As noted in the preceding chapter, poverty is world-wide phenomenon. The bulk of world's poor (680 million or about 85 per cent of the people) live in rural areas. Rural poverty is widespread in developing countries, particularly in overpopulated countries like India, Bangladesh and Pakistan. Of the total rural poor, small farmers constitute over 50 per cent and landless labourers form about 25 per cent. Besides absolute poverty, which is indicated by the level of income, the value of assets, consumption expenditure and the level of debt, majority of the people in less developed countries are subject to relative poverty indicated by gross inequalities among different sections of the population. The studies carried out at the international level by the World Bank, and the Food and Agricultural Organisation of the United Nations have brought

3. Food and Agricultural Organisation (FAO), The State of Food and Agriculture, Rome, 1982
into the fore the severity of the poverty, particularly rural poverty in the Third World Countries and highlighted the need for anti-poverty programmes.

In India, the question of defining the poverty line was first mooted by the Indian Labour Conference in 1957. Subsequently, a Working Group of the Planning Commission (1962), based on the balanced diet in terms of nutrition recommended by the Indian Council of Medical Research in 1959, prescribed in 1962 a nationally desirable minimum level of consumer expenditure to serve as the cut-off point.

After nine years, Dandekar and Rath (1970) took up the issue and defined the poverty line in terms of expenditure level at which households on an average seemed to have adequate energy intake. Sukhatme (1977), who contended that the norm of energy requirement used by the two economists was the average requirement of a healthy and active population and not the minimum below which a person should be considered undernourished. Then he suggested that the lower end of the range of the energy

4 The Working group comprised Prof D R Godijil, Dr. B N Ganguli, Dr P.S. Lokanathan, M.R. Masani, Asoka Mehta, Shriman Narayan, Pitamber Pant, Dr V K R V. Rao and Anna Sahab Rebuddha.

5 Dandekar, V M and Nilakant Rath, Poverty in India, Bombay, Indian School of Political Economy, 1970
intakes of a standard healthy individual be used as the cut-off point for determining undernutrition and the poverty. The view has also been attacked by Nilakanth Rath, Ojha, Gosh, Raj Krishna, Adiseshaiah, etc. It seems, they have all weighed for Dandekar and Rath's view, i.e., consumption expenditure levels. Although these studies vary in methodologies and in other aspects, one point is common viz., the predominance of rural poverty.

As a result of these studies and their recommendations, the Government of India, like those in other developing countries, has been taking up anti-poverty programmes like SPDA, DPAP, NREP, IRDP, Minimum Needs Programme etc., to alleviate poverty in general and rural poverty in particular. However, despite these programmes the magnitude and incidence of poverty, particularly rural poverty, has been on the increase. This is primarily due to lack of understanding of the problem is a proper perspective, failure to identify the beneficiaries and leakage of benefits.

6 Sukhatme, P V, "Incidence of undernutrition", Indian Journal of Agricultural Economics, July-September, 1977, p 71
8 Ibid
9 Ibid
10 Ibid.
11 Ibid.
Select Review of Literature

In recent times attempts have been made to explore theoretically and empirically the distributional aspects of economic growth in terms of the interrelationship between economic growth, income inequality, poverty and welfare obtaining among the various regions and the socio-economic groups therein at national and international levels. Traditional development was conceived in terms of an increase in Gross national Product (GNP) and per capita income and accordingly earlier approaches to development problems during fifties and sixties stressed on raising the aggregate rates of growth of domestic product. The small gains of development seem to be monopolised by the upper middle and richer sections of the society. The claims that there has been acceleration in the growth rate, that poverty has been on the decline and that majority of the poor is getting better-off have no basis.


Time has come to question the erstwhile strategies of development or growth and search for development paths that would result in growth with equity and elimination of poverty. As a consequence, studies on poverty have come into the fore and demanded the emphasis on income distribution, employment and growth.

The problem of poverty, particularly rural poverty, has been explored from time to time by different agencies at different levels - international, national and regional. In a study of rural poverty, a select review of literature at different levels is highly instructive and useful. Hence an attempt is made to undertake this exercise in the following lines.

In a World Bank study, "Assault on World Poverty", 14 McNamara, former World Bank President observes that growth is not equitably reaching the poor and the poor are not significantly contributing to growth. Development strategies, therefore, need to be reshaped in order to help the poor to become more productive. The study suggests that agricultural credit and land reforms are key elements in helping the rural poor to become more productive. Unfortunately, the flow of credit to poorer sections has been inadequate due to lack of sufficient collateral and

14 The World Bank, Assault on World Poverty, London, the Johns Hopkins University, 1975
high administrative costs of small loans to them. However, these programmes are difficult to carry out due to their effect on poverty base of the traditional elite in a developing society.

Griffin in his study "Land Concentration and Rural Poverty" mentions that the distribution of income in the agricultural sector and the standard of living of the majority of the rural population are greatly affected by the degree of land concentration. In each essay one encounters a constant refrain about the crucial role of agrarian reform in alleviating rural poverty. Griffin stressed that one of the great achievements in Taiwan is its ability to combine high rates of savings and growth with relatively equitable distribution of income. Many reasons are there for the even distribution of income in Taiwan. First, within the agricultural sector, the distribution of income from farming is relatively equal. Absentee landlordism was abolished during the post-war agrarian reform, rents were fixed and are now quite low and the average size of holding and unit of ownership is small and the dispersion around the average slight. All these factors have contributed to a more equalitarian community. Some nations, viz., Pakistan have achieved rapid

growth, but this has accrued at the expense of equity. Countries like Sri Lanka have been more equitable, but the rate of growth has been unsatisfactory.

It is study 17, the Food and Agricultural Organisation reviews rural poverty in developing countries and the means of poverty alleviation. The study is concerned with absolute poverty in rural areas and one of the origins of this poverty must lie in inadequate access to land and other factors leading to insufficient production by projecting World Agricultural perspectives and policy issues upto the year 2000 A.D with particular attention to developing countries the study found that over the next two decades the developing countries could double their food and agricultural production, but it would not by itself the scourge of hunger. The essential prerequisite is that the improved food production must go hand in hand with a more equitable distribution of this larger output. The study concludes that a sustained effort is needed on many fronts. No new startling technological breakthrough can be relied upon to transform production and there are no painless short cuts to more equitable distribution of income and food supplies.


The first part of the study examines the extent of poverty in 90 developing countries in terms of undernutrition, illiteracy and life expectancy. The study then examines the relative incidence of poverty in rural as opposed to urban areas. Rural poverty emerges as the major constituent of poverty worldwide, not only because the rural poor outnumber the urban poor by a substantial margin but also because the incidence of poverty is disproportionately severe among rural population.

The second part examines the causes of rural poverty and in particular the ways in which it can emerge as a result of economic or population growth. Rural poverty is seen here as a highly complex problem. Limited access to land due to unequal distribution of land or population pressure is undoubtedly a major contributory cause of insufficient production, but the inherent quality of the land and quantity of labour and capital are also the determinants of the level of farm output. Case studies prepared for A T 2000 (FAO 1981 - Agriculture towards 2000) show that the incidence of poverty in rural areas is highest among landless labour and small holder households. It is projected that the number of absolutely poor will increase in four developing regions during the next 80 years.
The third part of the study analyses the means of poverty alleviation. Mere economic growth in general or agricultural growth in particular will not suffice to solve the problem of rural poverty. The alleviation of poverty within an acceptable time scale requires a political commitment to the reshaping of the pattern of national economic growth and a new distribution of its benefits. The study finally reviews the activities of Food and Agriculture Organisation to assist countries to monitor rural poverty alleviation.

In its World Development Report 1980, the World Bank explored the absolute poverty that affects a total of about 780 million people throughout the world, excluding China and other low-income centrally planned economies, such as, Vietnam. It is observed that in China its nationwide food security programme, along with basic health and education services, may blunt the impact of poverty by raising the living standards of about 150 million people. The inclusion of China suggests a global total of close to 1 billion people living in absolute poverty.

The World Development Report 1982 reassesses the development prospects in many underdeveloped countries, potential for improved performance in agriculture and

rural poverty alleviation in those countries. It was felt that in developing countries low growth over the 1980's is more likely than was projected in previous years. However, it should be possible for many middle-income countries to repeat the successful adjustment they made to the adverse conditions of the 1970's, and to achieve per capita income growth well in excess of that of the industrialized countries. For the low-income countries, in which the bulk of rural poverty is concentrated the picture is mixed but generally bleak. China and India, both of which managed to maintain significant growth in the 1970s, are less affected by the adverse international environment. It is also observed that all countries where agricultural development has been strong, economic growth had advanced at a rapid rate. As a result, in many middle-income countries the worst kinds of absolute rural poverty have largely disappeared, although stark differences in standard of living persist.

In a study of Bangladesh, Khan 20 observes that in recent decades the rural economy of Bangladesh has not only failed to grow in terms of per capita output but also experienced remarkable increase in inequality and

extreme poverty. He found that during the period of relatively successful green revolution, which brought about significant increases in output and income, landlessness and near proletarianisation increased, resulting in the aggravation of inequality of incomes.

Lee, in his study of South Korea, observes that the size distribution of income is lower than in most other developing countries and that this relatively favourable distribution has remained essentially unchanged during a period of rapid structural change and economic growth. The initial egalitarian distribution of land not only created a low degree of inequality in asset and income distribution but also created the preconditions for a widely diffused adoption of new productive inputs. As a result, productivity and incomes have increased. Hence, it is found that the wide diffusion of growth contributed to the reduction in inequality and alleviation of poverty.

In a study of Egypt, Radwan and Lee note that although there was a reduction in the degree of inequality of incomes between 1964-65 and 1958-59, by the mid-seventies this trend has been found more than reversed. The


dramatic increase in rural poverty is analysed in terms of the inability of the agrarian reform policies to alter fundamentally the unequal distribution of land and income in Egypt.

In India, poverty is not a recent phenomenon. The debate on Indian poverty during eighteenth century vividly brought out the socio-economic conditions of that time and the effect of British rule on aggravating poverty among people in the country. Dadabhai Naoroji in his paper, 'The wants and Means of India,' has given 40 shillings (Rs 20) per capita as 'high estimate of the gross production of India.' In another paper "poverty of India," also his estimate stood at 40 Shillings (Rs 20) for the country as a whole. This he arrived at after taking into account the value of production in agriculture, manufacturing in industry, coals and mines, profits of foreign commerce etc. However, his estimates omitted the contribution of railways to national income, to profits of trade, to salaries and pensions, to non-agricultural wages and all other sources from which a man who does not grow food himself may obtain the means of purchasing it.

25 Ibid., pp.2-3.
26 Ibid., p.3.
he estimated it by taking into consideration to average prices of only few crops. As a result, Dadabhali's estimates led to underestimation of the values of production per capita in India.

Rao (1938)\textsuperscript{27} in his essay on the National Income of India, with a different methodology, has accepted Dadabhali's figure, revising it by just 15 per cent as Rs 23.4 for 1867-68. For 1948-49, Mukherjee (1969)\textsuperscript{28}, using his price index series, inflated the Dadabhali's estimate as Rs 142 at 1948-49 prices.

In his study, "Economic History of India in the Victorian age", Dutt (1950)\textsuperscript{29} emphasized that the inequity of land tenure system and the heavy taxation on backward agriculture during British rule have contributed to the reinforcement of poverty in India in general and rural poverty in particular.

A Study Group\textsuperscript{30} of the Government of India (1962) recommended the nationally desirable minimum level of


\textsuperscript{30} Study Group, *Op cit*
consumer expenditure of Rs 20 per capita per month at 1960-61 prices. Subsequently, the recommended figure was criticised on the ground that it was an underestimation as it excludes the expenditure on health and education assuming that they are provided free of cost by the state according to constitution. Further, there was no distinction between rural and urban areas.

Chatterjee and Others (1963)\(^{31}\) in their paper "A Preliminary Study on the Dietary Levels of Households in Rural India" found that about 53 per cent of the rural population fall below the norm of 2400 calories per capita per day. He uses NSS consumption data which does not take into account the non-food expenditure. Thus they have underestimated the extent of rural poverty in India.

In his study, "Size and Areal Distribution of Level of living in India" Mukherjee (1969)\(^{32}\), with a different methodology, and considering the country's population as a whole (without any bifurcation of rural and urban) has arrived at the conclusion that in terms of the density of the poor Orissa, Kerala, Bihar, Mysore and Andhra


Pradesh are poorest states in 1963-64. But he did not consider the price variation, type, nature and intensity of activities, cropping pattern and climatic factors in different regions of the country. Moreover he used uniform measure for all the regions to measure poverty.

Minhas (1970) slightly modified the Study Group's figure as Rs 200 per capita per annum relating to rural areas on the ground that urban cost of living tends to be somewhat higher at 1960-61 prices. Using the norm, he found that between 1955-56 and 1967-68, the rural poor declined by 19 million though the number of poor tend to rise in bad harvest years. Minhas was also subject to criticism on the ground that he committed the same mistake as the Study Group by not taking into consideration the expenditure on clothing, fuel, light, health, education, etc.

Ojha (1970), adopting a different methodology, estimated the poor both in rural and urban areas for two different years. Using calorie norm of 2250 per capita.


per day for an average Indian he worked out the minimum required food consumption as 518 grams for rural areas and 432 grams for urban areas. According to his estimates 51.8 per cent of rural population and 7.6 per cent of urban people fell below poverty line. For the year 1967-68 he concluded that 70 per cent of the rural population were below the minimum level of food grains consumption. Ojha has also excluded the expenditure on health, education and housing.

Bardhan (1970)\(^{35}\) used minimum level of income (1 e Rs 15 per capita for rural and Rs.21 for capita for urban areas) as norm and examined the trend of rural poverty over the years 1960-61 to 1968-69. Bardhan estimated that of the total population 38 per cent in rural areas and 44 per cent in urban areas during the year 1960-61 at the same year prices fell below poverty line. During 1968-69 at 1960-61 prices Bardhan estimated that 54 per cent of the rural population and 41 per cent of the urban population fell below poverty line. Bardhan found that the rural poor have increased at a staggering rate (1 e. by 95 million) between 1960-61 and 1968-69.

Dandekar and Rath (1971)\textsuperscript{36}, assuming a daily average energy requirement of 2250 calories for each person, which is equivalent to a little over 2800 calories per adult per day, estimated the level of consumer expenditure at Rs 15 per capita per month in rural areas and Rs 22.5 per capita per month in urban areas at 1960-61 prices. Accordingly, they found that in 1960-61 about 33.12 percent of the rural population and 48.64 percent of the urban population would have been living below the level of poverty. The methodology followed in estimating the minimum calorie requirement and expenditure levels was questioned by many economists.

Vyas (1972)\textsuperscript{37} observed that there was a negative association between the combined impact of major institutional changes and agricultural growth and the incidence of rural poverty during 1950's. The proportion of rural poor fell from 45 per cent in 1954-55 to 38 per cent in 1960-61, though there was no agricultural growth and no sectoral changes.


Vidyanathan (1974)\textsuperscript{38} in his paper "Some Aspects of Inequality in Living Standards in Rural India", by using Rs 21 44 as average per capita consumption per month at 1960-61 prices, found that about 15 65 per cent were living in poverty. With regard to trend, based on NSS data, he observed that rural poverty has gone up from 59.5 per cent in 1960-61 to 67.9 per cent in 1967-68.

Byatty (1974)\textsuperscript{39} estimated the poverty levels for different categories at different income levels for 1968-69 by using the techniques of Sen's poverty index and head count ratio. He observed that incidence of poverty was maximum among agricultural labourers' category (89.56 per cent) followed by non-agricultural workers (78.77 per cent) and cultivators (70.28 per cent).

Planning Commission (1977-78)\textsuperscript{40} in its draft plan estimated that 48 per cent of rural population and 41 per cent of the urban population in India fall below poverty line.


\textsuperscript{39} Bhatt, I.Z., "Inequality and Poverty in Rural India", in Poverty and Income distribution in India, edited by T.N.Srinivasan and P.K.Bardhan, Statistical Publishing Society, Calcutta, 1974, Pp 291-336.

\textsuperscript{40} Government of India, Draft Five Year Plan (1978-83), New Delhi Planning Commission, 1978, P 3.
In a meticulous study, Ahluwalia (1978)\textsuperscript{41}, using the norm of the per capita consumer expenditure of Rs.15 per month at 1960-61 prices for both country as a whole and for different states examined the trends in the incidence of rural poverty for about two decades from 1956-57 to 1973-74. He adopted Sen's poverty index as well as traditional head count ratio and concluded that the time trend is insignificant but the series shows that the incidence of poverty fluctuates in response to variations in real agricultural output per head. He found that there is an inverse relationship between rural poverty and agricultural performance for the country as a whole. The same trend was also noticed in several individual states. There was also evidence that there are processes at work which tend to increase the incidence of poverty independently of variations in agricultural output per head.

More recently, Tendulkar and Sundaram (1985)\textsuperscript{42} in their study "Growth Trickle Down Effects and Poverty" have concluded that the percentage of population below poverty line has fluctuated without any trend towards increase or decrease both for the rural and the urban


\textsuperscript{42} Tendulkar Suresh and K. Sundaram (1985) \textit{Op. cit}
population. The absolute population of the poor has, however, been rising at an annual average rate of 3.5 million in case of rural areas and 1.45 million in respect of urban areas. Further, they found that there was no relation between growth rate and poverty.

Besides the above said international and national studies, there are also some regional studies on this issue. An examination of these studies enables us to have an insight into the problem of poverty in general and rural poverty in particular. A brief review of some regional studies is undertaken in the following lines.

Panikar (1972) in his study of Kerala did not give any figure with regard to poverty in Kerala. He examined the reliability of minimum consumer expenditure norm of Dandekar and Rath under Kerala's conditions. His basic conclusions are that by ignoring regional factors, they reached wrong conclusions about the cost of nutritionally adequate diet in Kerala. By using national minimum norm Dandekar and Rath have overestimated the number of the poor in Kerala. It is found that the diet for Kerala to attain minimum norm at 1970-71 prices would cost Rs. 28.30.

per head per month and the total per capita consumption expenditure corresponding to this diet would be Rs 37.80.

Indira Rajaraman (1974)\textsuperscript{44} in her study of poverty in Punjab found that the incidence of poverty increased during the period 1960-61 to 1970-71 in the state. She measured poverty by the percentage of population below the poverty line worked out specifically for the region by using linear programming technique. In the study she used the minimum figure of consumer expenditure for defining poverty line as Rs 16.36 for 1960-61 and Rs 33.86 for 1970-71. Her important finding is that in the state of Punjab the percentage of population below the poverty line had increased from 18.4 to 23.3 during the decade. The largest increase in poverty was among agricultural labourers and in the case of cultivators the incidence showed a small decline.

In a study of Karnataka, Thimmaiah (1983)\textsuperscript{45} using primary data collected by the Institute for Social and Economic Change concluded that poverty is inversely associated with the level of development of the districts.


\textsuperscript{45} Thimmaiah, G., Inequality and Poverty: A Case Study of Karnataka, Bombay, Himalaya Publication House, 1983.
He found that rural poverty is confined to agricultural labourers, marginal and small farmers only.

Subramanian (1986)\textsuperscript{46}, in his study on "Poverty and Inequality in Tamil Nadu", using NSS data on consumption and other aspects, estimated the incidence of both urban and rural poverty. He applied the measures like traditional head count ratio, and Sen's poverty indexes, Gini Ratios and Lorenty curve techniques to study the inequality in the state. He uses the poverty line for state as the consumer expenditure level of Rs.15 per capita per month for rural areas and Rs 20 per capita per month for urban areas at 1960-61 prices. The important conclusions arrived at are that the absolute level of average real per capita consumer expenditure has been low in both rural and urban areas and these levels have shown no increasing trend over time. Inequality in the distribution of consumer expenditure is generally worse in the urban areas than in rural areas. The proportion of people below poverty line has been consistently high both in rural (47.15 per cent) and urban (49.89 per cent) areas. With regard to trend over 1961-62 to 1983 there is no clearly discernible trend in respect of the proportion of people below poverty either in rural or in urban areas both in terms of head count ratio and Sen's index.

\textsuperscript{46} Subramanian, S., \textit{Poverty and Inequality in Tamil Nadu, working paper No.74, Madras Institute of Development Studies, Madras, 1986}
In its Report (1981-82) the Bureau of Economics and Statistics found that 44.5 per cent of rural population in Andhra Pradesh fall below poverty line (Rs 6130 average monthly per capita expenditure has been used as the cut-off point. Further it is found that the highest percentage of families below this poverty line was found in Chittoor district (61.3 per cent) while this percentage was lowest (28.6 per cent) in East Godavari district.

In his presidential address at a National Seminar on "Growth, Stability and Equity with in the Agrarian Sector of Andhra Pradesh" Parthasarathy (1985) held that poverty ratios in Andhra Pradesh are sensitive to growth performance in agriculture although it is not significantly true in the case of bottom classes. Further, growth benefits much more the top cultivators' group rather than the bottom cultivators' group in the state.

Radhakrishna and Sudhakar Reddy (1986) in their paper on "Class composition, Poverty and Agricultural

49 Radhakrishna, R. and Sudhakar Reddy, S (1986) "Class Composition Poverty and Agricultural Development" Published in the volumes of Andhra Pradesh Economic Association fourth annual conference held at the centre for Economic and Social Studies, Hyderabad during 11-12, January
Development”, using Rs 50 per capita expenditure per month as poverty line, concluded that rural poverty is concentrated among the agricultural labourers in almost all the districts and cultivators and self-employed in backward districts. Although agricultural development benefits all classes, it widens disparities which suggest the search for suitable measures for equitable distribution.

Perraju Sarma (1987)\(^50\) examined the dimensions of rural poverty with reference to agricultural labourers in Andhra Pradesh. The study is based on field data collected by means of sample survey in Krishna district during 1981-82. He found that there is an association between the size of the household and the proportion of people below poverty line and also between the absence of female workers and poverty. The intergenerational decline in occupational status and access to land have been the important factors explaining poverty among agricultural labourers. But there is no association between income, poverty and generational change. Another interesting finding on assets is that the percentage of households below the asset poverty line (73) exceeds those below the income poverty line (41).

In his paper "Poverty in Andhra Pradesh" Sudhakar Reddy (1989) concluded that though there is a declining trend in the incidence of poverty in seventies and eighties the people below poverty line in the year 1986-87 were still higher (41.85 per cent) in rural Andhra Pradesh.

Need for Present Study

The foregoing review of literature indicates that most of the studies, which examined the problem of poverty, are macro in nature and do not take cognizance of the local conditions, resources and needs. In a vast country like India, conditions - agro-climatic and socio-economic - vary from region to region and the target groups differ from area to area. This suggests the need for micro-level studies for various regions of the country to identify the target groups and to estimate the magnitude of poverty. However, micro-level studies on this issue are scanty. Except the studies by Radhakrishna, Timmaiah, Paniker and Indira Rajaraman, not many studies have been carried out at regional level particularly district level. Against this background, the present study has been carried out in Cuddapah district of Andhra Pradesh, considered to be a drought-prone area subject to high degree of both absolute and relative poverty.

51 Sudhakar Reddy, S., Poverty in Andhra Pradesh, Centre for Economic and Social Studies, Hyderabad, 1989.
Objectives

The main objectives of the study are:

1. to assess the degree of absolute poverty in terms of the levels of assets, income, expenditure and debt of the sample households
2. to analyse the extent of relative poverty in terms of inequalities of the sample households;
3. to study the expenditure pattern and estimate poverty line of the sample households, and
4. to estimate the earnings capacity of the sample households

Hypotheses

Keeping in view the above objectives, the following hypotheses have been tested

1. The magnitude of absolute poverty in terms of the levels of assets, income expenditure and debt in IRDP and non-IRDP villages and also among beneficiaries and non-beneficiaries within IRDP villages is not significant

2. There is no significant difference between different categories at households in IRDP and Non-IRDP villages and also between beneficiaries and non-beneficiaries in IRDP villages in respect of assets, income, expenditure and debt.

3. The relation between the income size and expenditure pattern is not uniform for all the groups under study, and
4 The difference between the IRDP and non-IRDP villages as also between beneficiaries and non-beneficiaries in IRDP villages in respect of average earnings capacity is not significant

Source of Data

Both primary and secondary data have been used in the present study for analysis, drawing inference and arriving at conclusions. Secondary sources include the publications of Government of India, such as, Five Year Plan documents, National Sample Survey Reports, Census Reports, Statistical Abstracts etc., the publications of the Reserve Bank of India, which include the Currency and Finance Reports, the publications of the Government of Andhra Pradesh, such as, Statistical Abstracts of Andhra Pradesh, Season and Crop Reports, Data Andhra Pradesh, State Plan Reports etc, the publications of the World Bank, and the Food and Agriculture Organisation of the United Nations and periodicals like Indian Journal of Agricultural Economics, American Journal of Agricultural Economics, Economic and Political Weekly, Journal of Econometrica, Journal of Development Studies and other Economic Journals. Further data has also been drawn from the published and unpublished dissertations and studies. However, the present study is primarily based on the field data collected by the researcher by way of survey. The Schedules prepared for the study were canvased through personal
interviews during the year 1986. The sample design and tools used for data collection are outlined in the following sections.

**Sample Design**

A three stage stratified random sampling procedure has been employed for the selection of the ultimate units of the study. Cuddapah district consists of three revenue divisions. One taluk\(^2\) from each division has been selected at random at the first stage. Lists of villages in the selected taluks have been prepared. On the basis of the implementation of the IRD Programme the villages were classified into IRDP and non-IRDP villages in each sample taluk. Two villages - one IRDP\(^2\) and one non-IRDP\(^5\) - from each taluk have been selected using random sampling procedure. List of households was prepared in each selected village and the households were stratified on the basis of occupation as agricultural labourers, rural artisans and cultivators. In IRDP villages the households in each

52 Rayachoty from Cuddapah division, Rajempeta from Rajempeta division and Proddatur from Jammalamadugu division

53 The selected IRDP villages are
1. Methur from Rayachoty taluk
2. Singa Reddy palli from Rajempeta taluk
3. Maneram palli from Proddatur taluk.

54. The selected non-IRDP villages are
1. Peddiveedu from Rayachoty taluk
2. Sita Ramapuram from Rajempet taluk
3. Rameswaram from Proddatur taluk
Occupational category were grouped into beneficiary and non-beneficiary households. Ten percent of the households in each category have been selected as ultimate units of the study. The households selected in non-IRDP villages from the control segment for comparison between IRDP and non-IRDP villages with IRDP villages non-beneficiaries serve as control group to facilitate comparison between beneficiaries and non-beneficiaries and to study the impact of IRD Programme.

Tools Used for Data Collection

Listing schedule has been used to get the primary data relating to the households and occupations in the selected villages. This was used in the stratification of the households. Pilot survey has been undertaken to pretest and finalise the schedule. The schedule has been canvassed to collect information relating to distribution of land, income, debt, expenditure or various items such as food, clothing, health, education and others like power, cosmetics etc.

Tools of Analysis

Apart from simple averages and percentages, linear and compound growth rates have been computed to study the longrun trend rates of growth of yield and production of five important crops in the district and to study the
trend of poverty both in the country as a whole and the individual states.

The trend equations are as follows:

Linear growth rate

\[ Y = a + b_t \]

Where \( Y \) = Index number of variable

\( t \) = time

'\( a \)' and '\( b \)' are constants

Compound Growth Rate

\[ Y = ab^t \] (or)

\[ \log Y = \log a + t \log b \]

\( Y \) = Index number of variable

\( t \) = time

In order to test the significant of linear and compound growth rates t-test has been used. The formulae are as follows:

For testing the significance of linear growth rate

\[ t = \bar{b} \sqrt{\frac{1}{(n-2)}} \frac{(x_1 - \bar{x})^2}{(y_1 - \bar{y})^2} \]

where \( \bar{b} = \frac{\sum (x_1 - \bar{x})(y_1 - \bar{y})}{\sum (x_1 - \bar{x})^2} \)

and \( \sum (y_1 - \bar{y})^2 = \sum (y_1 - \bar{y})^2 - b^2 \sum (x_1 - \bar{x})^2 \)
For testing the significance of compound growth rates

\[ t = \frac{B}{SE(B)} \]

Where \( SE(B) = \frac{1}{(n-2)} \left( \frac{s_{YY}}{s_{XX}} - B^2 \right)^{1/2} \)

\[ s_{YY} = \log^2 Y - \left( \frac{\log Y}{n} \right)^2 \]

and \[ s_{XX} = \bar{X}^2 - \left( \frac{\bar{X}_2}{n} \right)^2 \]

For testing the difference between means of different variables of the study, 't'-test has been used with the aid of following formula

\[ \bar{X}_1 - \bar{X}_2 = \frac{S}{\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \]

Where \( \bar{X}_1, \bar{X}_2 \) = Means of 1 and 2 variables

\( S \) = combined standard deviation of the variables

\( n_1, n_2 \) = number of observations in the categories

To study the nature of relationship between the size of the income and assets/debt/expenditure and also between the farm size and operated area/net sown/net irrigated area log-linear function of the following form has been fitted

\[ \log Y = \log a + b \log X \]

Where \( Y \) and \( X \) are two variables

\( a \) and \( b \) are constants
The least squares method has been used in estimating the parameters. The 'F'-test has been carried out to test the significance.

Further, to measure the inequalities in the distribution of land area/assets/income/debt/expenditure on various items among different income groups in each category of the sample households, Gini co-efficients have been computed using the following formula, besides employing Lorenz curve technique:

\[
\frac{1}{100} (X_1 Y_2 - X_2 Y_1) + (X_2 Y_3 - X_3 Y_2) + \\
+ X_n (100 - (100) Y_n)
\]

Where \( X_1/X_2 \ldots X_n; Y_1/Y_2 \ldots Y_n \) are the cumulative percentages.

Gini co-efficients as percentages is calculated by dividing the sum of the differences by 100.

Further to measure poverty in the district various measures like head count ratio, Sens measures of poverty, estimation of poverty line, estimation of earnings capacity etc., have been used (For details see chapter one).

Scope, Limitations and Implications of the Study

The present study is confined to Cuddapah district of Andhra Pradesh and it is area-specific. As such, the
conclusions arrived at in this study may not have direct relevance to other areas of the country due to difference in agro-climatic and socio-economic conditions.

Year to year variations in output and income is common in agricultural sector in particular and rural areas in general. Apart from the vagaries of nature, the rural sector is influenced by changing price structure, which greatly affects decision making in various lines of production in the villages. The present study is subject the limitation of these variations as the data for the study has been collected for a single year.

The data for the study has been collected through personnel interview method. As the rural households do not maintain accounts, they had to recollect the information from memory. As such the data collected could only be an approximation to actual facts.

However, despite these limitations the study does indicate certain broad features of the rural poor, which may be of relevance for the country as a whole. As such the findings and the conclusions arrived at in the present study may be significant and may have practical implications in the formulation of policies for the alleviation of rural poverty in particular and poverty in general in the country.
Concepts Used

**Poverty** It is a situation wherein any person who for whatever reason was unable to provide himself and his dependents with a decent standard of living.

**Absolute Poverty** Absolute poverty is defined by income levels below which even minimum standards of nutrition, shelter and personal amenities can be maintained.

**Relative Poverty** Relative poverty is a state in which extreme inequalities in the distribution of assets, income and levels of living exist.

**Poverty line** Using the nutrition norms of 2400 calories per person per day for the rural areas and 2100 calories for the urban areas, the planning commission in its Sixth Plan (1980-85) document defined poverty line in terms of 1979-80 prices as per capita monthly expenditure of Rs 76 for rural areas and Rs 88 for urban areas. This definition has been adopted in the present study.

**Landless Labourers** Those who do not own any land and derive over 50 per cent of their income by way of rendering their labour for farm activities, are defined as landless labourers in the present study.
Rural Artisans

Rural artisans are defined as those who derive major part of their income (over 50 per cent) from their vocational skills.

Cultivators Cultivators are those who own and derive their major income from cultivation.

Income Groups For the purpose of the present study the households are stratified into six income groups. While doing this the total income of the household (both farm and non-farm income) has been taken into account. The six groups according to income size are as follows.

1 Those whose income is upto Rs 1,000
11 Those whose income is between Rs 1,000 and Rs 2,000
111 Those whose income is between Rs 2,000 and Rs 3,000
1v Those whose income is between Rs 3,000 and Rs 4,000
v Those whose income is between Rs 4,000 and Rs 5,000
vi Those whose income is over Rs 5,000

Chapter Scheme

The plan of the thesis is as follows.

First Chapter provides the background and theoretical basis for the study. It deals with the meaning of poverty, the concepts of absolute and relative poverty, estimates
of poverty, the extent, dimensions, incidence and trends of rural poverty in India, alleviation of rural poverty and anti-poverty programmes in India

In the second chapter (the present chapter), a select review of literature and the design and methodology of the study are presented. It is concerned with the problem, objectives, hypothesis, source of data, sample design, tools for data collection, tools of analysis, definition of concepts used in the study, scope and limitation of the study.

Chapter III deals with the rural economy of Cuddapah district. In this chapter, the location and population of the district, occupational distribution, literacy, basic amenities in the district, cropping pattern, yield, total output, distribution of holdings and irrigated area, consumption expenditure and poverty levels and rural development programmes in Cuddapah district have been analysed.

Chapters IV, V and VI, which form the core of the study, are based on primary data collected through field investigation in selected IRDP and non-IRDP villages. The fourth chapter deals with the profile of the sample villages, distribution of earners and dependents, basic amenities, literacy, housing, clothing, pattern of land
use and irrigation, distribution of assets, income, and debt among sample households

Chapter V examines the expenditure pattern of different categories of sample households. It analyses the total consumer expenditure, the expenditure on food, clothing, health, children education and other items, which include the expenditure on cosmetics, cultivation and power and finally the estimation of poverty using different measures.

In Chapter VI the earnings capacity of the sample households has been analysed. It studies the concepts of earnings capacity, its superiority over earnings, utilisation of earnings capacity, earnings capacity and inequality.

The final chapter presents summary of findings and conclusions.