation classes viz; agricultural labourers, cultivators, and non-
agricultural workers; agricultural labourers were found to be the most deprived among the occupation classes.

Ojha (1970) attempted to study the measurement of poverty line of both rural and urban poor in the year 1960-61 and at the rural poor only in the year 1967-68. The study used National Sample Survey consumption expenditure (16th round) data. The poverty line used was 2,250 calories per capita per day. In quantitative terms, it was estimated that, it requires, food-grains consumption of 518 gms and 432 gms per capita per day for the rural and urban areas respectively. The study found deficiencies in food grains consumption in the rural area for expenditure level upto `15-18 per capita per month. On the basis of this, the author estimated that in 1960-61 about 52 per cent of the total population were absolutely poor, while in urban areas only about 8 per cent of the total population were absolutely poor. The study also revealed that the rural poverty was higher (70 per cent) in 1967-68 than in 1960-61 (52 per cent).

De Costa (1971) measured the extent of poverty in India for the year 1963-64. He divided the poverty stricken people into the poor, the destitute, and seriously destitute. His line of destitution comprises of persons with a level of consumer expenditure below `13 in the rural areas and `18 in the urban areas for the year 1963-1964. By using the N. S. S data (18th round, 1963-1964) he found that there were 81.07 million destitute in the rural areas and 22.6 million destitute in the urban areas, together comprised 22.37 per cent of the total population in the country in 1963-1964. His line of poverty is `15 and `24 per month in rural and urban areas respectively. He found 34.6 per cent of the total below this poverty line. Severe destitute are those who are per capita consumer
expenditure is less than `11 and `15 per month in rural and urban areas respectively. The study found 13.2 per cent of the total population as severe destitute.

Dandekar and Rath, (1971) defined poverty line on the basis of a nutritional norm. According to them, the required annual per capita consumption expenditure was `170 and `271 for rural and urban areas respectively to obtain the minimum of 2,250 calories per capita per day. On the basis of this estimate, they found about 10 per cent and 50 per cent of the rural and urban population respectively remaining below the poverty line. The study indicated wide differences in the proportion of population below the poverty line between the rural and urban areas from State to State. However, the incidence of poverty was found much greater in the urban areas than in the rural areas. In addition, the study highlighted the fact that the character of rural poverty has remained the same as before although the urban poverty has deepened further.

Minhas (1974) estimated the extent of rural poverty in India for the period 1956-57 to 1967-68 on the basis of the distribution of private consumption expenditure available from different rounds of National Sample Survey. Two poverty lines were considered, (i) a private consumption of `240 (at 1960-61 prices) per capita per year and (ii) `200 per capita per year. On the basis of `240, there was not any significant change in the number of people below poverty line for the period 1956-57 and 1967-68. The number was found to have fallen in good harvest years. On the basis of the poverty line of `200, the number of people below poverty line fell more or less steadily (52.4 per cent in 1956-57 to 37.1 per cent in 1967-68). Out of the estimated 164 million people below the
poverty line (1960-61), the study identified around 60 million as rural labour households. The remaining 104 million people belong to land operating (non-Labour) households. A residual of about 10-15 million belonged to small land owners.

Bardhan (1974) studied the changes in the percentage of rural people below a minimum level of living for the period 1960-61 to 1968-69. By using the NSS consumption expenditure data, the poverty line considered was a monthly per capita expenditure of \( \text{'15} \) at 1960-61 prices. The results indicated that the percentage of rural people below the minimum level of living has significantly gone up from 38 per cent in 1960-61 to 54 per cent in 1968-69.

Sen, Amartya (1976) was the first to move away from the traditional approach of poverty measurement: he introduced axiomatic approach to poverty measurement. This approach gave rise to a number of mathematically sophisticated indicators based on income or expenditure. Sen (1980) also introduced the functioning and capability approach in an attempt to show a more comprehensive view of poverty using several dimensions or attributes of poverty. The first application of Sen (1985), using data from 1980 to 1982, showed that a ranking of countries based on Gross National Product (GNP) per capita is quite different from a ranking based on the selected functioning. The GNP per capita of Brazil and Mexico are more than seven times the GNP per capita of India, China and Sri Lanka, but the performance in life expectancy, infant mortality and child death rates were better in Sri Lanka and China than in Mexico and Brazil.
Naseem (1977) estimated the poverty lines instead of choosing them arbitrarily, defining the poverty line in terms of the level of per capita expenditure, at 1959-60 prices, which would afford a year consumption basket yielding 2100 calories per person per day. He used three different levels of representing the amount of income that permit the intake of 95 per cent, 92 per cent and 90 per cent of the minimum required food calories. While his results are sensitive to different poverty lines, they are perhaps not as sensitive as witnessed further in the earlier study of 1973. According to this study, poverty declined between 1963-64 and 1969-70 and then showed an increasing trend for the period up to 1970-72.

Ahuluwalia (1978) worked out the trends in the incidence of poverty in rural areas for 14 years covering the period 1956-57 to 1973-74 for India as a whole as well as for the individual states. The study also examined the relationship between poverty and agricultural growth. The poverty line was consumer expenditure levels of `15 per person (for 30 days) at 1960-61 rural prices. The analysis was based on two alternative measures of poverty, the percentage of the rural population below the fixed poverty line and Sen's poverty Index. The estimates for all India showed marked fluctuation from time to time in the extent or incidence of rural poverty. The observed fluctuations in the incidence of poverty according to Ahluwalia reflect the real change in the severity of the poverty problem over time. A linear time trend fitted did not show any evidence for ascertaining a trend increase or decrease in rural poverty over the period as a whole. From this, he came to the conclusion that there had occurred an increase in the absolute number of people in Poverty because of the
growth in the rural population over the period. The time pattern of the incidence of poverty for individual states also followed the pattern of fluctuation similar to all India. Thus, the study concluded that the incidence of poverty in rural India does not show any sustained trend over the past two decades, but only showed a pattern of fluctuation. The author observed a clear inverse relationship between rural poverty and agricultural performance. The study came to the conclusion that there had occurred some trickling down of benefits due to increases in agricultural production.

Kurien (1980) estimated the extent of poverty in rural Tamil Nadu for the period 1957-58 through 1969-70. Using the various rounds of NSS data and two widely accepted norms for the identification of the poor (on the basis of nutritionally adequate diet and minimum level of living), the study found in 1957-58 more than 50 per cent of the rural people below the poverty line. In 1969-70, it was slightly below 50 per cent on the basis of the nutritionally adequate diet. On the basis of the minimum level of living over 74 per cent were below the poverty line in 1957-58. Towards the end of 1960, it rose to nearly 80 per cent and again it declined to 73.98 per cent in 1969-70. The result indicated a close association of rural poverty with little or no claims on resources. Thus he concluded that growth, even if quantitatively impressive, cannot provide the elementary needs of those who do not have any resources at their command. He further added that poverty must be seen as the result of certain economic and social processes without reference to which cannot be properly understood and analysed.
Nayyar (1980) made an attempt to measure poverty and inequality in rural Bihar and has examined the distribution of consumption along with distribution of land among the agricultural labourers for the period 1960-61 through 1970-71. The study used NSS consumption expenditure data (17th, 18th, 19th, and 25th rounds) and the poverty line was \'15.83 per capita per month in 1960-61. The figure was updated for the subsequent years as \'19.00, \'23.59 and \'32.61 for 1963-64, 1964-65 and 1970-71 respectively.

The findings of the study shows that 41 per cent (17.5 million people) of the population are below the poverty line in 1960-61. In 1963-64 this percentage was 54 and in 1964-65 it declined to 53.5 and again it rose to 59 per cent in 1970-71. Thus, the study noticed (with in a period of one decade) an increase in the number of poor by 12.3 million.

Thakurtha (1980) estimated the extent of poverty in the Calcutta city (for the period 1950-72) on the basis of the family budget enquiries undertaken by the Bureau of Applied Economics and Statistics (BAES), West Bengal. The poverty line was 2,100 calories and it was estimated that on an average a monthly per capita income of \'25.89 was necessary for this much calorie in 1950-51. A per capita income of \'24.02, \'28.99, \'41.54 and \'52.57 were necessary in 1955-56, 1960-61, 1966-67 and 1971-72 respectively for generating the above mentioned calories.

Saith (1981) investigated the relationship between rural poverty, prices and agricultural production in India for the period 1956-57 to 1973-74 on the basis of secondary data. He observed price deviations are more important in explaining the fluctuations in the level of poverty than production deviations.
The incidence of poverty displayed strong tendency to increase over time after taking into account the influence of price and production fluctuations. The findings of this study thus contradict the findings of Ahluwalia.

In addition, the study revealed that price rises accentuate poverty rather more powerfully than production improvements alleviate it, while independently of the impact of both fluctuations, the incidence of poverty increases steadily over the period. The study also unfolded some of the determinants of rural poverty in India as percentage deviation of price index from trend level, percentage deviation of production index from trend level, and time trend.

Thimmiah (1982) measured the extent of poverty in the whole of Karnataka (for the period 1960-61 to 1973-74) and for its districts (for the year 1974-75). The study made use of secondary data from NSS and the independent State level survey conducted by the Institute for Social and Economic Change (ISEC). Further, he made use of the poverty line of Dandekar and Rath for 1961-62 and the figure was inflated for other years by using consumer price index.

The study noticed a fluctuation in percentage of people below the poverty line in rural and urban Karnataka. The urban poverty has increased from 45.14 per cent in 1960-61 to 65.89 per cent in 1965-66 and later declined to about 39 per cent in 1974-75. In rural areas, it has increased from 37.49 per cent in 1960-61 to 66.41 per cent in 1965-66 and to 30.65 per cent in 1974-75. But the percentage of people in absolute poverty was found lower in rural areas comparison with the percentage in urban areas except during 3 years, 1964-65, 1965-66 and 1973-74. The study found an inverse relationship between the
percentages of people below the poverty line and the level of agricultural production.

In Districts, the study indicated a higher proportion of people below the poverty line in the urban areas than in the rural areas. A look at poverty in social groups showed, (in the state as a whole), the highest proportion of Muslim population below the poverty line and this was found even higher in the urban areas. The study concluded that the poor people are concentrated in the urban areas rather than in the rural areas. Caste-wise poverty was high among Muslims, Scheduled Caste and Scheduled Tribe and other low caste people. It was also found that the rural poor consist mainly of agricultural labourers, marginal and small farmers, whereas the urban poor consist mainly of non-agricultural labourers and casual workers.

Sastry (1982) examined the incidence of poverty and its inter-relationship between economic development, inequality and poverty in the three sub-regions of Andhra Pradesh (Coastal Andhra, Rayalaseema and Telengana) and its districts separately for rural and urban areas. The special focus was on the vulnerable socioeconomic groups such as Scheduled Caste, Scheduled Tribe and Agricultural Labourers. For this purpose, the data on household consumer expenditure of NSS (26th round 1971-72) was made use of.

For quantifying poverty, both positive and normative approaches were followed. Under the positive approach, fulfilment of varying calorie requirements of per capita per day (1,800, 2,000, and 2,250) was fixed. Under the normative approach, two variants were worked out, on the optimum diet bundle yielding the specified nutritive factors ignoring the taste dimension and
the other which allowed the regional patterns of consumption to operate among various constraints. The inter-relationship between poverty, inequality and development was examined with the help of Multiple Regression technique.

The results of the study shows maximum incidence of poverty at the regional level in Telengana and minimum in Rayalaseema at all levels uniformly under the calorie criterion. Poverty incidence was found higher among Scheduled Caste, Scheduled Tribe and agricultural labourers the incidence of poverty was observed maximum among the agricultural labourers. In intra-regional comparison, the incidence of poverty among caste groups, the maximum sufferers were Scheduled castes.

Among the urban segments, Telengana registered the maximum intensity of poverty and Rayalaseema, the minimum under the calorie criterion. Low incidence of poverty was noticed in the prosperous districts of the state. Among the urban caste groups, the Scheduled Tribe of Coastal Andhra and Scheduled Caste of Telengana have the maximum incidence of poverty. The study revealed an inverse relationship between development and poverty and a direct relation between development and inequality.

Radhakrishna et al. (1982) have studied the impact of liquor consumption on poverty in Ahmedabad slums for the period 1973 on the basis of primary data. The study attempted to answer the following questions, (i) what is the effect of liquor consumption on poverty? and (ii) can it make a dent on poverty if the expenditure of liquor is diverted to essential Items of consumption?

The study found consumption of liquor was not predominantly at the cost of essential items. There was no any evidence of adverse effects of liquor
consumption on the levels of living. The study noticed that even the addicts stop drinking and spend the amount on consumer items; it could not make any significant improvement on total poverty. The poverty was seen to be so deep that hardly any difference can be made to it by the diversification of the amount spent on liquor. The study highlighted the fact that the root causes of poverty lie deep in the abstract conditions in which these vulnerable sections live and not in their budget allocations. It is the level of their earnings and not so much their allocation that lies at the root of rampant poverty.

Parthasarathy et al. (1982) examined the character of poverty among the rural poor in the West Godavari district of Andhra Pradesh drawing data from a sample study of "Employment and Unemployment of Rural Labour" conducted in West Godavari district for the period 1971-72. They considered two poverty lines (i) at the level of `450 per capita and (ii) at the level of `300 per capita. In order to examine the association between levels of poverty and other characteristics, they have constructed two way contingency tables. The variables chosen were (i) possession of land (ii) average wage rate (iii) worker dependent ratio (iv) size of the family (v) presence or absence of female worker (vi) average level of employment (vii) regional variations and (viii) caste. The association was examined for and less and landed labourers. Chi-square test was adopted to examine the association between poverty and the variables mentioned earlier. The results of Chi-square test reveal that possession of land alone was found to have significant association on poverty. The same exercise for landless households showed that the size of the family has a significant impact on poverty.
They used the multiple regression technique to measure the influence of variables such as annual wage income: number of days employed during a year, number of workers, number of members in the family, workers as percentage of members in the household and size of land holding on per capita income. The study observed an increase in the per capita income by 0.65 as a result of an increase in employment per worker per day. An increase in the wage rate by a rupee is associated with an increase in per capita income by ₹121.15. Thus, the authors underlined the need for employment oriented technology for ameliorating rural poverty.

Reddy and Mishra (1982) examined the nature of poverty and factors influencing poverty in the rural areas of Medak in Andhra Pradesh. The study relied on the ungrouped NSS data of 32nd round (1977-76 State sample). The poverty line was arrived on the basis of an optimum food basket by minimising the food cost subject to the fulfilment of nutritional norms. In their poverty line a certain imputed expenditure on non-food articles were added on the basis of the observed behaviour. They have considered a calorie requirement of 2,250 and 1,900 per capita per day. The calorie-intake of each household was derived from the information on quantities consumed by various food items and their calorie-content.

The study revealed that 83 per cent and 51 per cent of the people are below the poverty line on the basis of 2,250 and 1,900 calories respectively. Among occupation groups, poverty level varied from 90 per cent for marginal farmers to 86 per cent for the landless (agricultural landless labour and the self-employed). The study observed a positive association between poverty level and
average size of the households while the association was negative between poverty and the extent of irrigation. The authors suggested irrigation as an important policy instrument for the reduction of poverty and landless marginal and small farmers to be identified as target groups for any programme of poverty eradication.

Subramanyam (1982) has identified the inter-relationships between poverty and unemployment and labour force participation rates in the East Godavari district of Andhra Pradesh on the basis of the 32\textsuperscript{nd} round (1977-78) of NSS data. The poverty line was by estimating the expenditure-calorie intake relationship and deriving the expenditure corresponding to the minimum calorie requirement. The calorie-expenditure relationship was given by \( C = f(x) \), where 'C' is the calorie-intake and 'x' is the per capita total expenditure. The poverty line \( (x) \) was derived from the above relationship by inverse interpolation. The poverty lines were estimated at calorie levels, 1,800, 2,000 and 2,250. In addition, Head Count Ratio and Sen's index were also used to measure the incidence of poverty.

The study revealed that the incidence of poverty was not much different between rural and urban areas. However, it was higher among the scheduled castes (57.2 and 75.6 per cent in rural and urban areas respectively) than other caste people (43.2 and 47.4 per cent in rural and urban areas respectively). Classification of households by occupation groups revealed a positive association between poverty and unemployment. The incidence of poverty and unemployment found highest among labour households with a high participation
rate, the study suggested a policy of employment generation to mitigate their poverty.

Rao and Chandrasekhar (1984) have examined the inter-state and inter-temporal dimensions of the incidence of poverty in urban areas for the period 1963-64 to 1973-74. The database of the study was NSS consumption expenditure and the poverty line used was on the basis of the food baskets suggested by Sukhatma, for Indian situation (minimum basket). The food basket was valued by using the urban retail prices. The cost of minimum quantities of non-food items was also added to this to arrive the poverty line.

The authors revealed that the incidence of poverty has remained more or less stagnant. However, at the individual state level, a significant reduction in the incidence of poverty was observed. In addition, it was identified that income growth in the non-primary sectors has facilitated a reduction in the incidence of poverty. Therefore, the authors underlined the need for facilitating the growth of income emerging from non-agricultural sectors for the reduction of urban poverty.

Mundle (1984) attempted to unfold the effect of agricultural production and prices on the incidence of rural poverty. The author has made use of three sets of data (the state level agricultural production data, NSS consumer expenditure data and Index of agricultural and food grain prices). The period of study was 1963-64 to 1973-74. The study made use of simple Correlation co-efficient and Poverty Index (Head Count Ratio). The intake of 2,435 calories per capita for each State in each year was taken as the base for measuring poverty. Food grain production was taken as the proxy for agricultural production for
analysing the impact of agricultural production on the incidence of poverty in rural India.

The study revealed that there is no strong effect on the incidence of rural poverty by agricultural production and prices. Although, agricultural production was not significantly and positively correlated with rural poverty in a single state, these variables were found to have a significant negative correlation in six of fifteen states. Arise in the food-grain prices adversely affected the wage dependent rural labour households. Thus, the study came to the conclusion that the real income loss of the strata tends to be offset by real income gains of the other major segments of the poor rural cultivating households.

Amjad and Irfan (1984) for the first time exclusively deal with rural poverty. The study is also based on various HIES. The authors defined poverty lines based on monthly food expenditure needed to achieve 2,550 calories per adult equivalent. In poverty estimation they are adopted the same procedure of estimation as Mujahid (1978) while extending the period of study to 1979. The distinguished feature of the study being the way the authors analysed the process whereby agricultural growth and structural changes in the rural economy can be related to the existing high poverty levels. According to this study, between 1963-64 and 1969-70 percentage of population in poverty increased from 30.6 to 38.4, declined to 26.5 by 1979. However, this improvement only brought back the incidence of poverty to the level of 1963-64.

Sen’s (1985) second application examined sex bias in India and found evidence of gender differences. Females have poorer achievement than males for a number of areas of functioning, like age-specific mortality rates, malnutrition
and morbidity. These types of quantitative application based on aggregated data have become widespread, especially in development studies, resulting in the concept of human development, which has its theoretical basis in the capability approach.

Thakur (1986) estimated the extent of rural poverty among the households belonging to marginal holdings, small and medium size in Himachal Pradesh (in the year 1980-81) on the basis of primary data. Two poverty lines were considered. They are all on the basis of 'nutrition norms' (who consume less than 2,400 calories per day spent less than `52.93 per month on food items), (ii) on the basis on nutrition plus approach (those persons who spent less than `77.61 per month on both food and non-food items).

On the basis of nutritional norm approach, the percentage of poor on the marginal size of holdings was found 71.06, on the small size of holdings 50.65 and on the medium size of holdings 26.34 per cent. The overall percentage of the poor among all households was 47.14. On the basis of nutrition plus approach the percentage of poor among all the households worked out to 57.31 and the percentage of poor was the highest among marginal farmers.

Mittar's (1987) measured the extent of poverty and the structure of income and its distribution in the informal and formal sectors in Patiala City (in 1982) on the basis of primary data. The author revealed that the average income of the workers in the informal sector substantially lower than that of those in the formal sector. A higher proportion of households were found lying below the poverty line in the informal sector. This was due to the low wage which was lower than the legal minimum wage. In addition, the intensity of poverty was
found higher among migrant households. Further, the study also noticed a greater intensity of poverty among the nuclear family than that of a joint family.

Sharma (1987) examined the 'generational' and 'temporal' dimension of poverty among agricultural labour households in the Krishna district of Andhra Pradesh (during 1981-1982) on the basis of primary data. Two poverty lines were considered. They are; (i) an annual per capita consumption expenditure of `236 at 1961-62 prices and (ii) households who own assets less than `5,000.

The study revealed that 41 per cent of the households were below the income poverty line, whereas it was 26 per cent in the case of landed and 47 in the case of landless households. On the basis of asset poverty, 73 per cent are below the poverty line. The relatively low incidence of poverty on the basis of income poverty is due to the high level of development attained by the district and also due to the rise in the real wages and money wages of agricultural labour. No significant association was observed between caste and poverty. However, poverty was identified with specific occupational groups. Higher family size and dependency ratio were found to be independent factors explaining poverty. In addition, significant association between poverty and absence of female workers was also observed. However, there was not any association between poverty and the level of employment. A generational decline in occupational status and access to land were observed and this was found to have aggravated the problem of poverty. Further, inter-generational occupational change was seen more in the case of other castes than scheduled castes. The decline in the access to land among the sample households was due to the adverse effect of tenancy reforms.
The regression equation estimated with per capita income as the dependent variable revealed that family size, labour force participation rate, level of employment per worker, average daily wage rate per worker and occupational holding put together have shown a high explanatory power in explaining inter-household variations in per capita income. The author suggested public intervention in favour of the poor to make a big difference in the levels of living of the poor.

Singh (1987) estimated the magnitude of rural poverty and the trends in inequalities on the basis of NSS data on consumption expenditure in Uttar Pradesh, for the period 1957-58 to 1977-78. The study observed an increase in the value of consumer expenditure and this increase was relatively sharper in non-food items than in the expenditure on food items. The consumption pattern revealed that nearly 70 per cent of it was accounted by food items thereby left very little margin to meet other basic needs. Consumption expenditure inequality was found very sharp. More than half of the population were below the poverty line and nearly one quarter was below the line of severe destitution. The fluctuations in agricultural output were seen having an impact on the poverty level, although the trickle-down effect of agricultural growth was found weak. The study underlined the need for a simultaneous effort of raising agricultural output and redistribution policies to reduce rural poverty.

Mitra (1987) examined the relationship between (i) land ownership and poverty and (ii) size of the household and poverty in the rural areas of three districts of Andhra Pradesh (Anantapur, Medak and West Godavari) during the year 1977-78. The study was on the basis of the Employment-Unemployment
Schedule of the NSS (State sample) data. The dependent variables considered were monthly per capita expenditures of cultivator and agricultural labour households. The explanatory variables were. (i) The size of the household, (ii) per capita un-irrigated land, (iii) per capita irrigated land, (iv) proportion of economically active persons and (v) proportion of economically active males.

The pattern of relationships between family size and the levels of living (per capita monthly expenditure) was observed to be irregular. For cultivator household’s higher household size have not reduced the per capita expenditure. But the per capita expenditure of agricultural labour households was seen to be reduced by higher size of the family. Land was observed to be an important variable determining the per capita expenditure for the cultivator households. Owning and operating some land was observed to have helped in improving the per capita expenditure of the agricultural labour households. A substantial percentage of variations remain unexplained by the variables chosen for the study.

Subramanian (1988) studied the level of poverty in Tamil Nadu for the period 1961-62 to 1983 by using NSS consumption expenditure data. The poverty line was `15 and `20 per capita monthly expenditure at 1960-61 prices for the rural and the urban areas respectively. He made use of the Head Count ratio, the Proportionate Expenditure Gap (PEG) and Sen's Index of poverty for measuring the incidence of poverty. He found that the rural poverty is closely correlated with agricultural performance (measured in terms of the output of food grains per head of rural population). In addition, the relative rural-urban poverty pattern was seen closely related to the relative rural-urban price levels.
Further, the study indicated that the governmental policies for the impoverished sections have not made any appreciable dent in ameliorating the poverty of the state.

Sundaram and Tendulkar (1988) have examined the inter-regional variations in the incidence of poverty and the rate of unemployment. They also analysed the link between poverty and unemployment for the self-employed and the wage dependent households. The database of the study was 27th and 32nd rounds of NSS (1972-73 and 1977-78) relating to the all India rural population.

The study unearthed that the proportion of wage dependent households is the major factor explaining the interregional variations in the rate of unemployment. In addition, the average value of assets per household and average per capita consumer expenditure was found to be the other dominant variables contributing to the inter-regional variations in the incidence of poverty. As the rural poverty was found to be affected favourably by an increase in the average levels of household assets and gross cropped area and negatively by an increase in the inequality in distribution of assets and consumption expenditure, the study concluded that growth in average output or income may have positive or negative effects.

Gaiha (1988) attempted to explain the temporal/regional variations in poverty in terms of variation in agricultural output and prices. He studied the impact of village specific technological and household variables on poverty. He relates the risk/probability of households being poor to the characteristics of the household. For this purpose, he made use of the data on the Additional Rural

The study noticed that the village specific indicators exercised a poverty reducing effect and the new agricultural technology is beneficial to the poor. Among the household specific variables education was found to be associated with a lower risk of poverty, and the dependency burden was positively associated with poverty.

The risk of poverty was seen different for different occupations and the contribution of each variable in explaining the variations in the risk of poverty also varied by occupation. The risk of poverty was more sharply reduced for cultivators than for casual labourers under the impact of new agricultural technology. The availability of credit was inversely related to the risk of poverty for business and craftsman, while this explanatory variable did not have any significant effect on the risk of poverty for cultivators. The risks for casual labour were not influenced by life cycle effects operating through variations in earnings across age groups.

Sanyal (1988) studied the trends in poverty of fifteen major states and India as whole during the period 1954-55 to 1971-72. He linked the poverty line obtained on the basis of nutritional norm with the ownership holding size by using an indirect method. He assumed that household's level of living is determined by the amount of land it owns and it is an increasing function of the amount of land it owns for measuring poverty.

Maitra (1988) examined rural poverty in West Bengal by using Sample Survey of households and the poverty line used was an average per capita calorie
of 2,250. The study revealed that 55 per cent of the rural population are below the poverty line. Although, more than 60 per cent of the Scheduled Castes and Scheduled Tribes belonged to the poor, a considerable number of people from other groups were also found poor. Occupation-wise about 60 per cent of the village artisans and others engaged in agricultural work were poor. The study noticed a considerable inequality in the accessibility to publicity provided/subsidised commodities/services like ration rice, education and health. Although, the proportion of population receiving ration rice did not vary across income groups, the top 10 per cent received 16 per cent of the ration; the bottom 15 per cent received only 6.6 per cent. The amount of help received by the households in cash or in kind, which was designed to enable the weaker sections to stand on their own, revealed that the quantum was too meagre for the actual requirement. These materials were found to be received by even the richer sections too.

Gaur (1988) estimated the extent of poverty and identified the causes of poverty (both rural and urban areas) in the Bharatpur district of Rajasthan (1980) by using both primary and secondary data. Poverty was measured (i) on the basis of the minimum needs approach and (ii) calorie requirement approach. According to the minimum needs approach, it was estimated that a monthly per capita expenditure of `99 and `104.10 were necessary at the 1980-81 prices for rural and urban areas respectively. On the basis of calorie requirement approach it was found that a minimum of 2,845.48 and 2,506.48 calories necessary for rural and urban areas respectively.

The study found that 21.17 and 11.13 per cent households are below the poverty line on the basis of the minimum needs approach and calorie
requirement approach respectively. Out of 21.17 per cent poor households, 22.19 per cent were rural households and 16 per cent were urban households. Out of the 11.13 per cent poor households, the percentage of rural households was 12.53 and the percentage of urban households was only 4 per cent.

The study revealed that per capita consumption expenditure is an important factor influencing the level of per capita actual diet, per capita difference between actual diet and balanced diet, per capita calorie content, per capita difference between calorie content and calorie requirement of a household. The major contributory factors for the existence of poverty were: lack of irrigation facilities, size of the family, more dependence on the heads of households, absence of other sources of economic activities, joint-family system, unemployment, illiteracy and the system of landless agricultural labourers. Per capita monthly expenditure on medical care, education, and social customs tested in relation to per capita consumption expenditure showed significant relationship. The study revealed that the various governmental programmes for the eradication of poverty failed to achieve anything significantly in attaining its goals.

Kumar (1982) measured the extent of rural poverty in the two villages (Basantapur and Kaushalyapur) of the district of Puri in Orissa in 1982 on the basis of primary data. Poverty was measured in terms of per capita income, per capita consumption expenditure and per capita calorie-intake.

On the basis of calorie-intake, the study found about 52 and 44 per cent households below the poverty line in Kaushalyapur and Basantapur villages respectively. A comparison of the incidence of poverty by calorie-intake and per
capita monthly expenditure showed higher incidence of poverty when monthly per capita expenditure criterion was used. This was on account of the fact that in rural areas all consumption articles did not involve expenditure. The major cause of poverty was the non-availability of agricultural land to majority of the households. In addition, illiteracy, high dependency ratio, non–diversification of occupation from traditional to modern was the other factors responsible for the poverty of the region.

Schokkaert and Van Ootegem (1990) were the first to operationalize the capability approach using micro data. They applied the capability approach on 1979 data on the unemployed in Belgium. They showed that material factors are almost irrelevant in the determination of the well-being of the unemployed, thus providing support for a broad concept of well-being.

Ahmad and Allison (1990), using 2550 calories per adult equivalent, determined poverty lines based on total per capita expenditure per month as `100, and `110 respectively for rural and urban areas. They assume that the urban poverty lines are `10 higher than the rural ones. Their analysis shows that during the period 1979-1984/85, poverty has declined both in rural areas (from 25 to 20 per cent) and in urban areas (from 20 to 16 per cent).

expanding the data set of HIES to 1990/91. Using household and calorie intake parameters from his earlier study, calorie consumption functions for 3 years are estimated to derive poverty lines for provinces rural/urban decomposition. His analysis shows that poverty has declined during the period 1984-91.

Mahmood et al. (1991) using HIES (1984/85) rural and urban data and adjusting for family size and composition, regress required calories/RDA on food expenditure to get the poverty lines of 246 for urban areas and 149 for rural areas. Poverty indicators with rural/urban breakdown are also estimated. It is observed that 76 per cent households in urban areas and 40 per cent in rural areas were poor. The intensity of food poverty was very high and a more pronounced in rural areas compared to urban areas.

Smeeding et al. (1993) compared the incidence of poverty, among Organization for Economic Cooperation and Development (OECD) countries by assigning a monetary value for each of the welfare attributes of housing, education and healthcare. Estimating the per capita cost of primary, secondary and university education and allocating these costs to each individual in a household that completed a certain level of education allotted them to obtain the distribution across households of education services.

Ahmad, M. (1993) estimate absolute poverty based on the basic needs approach. The basic needs package used consist of food, clothing, housing, health, education, transport, social interaction and the recreational facilities. The qualification of the norm of each individual basic need was done through informed opinion. Validation was carried out through small survey of heads of families in both rural and urban areas. Expenditure data from HIES (1987/88)
have also been used to cross check the estimation of these exercise. For household size, the study assumed that a family unit/household have six members consisting of 2 adult and 4 minors. One minor is assumed to be equal of 0.8 adults. Estimates of expenditure required to meet the basic needs thus arrived at were rural `300, urban `419 and Pakistan `300 at 1991/92 prices. When adjusted for the price increase of 45 per cent, these estimates come to `207 for rural areas, `289 for urban areas and `233 for Pakistan in 1987-88. Based on grouped data from HIES (1987/88), poverty incidence fair and poverty gaps have also been calculated separately for rural and urban areas. It is clear that the method adopted by Ahmad for identifying the quantum and the value of each component of the minimum basket of basic needs, consequently as it is upon determining the poverty line through discussion with the limited number of professional, heads of household and the consumers, is un-scientific and arbitrary.

Shirazi (1993) estimated the poverty lines both in terms of income and expenditure based on nutritional needs. The FGT poverty measures have been applied to HIES Micro data to determine the incidence, intensity and severity of poverty in Pakistan. The analysis is carried out both on household and individual level and also on the regional level. The ratio of the very poor and the extremely poor has been determined by defining the very poor who can meet 80 per cent of the requirement and extremely poor who can meet barely 70 per cent of their needs. A detailed socio-economic profile has been developed. He has also analysed the possible role of INFAQ in the alleviation of poverty. He concluded
that the poverty gap could be reduced by 4.61 per cent and severity of poverty by 6.6 per cent in overall Pakistan under the impact of INFAQ.

Gazdar et al. (1994) estimated a basic needs poverty line at 1991 rural prices based on HIES and PIHS data for 1984/85, 1987/88 and 1991. Inter-temporal provincial and regional adjustment are made using HIES and consumer price indices. Assumptions regarding adult equivalence and choice of basic needs items are largely used from Ahmad (1993). However, some modifications on cost of food and housing items have been carried out. In defining the poverty line, the pricing of basic need items is based on information gathered from PIHS (1991). Consumer price indices are also used for estimating overall provincial and regional specific poverty lines for 1984/85 and 1987/88. This procedure is not appropriate in measuring poverty and more reliable result could be achieved by using the consistent set of data from HIES and PIHS by making minor adjustments.

Malik, Hussain and Shirazi (1994) studied the effects of INFAQ on poverty alleviation at a disaggregate level. The headcount showed that INFAQ reduced poverty level by 2.41 per cent overall, 3.93 per cent in the urban areas and 1.83 per cent in the rural areas of Pakistan. Among the provinces, Punjab showed the highest decline (24.6 per cent), Baluchistan (1.32 per cent), NWFP (1.16 per cent) and Sindh (0.70 per cent). The most significant effect of INFAQ was a reduction in poverty gap and severity of poverty. Among the provinces highest reduction in urban area poverty was observed in NWFP and the highest reduction in rural poverty was observed in Punjab.
Ali (1995) estimated the Poverty lines by Extended Linear Expenditure system (ELES). The system was an extension of linear expenditure system. He estimated `374 as total poverty line and `191 as food poverty line in terms of per capita per month for the year 1990-91. He reported that 47 per cent of the population failed to meet the minimum standard of basic needs. About 10 per cent of the population have lower income than minimum food expenditure. While estimating poverty lines for year 1987-88 using ELES technique he observed that his poverty lines were higher than Ahmad’s (1993) estimated lines. Although the approach used by both was same i.e., basic need approach but methodologies were different. He also analysed the concept of poverty both in national and international terms. ELES technique was applied to data and it was found that poverty were significantly high at the close of 60’s and at the beginning of 70’s. In the second half of 80’s the evidence reveals the reduction in poverty. The estimate for 1990-91 showed there is a marginal improvement in poverty.

Federal Bureau of Statistics (FBS) (1995) shows poverty phenomena in Pakistan by using HIES data for the year 1985-86, 1986-87, 1987-88 and 1990-91. Poverty lines were on the basis of both basic needs and calorie intake approach. These lines were determined by overall, rural and urban areas of Pakistan. The result showed that the magnitude as well as trend overtime has increased.

Jafri and Khattak (1995) based their study on individual household data of HIES of 1985/86, 1986/87, 1987/88 and 1990/91. The basic needs approach is used in determining the poverty lines. The estimated poverty line reflects the cost
of a minimum bundle of basic needs consisting of food, clothing, housing, health, education, transport, and socialization and recreation facilities. The cost of food in the bundle of basic needs is estimated as the average expected food expenditure required to meet the recommended level of caloric intake of 2550 calories per adult per day, which is equivalent to an average 2354 calories per person. The estimated expenditure on basic needs items of an average household that just meets the required expenditure on food. Separate exercises for rural and urban areas are carried out. Four national poverty lines at `203 for 1985/86, `224 for 1986/87, `234 for 1987/88, and `323 for 1990/91 have thus been determined.

To study the incidence of poverty, the head-count ratio, income gap ratio and FGT measures were estimated. The incidence of poverty indicators for the year 1990/91 compared to 1987/88 show that poverty has worsened over this period, both in terms of incidence as well as severity.

A report of World Bank on “Pakistan Poverty Assessment” (1995) was published in September (1995) presents the concept, measurement, nature and incidence of poverty. It also provides a review of strategies to reduce it. The approach used in the study was also used by Ahmad (1993) but there were some modifications in it. The national headcount ratio fell from 46 per cent in 1984-85 to 37 per cent in 1987-88 and then 34 per cent in 1990-91. The poverty gap also indicated a reduction of poverty. The incidence of poverty slightly fell in urban areas than in rural areas. According to report Pakistan has made good progress at reducing consumption poverty.

Balestrino (1996) analysed whether a sample of officially poor people indicated that they were functioning poor, income poor or both. Of the 281
Italian households in his sample, 73 households were pure functioning poor (in other words, they lacked education, nutrition or suffered some health failure), 71 were pure income poor and 137 were both. The analysis suggested that a sizeable portion of the poor in affluent societies is actually not income poor.

Anwar (1996) examined the actual change in absolute poverty. The actual changes in the distribution had been examined from two comparable HIES surveys from 1987-88 and 1990-91. The result showed that over the period of adjustment not only absolute poverty incidence but also the intensity of poverty increased significantly. Structural adjustment creates new poor in urban areas. Poverty is also increased unambiguously among self-employed and unemployed who seem to have been affected adversely by overall economic contraction.

Malik, S. (1996) used micro survey data from a Punjab village and considered a large number of rural and household specific variables besides landholding, in an attempt to determine their role in raising levels of living of rural masses. In this study, the author used two approaches; one is decomposition of variables and other regression analysis in order to facilitate the results. He concluded that rural poverty is found to be in line with the declining trend of rural poverty in Pakistan.

Malik and Sharif (1996) studied the rural poverty on the basis of a village study. A large number of socio-economic and demographic variables were undertaken in the data and methodology, and for the econometric and decomposition analysis. They found that the household groups with less education were not only often relatively poor, but poverty in these households was also more severe. The other main factors responsible for this outcome were
found to be favourable/unfavourable distribution by size of land holding, household size, participation rates, dependency ratio and female-male ratio. Those households escaping poverty, however, remained in the low-income category. Another finding of the study was that the bulk of the poverty is found among the small farm owners, landless rent-croppers and wage labourers.

Ruggeri-Laderchi (1997) tested to what extent an income indicator can capture some of the most essential functioning (education, health and child nutrition). He used 1992 Chilean data. The test concluded that the income variable appears to be an insignificant determinant for the shortfall in the three selected functioning areas. Hence, poverty analysis is highly dependent on the indicators chosen and thus “the approach should be kept as broad as possible in order to more fully capture the multi-dimensional nature of such a complex phenomenon”.

Amjad and Kemal (1997) used the income poverty defined by Malik (1988). They set the poverty trends for eight years, 1963/64 to 1992/93 by computing Malik’s poverty line. Since they inflated Malik’s poverty line to incorporate both the cost of food and the non-food items in their poverty lines, they analysed the correlation of poverty by using large number of macroeconomic variables. In addition to it, they have also examined the impact of the Structural Adjustment Policies (SAP) on poverty. They concluded that rural poverty shows a decline over the 1984-85 to 1987-88 periods irrespective of the definition employed. However, over 1987-88 to 1990-91 periods, the proportion of the very poor increased. They also interpreted growth and income
inequality trends as well as the trends in poverty with the review of the working of social action program.

Brandolini and D’Alessio (1998) used the Bank of Italy’s 1995 household survey covered six functioning areas (health, education, employment, housing, social relationship and economic resources). This exercise provides an interesting picture of the distribution of the achievement and deprivation of functioning. They also investigated and discussed a number of techniques which may be used, like sequential dominance analysis and multi-dimensional poverty indices.

Ashraf, Khan and Sharif (1999) scientifically analysed and determined the characteristics of rural poverty. They used Naseem’s poverty line by defaulting with the consumer price index. This study was on the rural poverty among non-farm/landless household survey conducted by the Punjab Economic Research Institute (PERI), Government of Punjab in 1986. They have used three poverty lines, while on an average 47 per cent households were below the poverty lines. Their estimates were below from Naseem (1973, 1981) and Alauddin (1975) but were similar to Burki’s estimates of rural poverty.

Jafri (1999) estimated food poverty line and total (basic needs) poverty line separately. For food poverty line, he converted the recommended level of calorie intake (2450 and 2150 calories per adult equivalent for rural and urban areas respectively) into food consumption function to ensure consistency with other regional countries-regressing calorie intake on food expenditure and identifying the expenditure consistent with the required level of calorie intake. Jafri (1999) also used basic needs approach to determine poverty lines for the
1986-94 period. The basket of basic needs include a cost of food, clothing, health, education, transport, socialization and recreation. The cost of food in this basket is estimated, as the average food expenditures required achieving the minimum level of calorie intake. For the non-food elements of the basket, Jafri, assumed that those households whose food expenditure is exactly equal to the minimum prescribed level that would also satisfy their basic needs. Based on the Pill’s poverty lines, Jafri estimated the food poverty; as well as poverty under the basic needs approach for five survey years, 1984-85 to 1993-94. He shows that poverty declined between 1987-88 and 1990-91, but it increased during the next two survey years, 1992-93 and 1993-94. According to Jafri, poverty in rural areas remained at the same level between the 1990-91 and 1993-94 period.

Pradhan and Ravallion (2000) created the subjective poverty line from the Micro data of Nepal and Jamaica. They asked each household what the income level the members of the household considered to be absolute minimum income they needed to make ends meet. For each attribute in the multi-dimensional analysis, a global subjective line was defined as the least amount of expenditure required for an individual to be able to acquire the minimum each attribute. An individual is considered poor when his or her income falls below the subjective poverty line.

The World Bank (2000) study shows a continuous decline in poverty between two periods 1987-88 to 1992-93. In urban areas the declining trend of poverty they continued till 1996-97 period. However, at the national level as well as for rural areas, after a modest increase in 1993-94, poverty declined again in 1996-97.
Jamal and Ghaus-Pasha (2000) defined poverty line by using the calorie intake norms of 2550 per capita for rural and 2230 for urban areas. They have used calorie norms higher than used in the official poverty line. According to Jamal and Ghaus-Pasha, overall poverty is 31 per cent during the period 1996-97, 32 per cent in rural areas and 27 per cent in urban areas for the same period. They used at the primary data set of the 1996-97 HIES and regressed the calorie-intake on the total expenditure. However, it is not clear from their methodology whether they have excluded expenditure on any item such as durable from the total expenditure.

Qureshi and Arif (2001) also computed food poverty line and total (basic needs) poverty line separately like Jafri (1999). For food poverty line, they converted the recommended level of calorie intake (2550 and 2295 per adult equivalent for rural and urban areas respectively) into food consumption function, regressing calorie intake on food expenditure and identifying the expenditure consistent with the required level of calorie intake.

Arif, Nazil and Haq (2001) estimated poverty for 1993-94, 1996-97 and 1998-99 using the methodology of Qureshi and Arif (2001). The authors have estimated the poverty overall as well as for urban and rural areas of the country. They showed that poverty has increased from 27 per cent in 1993-94 to 35 per cent in 1998-99. Thus at the end of the last decade, more than one-third of the total households in the country were below the poverty line; being this level very close to 40 per cent for the rural areas.

Azid et al. (2001) attempted to explain the role of female-labour force participation alleviation through the cottage industry like cloth embroidery in
rural Multan. This study is based on the primary data. They concluded that there is a positive association between hours of female workers and household poverty. They pointed out that this problem has two dimensions, i.e., to improve the status of female workers and incentives should be provided to them. Other is to develop this sector on the priority basis for the economic and social development of rural sector and as well as for the enhancement of the foreign exchange. However, they have not estimated poverty profile either at the national or regional level.

Federal Bureau of statistics (FBS) (2001) estimated poverty for four surveys from 1992-93 to 1998-99 using HIES and PIHS data. The FBS estimated the poverty line from a regression of per equivalent adult consumption expenditure against estimated daily per capita calorie intake. The FBS report (2002) specifically says that it is important to note that regression is between requirement and total consumption expenditure, not only food expenditure. The other very important point to note is that the regression was run only using the three lowest or per adult equivalent the consumption expenditure quintiles. This methodology implicitly assumes that those households that reach the minimum requirement of calories consume also necessary non-food items; otherwise they would have increased their calorie intake (FBS, 2001). The FBS applied the same methodology for poverty levels estimation based on the lower intake of 2150 calories for an adult to calculate poverty line for both the rural and urban areas of the country. The FBS methodology was also applied for the calculation of the official poverty line adopted by the planning commission based on the
calorie requirement of 2350 per adult per day at the national level (2150 per adult per day for urban areas and 2450 for rural areas)

A perusal of all studies in the present chapter indicates that majority of these research efforts have either concentrated more on counting numbers below the given poverty line at the national or provincial level, or have explained poverty with reference to a narrow range of variables. The present study is undertaken with somehow different the data and methodology. The area, which has been taken for the household’s survey, is critical in the sense that it is a metropolitan city and so far no impressive and detailed research has been undertaken. So the present study is different to the previous studies and it provides a detailed analytical and empirical analysis of large number of socioeconomic and demographic variables regarding urban poverty level among slum dwellers in Chennai city. The next chapter deals with profile of the study area.
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PROFILE OF THE STUDY AREA

Chennai previously known as Madras owes its origin to the East India Company came to India for the purpose of trade. In March 1639, Francis Day, obtained from Sri Ranga Raya, the Rajah of Chandragiri, the grant of land on which Fort St. George presently stands. Chennai is the fourth most populous metropolitan city of India, after Mumbai, Delhi and Kolkata. But, it is the largest city in the southern region of India followed by Bangalore and Hyderabad. It is the capital of Tamil Nadu, which ranks first in the degree of urbanization in India with almost 46 per cent of its population being urban.

3.1. Location

Chennai is located on the south-eastern sea coast of India at 13° 40' north latitude and 80° 15' east longitude on a flat plain slightly above the sea level. Chennai city stretches nearly 26 km. along the coast from Thiruvanmiyur in the south to Thiruvottiyur in the north. The traces of colonial legacy are still visible from the architecture of some most important buildings like Fort St. George, High Court Complex, General Post Office, University of Madras, College of Engineering, and Central Railway Station, to name a few. It is a relatively uncongested city of India. The physical expansion of the city is marked by lateral rather than the vertical growth because of the availability of land.

3.2. Size of Population

Table 3.1 provides state of the population of Chennai city according to 2011 census. The Population size of Chennai City is 4,681,087 comprises 2,357,633 males and 2,323,457 females.