CHAPTER I

POVERTY: CONCEPTS AND MEASUREMENT

1.1 INTRODUCTION

Economics is, in essence, the study of poverty, for economic history is largely the history of Poverty, that is, the study of the scarcity problem over time. It details the history of mankind's attempt to increase the available resources—through economic growth—and the history of the effects of the distribution and consumption of those resources between the members of society—economic welfare. Thus, Poverty as old as history is a global phenomenon affecting the world's developing as well as developed countries.

The economic setup and "ISMS" existing in a country seem to be inadequate in solving the problem of poverty. In the United States of America—the world's richest nation—a fifth of the population was living in conditions of poverty. Similarly, in Soviet Russia—the world's Communist giant—some two fifths of the non-peasant labour force earned less than the sum needed to achieve a minimum level of subsistence proposed by Soviet Scholars for small urban families in the late Seventies. The incidence of poverty among larger families (peasants and pensioners) was undoubtedly higher. Socialistic Poland seems to be now the country in East Europe where both the extent and the depth of poverty are the greatest.
This reappraisal of poverty as an economic and social problem even in affluent countries may appear ironic as the poverty of advanced countries is different from that of underdeveloped countries. We cannot abstain from noticing deprivation in western societies, because of even stronger deprivation elsewhere. Thus, elimination of poverty is a leading social issue in both developed and developing countries. However, it is widespread and serious in the developing world, where as many as 700 million people suffer from lack of food security because of inadequate purchasing power. In a recent paper, focused on the dimensions of Third World poverty, Ahluwalia, Carter and Chenery concluded that "almost 40 per cent of the population of the developing countries live in absolute poverty".

1.2 POVERTY AND "TRICKLE DOWN" THEORY

The prevalence of abject poverty in the underdeveloped countries was attributed to the economic underdevelopment and hence economic development was suggested as a sure remedy for the solution of the problem. The belief on aggregate growth rates to eradicate poverty was prompted by the belief that the benefits of aggregate economic growth would spread to different strata of society eventually by the "trickle down" process. The developmental experts assumed that "reduction of poverty could only be tackled after a certain level of GNP had been reached - first the cake had to
be produced and made bigger before it could be equally distributed". Once high income levels were attained, distribution would exert its levelling effect with greater ease through rapid percolation.

The development experience of a number of underdeveloped countries, for the last many decades however, was against this belief. Though growth rates did accelerate in many post-colonial countries it soon becomes apparent that they provided no guarantee of a secular rise in the material well-being of the masses. On the other hand, many countries of the Third world experienced widening inequalities among the regions and socio-economic groups and a worsening in the levels of living of the people, sometimes absolute, at the bottom of the socio-economic pyramid. Even in countries which have attained bigger and higher growth rates large number of people have failed to share the benefits of growth and only served "to absorb the political, economic and political costs of change and growth". Despite the developing countries' impressive economic growth of the past 25 years, the benefits have only reached the poor to a very limited degree. The poorest countries have grown only slowly, and within most (though not all) developing countries the growth processes underway are such that the incomes of the poor increases much more slowly than the average.

The gradual realization that economic growth has bypassed the large percentage of population in developing
countries led to the awareness that growth in average GNP is not a reliable indicator of improvements in economic well-being. This has made the development economists to question the erstwhile strategy of growth which has assumed a "trickling down" of benefits to the lower end of the people.

Hence, Mahabub-ul-haq asserted that economic theory should be stood on its head. "First, the basic problem of development should be redefined as a selective attack on the worst forms of poverty ... We were taught to take care of our GNP as this will take care of Poverty. Let us reverse this and take care of poverty as this will take care of GNP." The apparent "failure of growth-oriented strategies to reduce inequality and eradicate poverty, therefore, led to an increasing awareness that major shifts in development strategies were urgently needed. A new paradigm began to emerge. It was gradually realized that development involves much more than merely raising income per head, and that what should be aimed at is the reduction of poverty, unemployment and inequality". The explicit goals of development planning should be the absolute satisfaction of basic needs.

For a drive against mass poverty, it is essential that Governments of the developing countries should start with a clear idea of what, in their own social context, they would regard, as the components of a minimum level of living consistent with human dignity. They should identify those sections of the population whose consumption standards do not
meet this minimum. This realization has made many underdeveloped countries launch special poverty eradication programmes for the material upliftment of the poor.\textsuperscript{17}

1.3 INDIAN EXPERIENCE

Poverty in India, as the economic history of pre-British rule shows, is not a modern phenomenon brought about in some mysterious way by British rule.\textsuperscript{18} Ample evidence of its abject incidence among the masses is found in the literary and descriptive accounts of the pre-colonial and colonial times.\textsuperscript{19} However, Naoroji\textsuperscript{20}, Dutt\textsuperscript{21} and Marx\textsuperscript{22} attribute Indian poverty largely to the British rule and the Government drain of wealth and capital from the country.

Although poverty was there in India even before the arrival of the British, the problem was intensified and was made a permanent feature of Indian society by them. During their reign all the developmental programmes and policies were oriented towards facilitating the drain of resources of the country. This has resulted in still greater poverty to the Indian masses. According to an estimate\textsuperscript{23}, as high a proportion as 82 per cent of the people in India lived in abject poverty around the beginning of the later half of 19th Century. However, at the time of independence, the percentage of poverty stood at 59.\textsuperscript{24} Thus, independent India inherited not only an underdeveloped economy - characterized by low levels of economic activities and income in general, but also
structural malaise - a sizeable section of population in abject poverty.  

After independence, the major thrust of Planning in India has always been the betterment of the level of living of the poorer sections of the society and all the Five Years Plans have set specific objectives towards this end. Thus, it would be worthwhile to examine, in this context, the attempts of our Five Year Plans to eradicate Poverty in India.

1.4 POVERTY AND FIVE YEAR PLANS IN INDIA

The major strategy of poverty eradication in the initial stages of Planning in India was the attainment of rapid economic growth - which through the 'trickle-down' effect, will help the poor to come out of their poverty in proportion to the development (increase in G.N.P and Per capita Income). The central purpose of Planning was identified as that of initiating "process of development which will raise living standards and open out to the people new opportunities for a richer and more varied life". However, there has been some difference in the manner in which this purpose has been transmitted into specific objectives from one Plan to another.

The twin objectives of the First Five Year Plan were the initiation of a process of all-round balanced development which would ensure a rising national income and a steady improvement in living standards of the people. The First Five
Year Plan has enabled a 10.5 per cent increase in Per capita Income and the Per capita levels of consumption by 8 per cent. However, the Plan did not speak anything about its achievement about the reduction in poverty as it believed in the so called 'trickle down' theory. Planning as an instrument to fulfill poverty eradication is seen in the Second Five Year Plan document. The basic objectives of their plan (1955-56 to 1960-61) have been summed up in the phrase, "Socialist Pattern of Society". Accordingly, the major decisions regarding production, distribution, consumption and investment - and in fact all significant socio-economic benefits of economic development must accrue more and more to the relatively less privileged classes of society, and there should be a progressive reduction of the concentration of incomes, wealth and economic power. However, these objectives have not been achieved, and that in fact we seem to be going in the reverse direction as far as poverty and unemployment are concerned.

The Third Five Year Plan was also along the socialist lines to secure rapid economic growth. The basic objective of this development programme was to provide the masses of the Indian people the opportunity to lead a good life by combating the course of poverty, and it is recognised that this can only be done through socio-economic advance, and a social order which offers equal opportunities to all citizens. The first condition for securing equality of
opportunity and achieving a national minimum is assurance of
gainful employment for every one who seeks work. However,
"in spite of a number of references in the Plans to the
employment problem, the creation of employment opportunities
was seen more or less as an adjunct to or a by-product of the
development strategy outlined above". Hence, it is apparent
that the income of the poorest segments - as a result of
spontaneous economic development was expected to increase in
more or less the same proportion as total income in India as
in any other country.

As against the expectation of the Planners, the
Third Plan also failed miserably on the employment front.
Further, the inequalities in income and wealth instead of
declining had actually increased as the gains of development
were mainly cornered by the richer sections of the society.
Altogether, the efforts in the Third Plan were not able to
mitigate widespread poverty and inequality of incomes arising
out of the growth process.

The Fourth Plan also emphasised its inevitable
commitment to the poor. It also conceived a rapid increase in
the standard of living of the people and emphasis is placed on
the common man, the weaker sections and the less privileged.
With these pronouncements, however, it seems that Planners
were afraid of bringing a reduction in the inequality in
income and wealth by strong redistributive measures as they
believe it will affect the economic growth in the future.
This is clear from the Fourth Plan expression that in a poor country like India no significant results can be achieved through redistributive policies since whatever surpluses can be mobilised from the higher incomes of the richer classes are needed for investment in future. The poor and the weak, therefore, have to be helped through faster growth of the economy and other specific policy measures. However, some specific programmes and policies for the weaker sections have been adopted in the Fourth Plan as if the planners realised that the 'trickle down' has not worked as expected in India. These programmes were specially meant for the poor in rural areas as the vast majority of the rural people are living below the poverty line and the urban poverty being an overflow of rural poverty.

The Fifth Plan also eloquently proclaimed the historic inevitability of its anti-poverty thrust. It has stressed the need for a direct approach to reduce poverty as the basis of a programme whose centre-piece is "Garibi Hatao". The approach to the Fifth Plan presents some calculations which show that if the average level of living of the poorest 30 per cent of the population has to be brought near the poverty line at the end of the Fifth Plan period, the average per capita household consumption of the richest 30 per cent has to be levelled down considerably. However, the nature of this "Garibi Hatao" did not say how the income of the poor would be increased to give them a higher consumption, and did not show how the consumption of the rich would be
curbed when their income and wealth were planned to be increased". At last, the final version of the Fifth Five Year Plan solved all these riddles by conveniently dropping the centrality of poverty and returning to the more conventional planning categories - long-term investment, sectoral growth rates, self-reliance, and the like.

The Planning Commission, in its Draft Sixth Plan (1978-83), after reviewing the previous approach to rural development, specially with reference to the poor, visualized an integrated plan of development at the block level, within which a special beneficiary-oriented plan for the poor was contemplated. Consequently, the Integrated Rural Development Programme (IRDP) - a component of 20 point programme was launched in 1978-79 for the removal of poverty. The emphasis was on provision of assets to the poor - wells and pumps to the small and marginal farmers and milch-cattle to the landless labourers. The new Sixth Five Year Plan (1980-85) also gave top priority to poverty reduction through fuller employment of human resources.

The Seventh Five Year Plan (1985-90) also has given utmost importance to employment generation and poverty alleviation. For achieving this goal, the plan stressed the need of larger investment in programmes aimed at giving self-employment and wage employment to the poorer sections of the community. The core of anti-poverty programmes lies in the endowment of income generating assets on those who have little
or none of these. It was also aimed to widen programmes like IRDP and NREP (National Rural Employment Programme) and their focus sharpened for taking the benefits to the largest sections of the poor population. 

The above review shows that in spite of nearly four decades of assiduous planning in India (all plans aimed to eradicate poverty), there are 273 million poor people in the country in 1985, according to the Planning Commission's own estimate. Thus even with 3.9 per cent increase in the National Income in the Five Year Plans, it could not make a significant reduction in the number of people below poverty line.

Hence, "Growth-in the abstract is not socially neutral. A commodity specific growth is a minimum condition for the eradication of poverty. The solution to poverty has to be specific - Person specific and location specific. And ultimately, there must be radical changes in the conception, thought and attitude of the society and people (Rich and Poor) to eliminate the problem of poverty. Above all, it largely depends upon the concept of poverty used in a society.

1.5 THE CONCEPT OF POVERTY

Defining poverty in precise terms is difficult. It is a vague and value-loaded term, which means different things in different cultures, and at different levels of economic development. It is a social phenomenon, it is an economic
phenomenon, and above all it is religion specific, caste specific, region specific, occupation specific and time specific. Thus, conceptually, the notion of poverty is a complex phenomenon in its content and scope. It is both widespread and intensive, and intrinsically related to socio-cultural and socio-economic factors which indicate the contemporary ideologies and policies followed by a society.

Hence, different concepts of poverty are there in the literature which implies different approaches to measure it. Here, some of the important concepts are reviewed briefly.

1.5.1 The Culture of Poverty

Sociologists and Anthropologists are the proponents of this culture of poverty concept. To Lewis, it is a way of life that develops among some of the poor in a society characterised by (i) cash economy, wage labour and production for profit, (ii) persistently high rate of unemployment and underemployment for skilled labour, (iii) low wages and (iv) the failure to provide social, political and economic organisations for the poor by the voluntary organisations or the government. He describes this culture in seventy inter-related socio-economic and psychological traits which he admits may vary with variations in the family, society and other situations. However, according to Lewis himself, the 'culture of poverty' thesis has no relevance to the Indian scene as some of the key traits of the 'culture', are not found in India.
1.5.2 Economic Concepts of Poverty

Economists consider poverty mainly as an economic problem, without neglecting its other dimensions like socio-political aspects. However, their major thrust is economic aspects. In economics, there are various concepts of poverty, but broadly two, Absolute poverty and Relative poverty.

1.5.2.1 Absolute Poverty

The concept of absolute poverty is based on absolute needs of the people and people are defined as poor when some absolute needs are not sufficiently satisfied. It is also defined in terms of an insufficiency of basic needs. However, in basic needs, although there is a greater measure of agreement on the food component of the needs and their sufficiency in terms of nutritional standards, there is a greater measure of disagreement about the non-food component. In spite of this, the usual procedure followed is the estimation of the cost of minimum food as the basis for the poverty line which can be in terms of income, expenditure or calorie-intake. Thus, in absolute poverty, the needs of the poor are not related to the consumption pattern of other people in society and a completely absolute poverty line has an elasticity of '0' with respect to changes in the general standard of living in society.
1.5.2.1.1 Measurement of Poverty on the Basis of Absolute Criteria

Biological Approach

When poverty is perceived as an absolute phenomenon, it is implicit that it must be on the basis of biological necessities or subsistence for human existence. Hence, in this "Biological Approach", a definitional bundle of economic goods and services mainly consisting of minimum calorie-intake essential to human existence is taken into account.

Measurement of poverty by biological approach seems to be in accordance with a common sense notion of poverty and appears to be capable of value-free determination. Further, although, the absolute needs of a family is not a static concept, specifying a norm for levels of living, especially in a poor country like India, where absolute minimum is still the major concern is an easy procedure. Again if, the biological definition is abandoned, no absolute measurement of poverty is possible.

However, the basic issue involved in the measurement of poverty in biological approach is determining the poverty line. Among the various factors used to determine the poverty line, the most important ones are as follows -

a. Income Level Approach

The minimum income necessary to meet the minimum needs of life is the core of this approach. According to this approach the minimum income necessary for meeting the basic
needs are arrived and those whose income are below this level are considered below poverty line. However, it is very difficult to assess one's income accurately. Further, even with the minimum income, if it is not spent, one will be living below poverty line as his minimum needs remain unfulfilled. In spite of all these problems, it is an approximate measure of one's standard of living and hence poverty.

b. **Consumer Expenditure Approach**

The problems in defining poverty in terms of income have made consumer expenditure to accept as a proxy for income to define poverty line. Here the minimum expenditure necessary for meeting the minimum needs are arrived and those people or households who doesn't have this minimum expenditure are considered below poverty line. According to the consumer expenditure approach, poverty is also measured by the proportion of expenditure spent on certain essential items of consumption such as food.62

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**c. Energy Requirement Approach**

Energy requirement is explained through calorie-intake, balanced diet and food consumption level.

1) **Calorie-Intake**

Several norms for the Dietary Energy Requirements (DER) have been suggested both at the international level (as represented by FAO/WHO) as well as at the national level (Indian Council of Medical Research ICMR)63, and also by
individual researchers and this has led to many controversy. Sukhatme recommended a minimum of 1,900 calorie per capita per day for an Indian, while Dandekar recommended an average daily requirement of 2,250 calorie per capita. The Planning Commission's task force recommended an average of 2,400 and 2,100 calorie per capita per day for rural and urban areas respectively. Here, the procedure is to convert all the food items into calories to arrive at the calorie-intake.

(11) Balanced Diet Approach

Poverty can also be measured by physical norms. In India, various recommendations of balanced diet is made by Nutrition Advisory Committee. Sukhatme also had worked out such balanced diet, two food baskets corresponding to a minimum and medium concept. Here various items are included in the food basket according to the lowest cost principle and higher calorie content. Sukhatme's minimum food basket per day per person consists of 0.403 kg cereals, 0.104 kg. pulses, 0.201 kg milk, and 0.137 kg fruits and vegetables. Besides these, he included certain quantities of fruit, sugar, oil and fats, meat, fish and eggs. However, there are many practical difficulties in this balanced-diet approach. The most important is that of taste dimension as the taste widely differs from household to household. The balanced diet with least cost combination recommended by Panikar, Rajaraman and Sastry are important contributions in this line but on account of their omission of taste dimension it cannot be recommended to the households.
d. Basic Services Approach

In this basic services approach, besides the minimum of food, other basic services have to be included. Sukhatme\textsuperscript{73} for example suggested (i) protected supply of drinking water, (ii) housing, (iii) clothing, (iv) fuel, (v) latrines, (vi) sanitation, (vii) opportunities for education (viii) Avenues for employment etc., in addition to food.

The absolute poverty line based on biological approach has come under intense fire recently. For example, there are infinite number of ways in which a person can consume the requisite number of calories. Further, calorie is only one of the two important characteristics of food, the other characteristic being 'tastes' and with rising levels of income, even among the poor, food tastes or preferences will be substituted for calories.\textsuperscript{74} In addition, significant variations in physical features, climatic conditions and work habits\textsuperscript{75} between regions makes different calorie requirements for different regions in a country. Even for a specific group in a specific region, defining of nutritional requirements precisely are in fact difficult. Many studies used 'average requirement' as 'minimum requirement' for estimating the incidence of poverty and hence the dimensions of malnutrition and poverty are exaggerated.\textsuperscript{76}

Even if the minimum requirements of food is arrived, it is very difficult to arrive the minimum non-food requirements in a scientific way. This problem is solved
usually by arbitrarily assuming that a specified proportion of total income will be spent on food. With this assumption, the minimum food costs can be used to derive minimum income requirements. However, the proportion spent on food varies not merely with habits and culture, but also with relative prices and availability of goods and services. But most often the assumptions made turns out to be contradictory in the actual experience.\textsuperscript{77} Thus, almost every procedure in the subsistence-level definition of poverty can be reasonably challenged.\textsuperscript{78}

1.5.2.2 Relative Poverty

To avoid some of the problems encountered in fixing absolute standards, the concepts of relative poverty has been brought by some researchers. A relative poverty line is in some way related to the general standard of living in society, a completely relative poverty line will increase or decrease with the same percentage as the decrease or increase in the standard of living. A completely relative poverty line has an elasticity of '1' with respect to changes in the general standard of living in society.\textsuperscript{79} According to Townsend, one of the proponents of relative poverty, "Poverty must be regarded as a general form of relative deprivation which is the effect of the mal-distribution of resources and that section of the population whose resources are depressed from the mean as to be deprived of enjoying the benefits and participating in the activities which are customary in that
society can be said to be in poverty. Thus, according to the relative concept of poverty, "people are 'poor' because they are deprived of the opportunities, comforts, and self respect regarded as normal in the community to which they belong, it is therefore, the continually moving average standards of that community that are the starting points for an assessment of its poverty and the poor are those who fall sufficiently far below these average standards". 

1.5.2.2.1 Measurement of Poverty on the Basis of Relative Criteria

In relative concept of poverty, poverty line used for identifying the poor are drawn with respect to the contemporary standards in the community in question. Most of the studies using relative poverty concept follow Fuch's and define a 'poor' person or family as one whose income is less than the average income of the community. Thus by his definition those with incomes less than half of the national median are poor.

The relative poverty line is in a way similar to inequality approach to the problem of poverty. Arguments in favour of viewing poverty as inequality are presented powerfully by Miller and Roby. But one can argue that inequality is fundamentally a different issue from poverty, although inequality and poverty are not unrelated. A transfer of income from a person in the top income group to one in the middle income range must ceteris paribus reduce inequality,
but it may leave the proportion of poverty quite unaffected. Similarly, a general decline in income that keeps the chosen measure of inequality unchanged may, in fact, lead to a sharp increase in starvation, malnutrition and obvious hardship, it will then be fantastic to claim that poverty is unchanged. 84

Further, according to this relative concepts of poverty, in any society there will always be people with less than the average income of the people and hence poverty will persist as long as inequality does. Again even in a poor country, poverty can be eliminated by transferring resources from the rich to the poor and by simply achieving equality of incomes.

The relative concept of poverty is more suitable to measure the extent of poverty in developed countries where the basic physical needs have been met. It is meaningless to speak about relative poverty till the basic needs of all are met. Hence, in India, very little effort has been made to measure the extent of poverty on the basis of relative criteria. In India, the concept of absolute poverty is the best to measure the extent of poverty as we are far away from providing the basic minimum of life to all those who do not have it even now. Hence, the aim of poverty studies is to uplift those who suffer from absolute poverty (by providing food) and consequent removal of under-nourishment and provision of essential minimum needs (such as clothing, housing, education and health).
1.6 POVERTY INDICES

Once there is an agreement about the poverty line to be used, one can proceed to measure the extent of poverty in a certain population by a poverty index. There are various poverty index for this purpose and the important ones are briefly reviewed here.

1.6.1 Head-Count Ratio

The most widely used poverty index in measurement exercise is that of the head count ratio, i.e., counting the number of people below the poverty line. This head count ratio is simply the ratio of the number of units with income or expenditure less than or equal to a defined level of income or expenditure, i.e., the poverty level. This can be written.

\[ H = \frac{q}{n} \]

Where 'q' is the number of poor and 'n' the total population. This head-count ratio is completely insensitive to the extent of the aggregate shortfall in income (from the poverty line) as well as to the distribution of income amongst the poor.

1.6.2 Poverty Gap or Income Gap Ratio

Another measure that has had a fair amount of currency is the so-called "poverty gap", which is the
aggregate shortfall of income of all the poor from the specified poverty line and is given by

\[ G(Y) = (z - y_i) \]

Where 'Z' is the poverty line and \( y_i \) is the income or expenditure of the \( i^{th} \) unit and \( Y_1, Y_2, Y_3, \ldots, Y_n \).

This index can be normalized by being expressed as the percentage shortfall of the average income of the poor from the poverty line. This measure denoted 'I' will be called the "Income Gap Ratio". With the poverty line income \( \overline{Y} \) and income of person 'i' being \( Y_i \), the income gap of person 'i' is.

\[ g_i = \overline{Y} - Y_i \]

And the Income-Gap ratio 'I' is given by the following when \( s(\overline{Y}) \) stands for the set of people with income not higher than \( \overline{Y} \)

\[ I = \frac{\sum g_i}{\sum s(\overline{Y})} \]

However, the Income Gap Ratio 'I' is completely insensitive to transfers of income among the poor so long as nobody crosses the poverty line by such transfers. No attention is paid to the number or proportion of poor people below the poverty line as it concentrates only on the aggregate shortfall, no matter how it is distributed and among how many.
1.6.3 Sen's Poverty Index

Sen\textsuperscript{91} distinguishes three elements that ought to be included in a poverty index, the (relative) number of poor, indicating the incidence of poverty, the average income shortfall of the poor, indicating the average deprivation of the poor, and the distribution of income amongst the poor, indicating the relative deprivation of the poor. He has introduced a poverty index by combining the two familiar poverty indices viz., Head-Count Ratio and Income Gap Ratio with income inequality amongst the poor. His index is defined as the weighted average of the individual income shortfalls, where the weights depend on the rank order of the individual in the welfare ordering of the poor. The general form of the poverty index is.\textsuperscript{92}

$$\frac{2}{(q+1)n} \sum_{i=1}^{q} \frac{(y_{i} - y)}{(q+1)} \frac{(q+1-i)}{n}$$

Where

$Y$ = the income or expenditure of the $i$th unit arranged in an ascending order of magnitude,

$q$ = the number of units below poverty line.

$z$ = the minimum acceptable level of income or expenditure or the poverty line.

$n$ = population size.

Sen has modified his poverty measure in the light of his axiomatic frame-work.\textsuperscript{93}

When the number of poor ($q$) is sufficiently large, Sen's index reduces to his widely used Poverty Index.\textsuperscript{94}
\[ P_s = H \left[ 1 + G \left( 1 - I \right) G \right] \]

Where \( I = \sum_{i=1}^{q} \frac{(z - y_i)}{qz} \).

and G is the Gini-Coefficient of the income distribution of the poor.

There are several variants\(^ {95}\) of Sen's index on an axiomatic framework developed by Takayama, Kakwani, Blackorby and Donaldson, Clerk, Hemming and Ulph (CHU), Thon, Foster, Greer and Thorbeke, and Kundu and Smith. The present study has not ventured an indepth review of these indices owing to its limited applicability in the study under consideration.

1.7 NEED FOR THE STUDY

Poverty has been a problem affecting the Indian society for the last many decades and is a serious challenge to the intellectuals, politicians, planners and policy makers. A sizeable reduction in the magnitude of poverty has been one of the major objectives of planning in India. Though, the country has made remarkable progress in the growth of Per capita Income and G.D.P. the extent of poverty has been generally on the increase.\(^ {96}\)

In view of the crucial importance of the problem of poverty umpteen studies have been carried out in India since the Seventies. These studies have in general been concerned with examining various dimensions of poverty, the major focus...
being on measuring the extent and incidence of poverty\textsuperscript{97}, from a national angle, conveniently ignoring the wide inter-regional differences, which are conspicuous in a large country like India. The criticisms against their use of the National Poverty Line and the National Sample Survey consumption expenditure data are well documented and need not be repeated.\textsuperscript{98}

From a policy point of view, what matters more than a mere understanding of the incidence of poverty is the identification of the determinants of poverty at regional levels. The neglect of poverty determinants by academicians seem to have resulted in misfiring of anti-poverty measures implemented in the country. Accordingly a few attempts\textsuperscript{99} in the direction of identifying the real variables affecting poverty have been carried out.

Even these studies appear to have ignored several vital factors affecting poverty such as caste, influence of education, health, fuel, shelter, clothing, liquor, calorie-intake public distribution etc. Further, in a dynamic world the determinants of poverty are likely to vary over time and across space. Hence, even a study which claims to have exhaustively accommodated all the possible determinants is likely to become out of date with the passage of time.

The determinants of poverty may also vary across the regions as the regions differ in respect of topography, climate, culture, food habits, cropping pattern and so on.
Therefore, what is important as a determinant of poverty in one region or area may not be so in another.

This points to the need for identifying all the possible determinants of poverty at a more disaggregated regional level. In particular, the analysis should be extended to cover rural and urban areas separately as there exist significant differences between them in respect of characteristics of the poor and the determinants of poverty. Thus, in studies relating to India's poverty, no systematic attempt has so far been made to examine the influence of multiple factors on poverty at regional levels. Further, in the Union Territory of Pondicherry with which the present study is concerned, no scientific enquiry either on the extent of poverty or its determinants have been carried out so far.

The Territory and the regions selected for the present study have many distinguishing features with the rest of India. The Territory being centrally administered, its inhabitants have been getting many concessions from the central government. To mention a few, the very essential items of daily consumption are provided by the government through ration shops in sufficient quantities. The tax rate in this Territory is very low compared to other states of India, which has resulted in the rapid expansion of business sector in this Territory. Further, liquor is provided at a cheap rate in this Territory. These peculiar features of this Territory will make the poverty of this Territory different
from the rest of India. Further, the selected regions of the Territory, Pondicherry and Mahe, although within the same administrative jurisdiction, have wide differences in their culture, food habit, cropping pattern, occupation and in resource endowments. These characteristics of Pondicherry region is almost similar to those of the people of the neighbouring state of Tamil Nadu while the features of Mahe are similar to those of the neighbouring State of Kerala. Hence, the present study is an attempt to fill this research gap.

1.8 OBJECTIVES OF THE STUDY

The specific objectives of the study are -

1 To identify the characteristics of the poor in the Union Territory of Pondicherry and their variation in the constituent parts of the Territory.

2 To identify the major determinants of poverty in the Union Territory of Pondicherry and their variation in its constituent administrative units, and between the rural and urban areas within the Territory.

3 To attempt plausible explanations for the inter-regional and intra-regional differences in poverty determinants.
1.9 METHODOLOGY

The study has made use of both primary and secondary sources, but mainly the former. The main secondary sources of information are (1) Census Abstracts of Pondicherry, (11) Gazetteer of Pondicherry, Abstract of Statistics, Pondicherry and other published and unpublished sources. For the collection of primary data, a detailed interview schedule was administered at the household level.

1.10 SAMPLING DESIGN

The focus of the study being inter-regional differences in poverty determinants, two administrative units, namely Pondicherry and Mahe were chosen from the four administrative regions of the Union Territory of Pondicherry. As it was difficult to cover the entire area, the stratified multi-state random sampling method is used to select the sampling unit.

The two selected regions were further classified into rural and urban areas. As per 1981 Census, the rural Pondicherry consists of six communes and urban Pondicherry consists of four towns (see Table 1.1). In the first stage, out of the six communes of rural Pondicherry and four towns of urban Pondicherry, one commune (Nettapakkam) and town (Pondicherry City) respectively were randomly selected. The selected commune consists of 27 villages with households
ranging from 13 to 757. These villages are stratified into three categories on the basis of the number of households as large (with households above 400), medium (with households between 200 and 400) and small (with households below 200). Then, from each of these three categories one village was selected at random and the selected villages are Pandasozhanur (409 households), Sooramangalam (341 households) and Nathamedu Embalam (82 households).

The selected town from urban Pondicherry consists of 36 wards with households ranging from 435 to 1,659. These 36 wards are stratified into three categories on the basis of the number of households as large (with households above 1,000), medium (with households between 500 and 1,000) and small (with households below 500). Then, from each of these three categories, one ward was selected at random and the selected wards are Solai Nagar (1,659 households), Thiruvalluvar Nagar (813 households), and Vanarapet (435 households).

In Mahe, according to 1981 census, there is only one commune and one town and these are Mahe commune and Mahe town respectively (see Table 1.2). The commune consists of three villages and these are stratified on the basis of the number of households as large - Palloor, (1,176 households), medium - Pandakkal, (734 households) and small - Chalakkara (688 households).
Table 1.1: Sample Spectrum of Households in Pondicherry Region

<table>
<thead>
<tr>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Villages in the selected commune</td>
<td>No. of wards in the selected town</td>
</tr>
<tr>
<td>No. of Name of No. of Samp- No. of Name of No. of Households selected Households sample</td>
<td></td>
</tr>
<tr>
<td>Villages in the villages selected holds house- wards the holds sample</td>
<td></td>
</tr>
<tr>
<td>selected</td>
<td>selected</td>
</tr>
<tr>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>832</td>
</tr>
</tbody>
</table>

Total Sample Households selected - 200
Proportion of Rural Urban Households - 45 55
Proportion of Rural Urban Sample Households - 90 110
Table 1.2: Sample Spectrum of Households in Mahe Region

<table>
<thead>
<tr>
<th>Rural</th>
<th></th>
<th>Urban</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Villages</td>
<td>No. of the villages selected</td>
<td>No. of Sample households in the selected villages</td>
<td>No. of wards</td>
</tr>
<tr>
<td>No. of wards selected in the selected wards</td>
<td>No. of the selected wards</td>
<td>No. of households</td>
<td></td>
</tr>
<tr>
<td>Palloor</td>
<td>3</td>
<td>3</td>
<td>1,176</td>
</tr>
<tr>
<td>Pandakkal</td>
<td>734</td>
<td>38</td>
<td>Manjakkall</td>
</tr>
<tr>
<td>Chalakkara</td>
<td>688</td>
<td>35</td>
<td>Valavil</td>
</tr>
<tr>
<td>Total</td>
<td>2,598</td>
<td>134</td>
<td>Total</td>
</tr>
</tbody>
</table>

Total Sample Households Selected - 200
Proportion of Rural Urban Households - 67 33
Proportion of Rural Urban Sample Households - 134.66
Urban Mahe consists of one town (Mahe town) which has five wards with households ranging from 223 to 333. These wards are stratified as large, medium and small on the basis of the number of households and one ward was selected at random from each of these categories. The selected wards are Mundock (333 households), Manjakkal (249 households) and Valavil (223 households).

The sample size has been limited to 400. As the major concern is to examine inter-regional differences in poverty determinants, the sample households were equally distributed between Pondicherry and Mahe regions. The two hundred households relating to each region were further distributed between rural and urban areas on the basis of the proportion of rural/urban households. The proportion of rural/urban households in Pondicherry region is 45.55 and for Mahe it is 67.33. Hence, the number of sample households for rural and urban Pondicherry are 90 and 110 respectively and for Mahe it is 134 and 66 for rural and urban areas respectively. The sample households were further distributed in proportion to the universe of the selected villages and wards. The last stage, i.e., the decided number of households from these villages and wards were selected randomly. However, wherever the selected households were seen above the defined poverty line, the next poor household was substituted.
1.11 POVERTY LINE FOR THE STUDY

The most appropriate poverty line for the study area is one which is specifically arrived for this Territory. However, nobody has, so far, arrived at such a region specific poverty line for this Territory. Hence, due to lack of any poverty line for this Territory, we have taken the poverty line arrived for the neighbouring state of Tamil Nadu, whose socio-economic characteristics are very similar to those of the Pondicherry region. Madras Institute of Development Studies has arrived that Rs.79 and Rs.113\textsuperscript{103} per capita monthly expenditure as necessary for one to be above the poverty line in rural and urban areas respectively at 1983-84 prices. But it should be noted that the prices have been rising sharply since 1983-84 and hence, the figures have to be inflated in accordance with the rise in prices. It was found that the prices have risen by about 37.5 per cent from 1983-84 to 1989-90 and hence we have inflated the above mentioned figure roughly by 37.5 per cent. Thus the figures arrived is a monthly per capita expenditure of Rs.108 and Rs.155.5 for rural and urban areas respectively. However, due to lack of any reliable information about the expenditure of households, we have taken per capita income as a proxy for per capita expenditure. Thus our poverty line is monthly per capita income of Rs.108 and Rs.155.5 in rural and urban areas respectively. In other words, the poor are defined as those receiving an annual income of less than Rs.1,305 in rural areas and Rs.1,866 in the urban areas at 1989-90 prices.
1.12 MODEL SPECIFICATION

Poverty determinants were identified with the aid of the Simple Linear Regression Model. The variables considered include economic, social, political and demographic which are all important dimensions of poverty. The dependent variables considered were the per capita calorie-intake, the difference between actual and required per capita calorie-intake, and the per capita income. The independent variables include, caste, per capita area, size of the household, nature of family, sex ratio, dependency ratio, age of the head of the household, literacy ratio, political contact, migration, average days worked in a week, per capita value of assets, per capita debt, per capita expenditure on cereals, pulses and nuts, milk and milk products, edible oil, meat, egg and fish, vegetables, fruits, sugar and salt, spices, beverages, food in the open market, ration shop items, home-grown, proportion of expenditure on liquor and addiction, fuel and light, clothing, education, health, entertainments, toilet articles, conveyance, marriage and ceremonies, in total expenditure, besides benefits from integrated rural development programme (IRDP), per capita expenditure on food items and per capita income.

1.13 PERIOD OF STUDY

The study relates to the reference period of August 1990 to January 1991.
1.14 LIMITATIONS OF THE STUDY

As the major focus of the study being determinants of poverty and our sample households being poor, we have not attempted to measure the extent of poverty as such. Further, the study being mainly a micro-level enquiry macro variables have not been considered. In fact, even all the micro-variables could not be incorporated. We have not looked into the inter-personnel variations in calorie-intake among the household members. An inter-temporal analysis could not be attempted due to the paucity of time series data at regional levels. Lastly, owing to the regional differences, it is not accurate to generalise the findings to the entire Territory, but confines to the study regions and areas alone.

1.15 PLAN OF THE STUDY

The study is presented in seven Chapters. The first, the introductory chapter, briefly discusses the concepts and measurement of poverty, followed by a brief review of the planned efforts to eradicate poverty, and touches upon the objectives and methodology of the study. A brief review of the literature on poverty is attempted in Chapter II. In the Chapter III, a brief description of the study area has been given. Chapter IV deals with the socio-economic characteristics of the poor sample households. While poverty determinants and their regional variations are examined in Chapter V, Chapter VI discusses the intra-regional differences in poverty determinants. Chapter VII summarises the major findings and conclusions.
NOTES AND REFERENCES


22. Marx, Karl, Articles on India, People Publishing House, Bombay, 1943.


24. Ibid., pp.8-9.


27. Ibid., pp.1-8.

29. "Socialist Pattern of Society means that the basic criterion for determining the levels of advance must not be private profit but social gain, and that the pattern of development and the structure of socio-economic relations should be so planned that they result not only in appreciable increases in national income and employment but also in greater equality in incomes and wealth. See Kurien, C.T., Ibid., p.89.


33. Minhas, B.S., Planning and the Poor, Sultan Chand and Company Ltd., New Delhi, 1978, p.3.


36. Ibid., 1978, p.51.


41. Ibid.

42. Rath, Nilakantha, "Garib Hatao Can IRDP Do it?", Economic and Political Weekly, Vol.XX, No.6, February 9, 1985, p.238.


44. Rath, Nilakantha, E.P.W., op.cit., 1985, p.239.

45. Bhargava, B.K., op.cit., p.124.

47. See Bhargava, B.K., op.cit., p.135.


55. The precise nature of 'basic needs' and 'sufficiency' are arbitrarily defined. For details see Hagenaars, Aldi J.M., ibid., p.1-42.

56. Here too, there is wide differences in food requirements according to climatic conditions, nature of work, age, body weight etc.

57. It is quite difficult to arrive the minimum of non-food items in a scientific way, especially for health, education, etc.

58. See, Hagenaars, op.cit., p.12.


64. The Controversy between Dandekar and Sukhatame about the minimum calorie requirement. See Sagar, Sushma (1988), *op.cit.*, pp.7-19.


68. Nutrition Advisory Committee (1965), *op.cit.*


95. For details see Hagenaars, Aldi J.M., *op.cit.*, pp.50-59.

96. The number of people below the poverty line had increased from 186 million (42 per cent) in 1960-61 to 305 million (48.3 per cent) in 1977-78 in spite of our average rate of growth of about 3.5 per cent per annum. See K.Rajan, *Poverty and Income Distribution in Mahe*, M.Phil Dissertation submitted to Pondicherry University, 1988, p.4.
97. These studies are reviewed along with the deficiencies in Chapter 2 of this Thesis.


100. See Interview Schedule in the Appendix.


104. For the Regression equations, see Chapter V of this Thesis.