Chapter - III

POVERTY

3.1 The concept of poverty

Poverty in terms of deprivation of the individual can be assessed by their non-fulfilment of certain material demands in absolute terms which may be articulated roughly through variables like per capita income, consumption etc., Rein[1] looks at poverty constituted by three components, which are subsistence, externality and inequality. It is also said that poverty is a value judgement and it lies mordin the realm of beliefs and feelings than that of material existence. According to Joshi[2] natural poverty is the product of economic change and development itself, while artificial poverty is identified with low level of development of productive forces. Rowntree[3] feels that those in primry poverty were, whose income falls below the level that was required to purchase the absolute requirements of food, clothing, shelter, warmth etc., and those in secondary poverty defined as those who have failed to acquire these essentials eventhough their income would have been sufficient to do so. Dastry's[4] positive approach considers poverty in terms of minimum expenditure as well as calorie intake. Whereas he uses the normative approach to quantify poverty underlined by fulfilment of multiple nutritive norms

subjected to cost minimisation. Another study[5] with reference to Kerala points out two broad concepts of poverty. They are, relative poverty as measured in terms of inequality in the distribution of the income and absolute poverty in terms of notion of subsistence considered appropriate to the circumstances of the country concerned. However, the discussion of poverty among economists has tended to concentrate on absolute poverty. The absolutely poor are defined to be those below the 'poverty line'. The poverty line is drawn with reference to a minimum nutritional requirement for physical subsistence. This does not mean that relative poverty and inequality are unimportant; or that they are unrelated to absolute poverty. In the bulk of academic writings it is 'poverty'line' that has occupied the centre of stage.

Conceptual and methodological difficulties arise in the adoption of a unique and wholly satisfactory indicator of the level of living. As a result, any serviceable indicator turns out to be a composite one made up of indices of several elements, and not a unique poverty determinant based on a single service, money value or commodity. The norms applied in denoting what constitutes a minimum level of living can however, be quite important as a working hypothesis from the operational point of view. In order to identify poverty, a norm of minimum level of living which includes items such as clothing and housing as well as food requirements, was used.

An Expert Committee set up by the Government of India in July 1962 put the nationally desirable minimum level of consumer expenditure at Rs.20 per capita per month at 1960-61 prices, excluding expenditure on health and education. Nutritional experts prescribed a least cost balanced diet to fulfill minimum requirement of Calories for human existence. This per-capita minimum calorie requirement is also used widely to measure the incidence of poverty in terms of undernutrition. Per capita calorific requirements vary with age, sex, level of activity and quite decisively with climatic conditions.

Morris[6] has constructed a physical quality of life index which is the simple average of life expectancy, infant mortality rate and literacy rate. This physical quality of life index is taken with reference to per capita GNP to find the correlation between per capita income and the quality of life.

Whereas the average level of current income of an individual is taken to represent his capacity to acquire the goods and services consumed by him, the income concept is difficult to measure. Food consumption itself and as a proportion of the total income, is a pertinent indicator of the levels of living. As food is major constituent of consumption, changes in the consumption of food indirectly suggest changes in the levels of living. Hence per capita consumption expenditure on food is a good indicator of the levels of living.

3.2 Dimensions of poverty

In India, several attempts have been made to estimate the extent of poverty both in rural and urban areas. For instance, Bardhan[7] estimated the number of rural poor, taking a modest figure of Rs.15 per capita per month as the minimum level of monthly expenditure at 1960-61 prices and concluded that 38 per cent of population was found to be below poverty line. He felt that the percentage of poor people in rural India increased during the period between 1960-61 and 1968-69. Bardhan stated that there was a greater incidence of poverty in rural areas. Dandekar and Rath[3] noticed greater incidence of poverty in the urban areas. The estimates of rural poor in 1967-68 ranged from 166.4 million (Dandekar and Rath) to 268 million (Ojha[9]).

V.K.R.V. Rao[10] observed that the rural poverty in magnitude and intensity increased in the period between 1960-61 to 1973-74. Based on NSS estimates of poverty line of Rs.65 per capita consumption expenditure at 1977-78 prices, it was stated[11] that 50.02 per cent of rural and 38.19 per cent of urban population were below poverty line in 1977-78. In March 1980, the Prime Minister made a statement in the Parliament that 54.09 per cent of rural population and 41.22 per cent of urban population lived below poverty line.

Ahluwalia[12] estimates that the proportion of rural poor in Tamil Nadu at different points of time between 1957-58 to 1973-74, showed a fluctuating pattern. Starting from 67.8 per-cent in 1957-58, it was found to be 51 per cent in 1961-62, 62.7 per cent in 1966-67 and 48.3 per cent in 1973-74. Kurien[13] has made independent estimates for Tamil Nadu using a poverty line of Rs.15 at 1960-61 prices and used the Rural Price Index for Tamil Nadu as deflator. His conclusions are in conformity with Ahluwalia's. Kurien feels on the whole, during the 12 year period between 1961-62 to 1973-74, the proportion of rural poor in Tamil Nadu has consistently been higher than the all India proportion. It has never been below 50 per cent except in 1973-74 when it was marginally less at 48.3 per cent.

Ahluwalia ranks Tamil Nadu as the third poorest state with a very high proportion of rural poor households in India. Ahluwalia feels that Tamil Nadu has done relatively better under Sen's Index, as it has declined from 0.34 in 1957-58 to 0.17 in 1973-74. Thus Kurien[32] feels that extreme poverty in the state may have been reduced, but some people who were just above the poverty line may have been pushed below it.

A study undertaken by the Department of Statistics, Government of Tamil Nadu[15] found that the proportion of population below poverty line for Tamil Nadu in 1977-78 was 57.48 per cent in rural areas and 45.47 per cent in urban areas.

The state's draft VI Plan estimates that 62.98 per cent of rural population were living below poverty in 1980 compared to 52.52 per cent in August 1976. Based on these estimates, it may be concluded that above 25 million people in the state come below the poverty line, whereas an estimated 290 million people come below poverty line in the whole country. This speaks that every tenth poor man in the country lives in Tamil Nadu and that Tamil Nadu is on an average worse off than almost the whole country.

Though the estimates with regard to the extent of poverty in both rural and urban areas are debatable, most of the studies show that rural poverty has been increasing. The two surveyed villages of this study are from Sivaganga taluk of Ramanathapuram district. Kurien[16] finds from the 1971 Census Data that three-fourth of workers in this district are poor.

3.3 The poverty line

The concept of absolute poverty which the poverty line seeks to quantify is an important one. Poverty line is generally defined in terms of minimum necessary level of consumption. A fundamental limitation of this approach is that any such line is necessarily arbitrary.

Recent studies on poverty in India have evolved two widely accepted norms for identification of the poverty line. One is

classification of poor on the basis of monetary value of minimum consumable items like food, cloth, fuel and light. It is a relatively more affluent norm. The other one is classification of the poor on the basis of a single important component of level of living such as food. The latter method is on the basis of nutritional standard recommended by the Indian Council of Medical Research.[17] The Council estimated various levels of nutritional requirements for population depending on age, sex and conditions of work as shown in Table 3.1.

Table 3.1

Daily Calorie allowance of nutrition for India

Category	Calorie allowance
1	2
Men :	
Sedentary worker	2400
Moderate worker	2800
Heavy worker	3900
Women :	
Sedentary worker	1900
Moderate worker	2200
Heavy worker	3000
Children :	
1 to 3 years	1200
4 to 6 years	1500
7 to 9 years	1800
10 to 12 years	2100
Adolescents :	
13 to 15 years - boys	2500
girls	2200
16 to 18 years - boys	3000
girls	2200

Source: Indian Council of Medical Research, Nutrition Expert Group, Recommended Daily Allowances of Nutrition and Balanced Diets, Hyderabad, 1968.

The minimum requirement ranges from 1900 calories per day for women engaged in sedantary work to 3900 calories in the case of men doing heavy manual work.When identifying the poverty line, however, what is normally accepted as the minimum requirement is a daily intake in the range of 2100-2400 calories with 44 gms of protein, which is thought just sufficient to satisfy the biological needs of human system. Further a simple procedure has been used for the computation of monetary value of per capita consumption with their respective prices for the period. Based on the consumption habits in India, it has been estimated by Dandekar and Rath[18] and also by Bardhan,[19] that the minimum requirement would cost 51 paise per day in 1960-61 prices or around Rs.15 per month. In course of time this figure has gained wide currency as the standard for defining poverty.

The use of least cost balanced diet as recommended by nutritional experts, can be misleading, where they are not further defined by other economic constraints such as price. The provision of minimal levels of nutrition at a low cost for those who do not already receive such nourishment, consistent of course with consumer acceptability and necessary calorific and protein requirements suggests itself as another norm by which poverty line can be drawn. However, there are practical problem in this approach. There is a vast variety of items of

food available and the cost at which they can be bought varies widely. Also there are practical problems connected with making a nutritionally adequate diet into an acceptable one.

In the present study, keeping all the above considerations in view, data on quantities of food consumed for the week preceding the survey, under groupings such as cereals, pulses, vegetables, milk and its products, sugar, condiments etc., were collected by interviewing mostly the head of the household in two rounds of survey in conformity with the procedure adopted by National Sample Survey. This however is subjected to recall and excess reporting biases. Nonetheless the reported quantities of items consumed by the household, irrespective of the fact that it is homegrown, or purchased or free good, the quantities were first converted into value terms on the basis of average retail price prevailing in the nearest market centre to the village. Further quantities of food items consumed were converted into calories by multiplying them with their calorie content as given by the Indian Council of Medical Research.[20] The calorific value of various items were representative of their groups to which they belong such as cereals, vegetables etc. and their average calorific value was considered for computation (Table 3.2). From this, the per capita per day calorie intake was worked out by dividing the total

Table 3.2

Average nutritive values per 100 gm of edible portion of representative food items

Commodity	Calories
1	2
1. Rice	347
2. Wheat	341
3. Cumbu (Bajri)	361
4. Ragi	328
5. Jowar	349
6. Maize	347
7. Kudiraivali (small millet)	307
8. Tuvar dhal	280
9. Groundnut	549
10. Milk	68
11. Ghee	825
12. Cooking oil	900
13. Sugar/Jaggery	390
14. Condiments	280
15. Vegetables	50
16. Banana	131
17. Mutton	118
18. Fish	94
19. Egg	173
20. Tea/Coffee	70

Source: Based on Nutritive value of Indian Foods, National Institute of Nutrition, Indian Council of Medical Research, Hyderabad, 1977.

calorie intake by 7 (i.e. 7 number of days in a week) and the size of the family. It may be mentioned that the age composition and structure of the household are ignored in this context. Further it should be noted that calories contained in these items are alone considered ignoring other nutritive factors like proteins, vitamins, minerals, etc. For further analysis and interpretation, the average of the two survey figures of consumption were considered to eliminate externeties arising out of seasonality.

It is important to note here that it would have been much better, from the view point of nutritional analysis, if the quantities of food consumed were recorded by weighment method. Besides its prohibitive cost, it is not free from defects either. In this study, food consumed includes food not eaten, or food thrown away as waste. It may not be possible to estimate how much food is discarded as waste or the loss incurred during storage. The age, sex and occupational differentials of the members of the household were ignored and as such per capita estimates were made rather than standardising them into consumer units. The effect of cooking and adulteration on the nutritional aspect of food were not taken note of. These are some of the limitations of our data. Incidentally, it may be mentioned that the Expert Committee of Food and Agricultural Organization on calorie requirement is of the opinion that losses during storage, in cooking,

wastage in plates, food fed to pet animals - all these are unlikely to exceed 10 per cent of the calorie at the retail level. Hence exclusion of these aspects in the calculation of calorie availability in the present study may not affect the results significantly.

Now, there could be two approaches for determining the cut-off point between the poor and the non-poor, given the data as collected from the household survey. One approach would be to follow the conventional procedure based on the monetary value of 2250 calories per day per head as estimated by Dandekar and Rath in 1960-61 prices.[2] The other method would be to estimate the calorie equivalents of food consumption directly from the village survey data and find out its monetary equivalent value in terms of local prices which are already available with the survey. Given the actuals that we have from the survey, the second procedure will be possible and more relevant. However, it would be interesting to work out the poverty line following both the procedures and to compare the results. It would throw light on the validity of the first procedure which is generally followed when quantitative details of consumption are not available.

Following the first procedure a minimum calorie intake of 2250 calories per capita per day or its equivalent consumer expenditure which will be the cost of nutritionally adequate diet of 51 paise in 1960-61 prices is taken. That is, any

one who can spend 51 paise per day or Rs.15 per person for 30 days, should be able to buy himself a diet that is nutritionally adequate in respect of calories. This line has a well established pedigree in the Indian literature on poverty and used by Ramamurthy[21] and Kurien[22] also with reference to Tamil-Nadu. Dandekar and Rath[23] adopted this line on the ground that it corresponded to the expenditure level at which food consumption (on an average) satisfied the norm of 2250 calories per day. Here, it is important to emphasise that attempts to interpret this line as guaranteeing a nutritional minimum could be misleading. Suffice to say that this indicates minimum level of living.

The next step is to define appropriate poverty line for survey periods in terms of consumer expenditure in current prices. This requires identification of a suitable price index for the rural poor. Price indices for average consumer are clearly not suitable, since the poor spend much greater proportion of their budget on items whose price displayed very high inflation rates, e.g., food and especially coarse grains. The use of national income deflator by Minhas,[24] Dandekar and Rath,[25] lead to under-estimation in the prices paid by the rural poor, remarks Bardhan.[26] In the absence of suitable price indices specially designed for the rural poor, following the example of Bardhan,[27], Ahluwalia[28] and others, the consumer price index for agricultural labourers prepared by the Labour

Bureau, Simla, was used here. The use of this index for capturing the rise in prices paid by the rural poor which include the agricultural labourers as well as the more numerous small farmers and artisans, may be objected to. Ideally, it would be better to use separate price indices for different groups comprising the poor, especially distinguishing landless labourers relying on wage income from subsistence farmers, who rely upon own consumption. It can be argued that the very approach of using a base weighted price index is flawed, since it cannot reflect the impact of changes in relative prices upon the commodity composition of consumption. Further, consumer price index for agricultural labourer is used on the assumption that the cost of living of agricultural labourers may not be much different from the cost of living of other people in the rural areas. Nevertheless owing to the absence of appropriate index number and also in conformity with past practice, we have used consumer price index for agricultural labourers. Table 3.3 shows the appropriate average index for the two survey periods as 426. This indicates that there is an increase of 4.26 times in prices between the period 1960-1952. Hence the money expenditure that will fulfill the minimum requirement of 2250 calories at the survey period prices of 1961-1962, will be 4.26 times higher than Rs.15 at 1960-61 prices and turns out to be Rs.64, which will be the cut-off point to identify the poor.

Table 3.3

Consumer price index number for agricultural labourers

(Base: July 1960 - June 1961 = 100)

Year	Month	All India		Tamil Nadu
		General Index	Food Index	General Index
1	2	3	4	5
1980	July	398	424	359
	August	398	435	365
	September	399	436	361
	October	402	441	364
	November	407	446	367
	December	408	446	385
1981	January	404	441	384
	February	414	453	415
	March	419	458	422
	April	420	460	422
	May	425	466	425*
	June	429	470	420
1981	July	439	482	430
	August	451	497	446
	September	457	505	455
	October	460	505	450
	November	460	508	455
	December	454	499	449
1982	January	451	494	434
	February	445	487	427*
	March	440	486	413
	April	440	480	408
	May	439	479	409
	June	443	485	412

Source: Indian Labour Journal, various issues of 1981-82, Labour Bureau, Simla.

* Indices for survey periods.

Following the second approach, i.e., the direct estimate of poverty based on the survey data, the following procedure is adopted. According to nutritional experts per capita minimum calorie requirements vary between 1900-2700. However, most of the researchers who have worked on poverty line have considered minimum calorie requirement in the range of 2100-2400 per day per capita. Since from the household survey data it will be difficult to find a good number of households who are exactly at the cut-off level of calorie intake, we take this range of calorie requirement i.e. 2100-2400. Out of the total of 149 surveyed households, there were 18 households falling in this range. Their coverage calorie intake was 2222 per capita per day and their average expenditure on food was Rs.64 per capita per month. This could be taken as the poverty line. The prices involved in this calculation are the local retail prices which were quoted by the households and further verified from local shopping centres. On the procedure of calculating calories of the consumed items it may be mentioned that the standard calorie tables published by the National Institute of Nutrition, Indian Council of Medical Research, Hyderabad (1977) were used. Items of consumption which were excluded as non-calorie items were: pan, tobacco, toddy. The last mentioned item i.e. toddy in fact has calorific value. However, since, it is generally used as intoxicant, the reporting in respect of this item was not always uniform and reliable. It is not

clear from the available literature as to what other scholars estimating poverty do about an item like this. However to the extent this forms the part of consumption of a group of people and it contain some calorific value, there is an underestimation of consumption. However, the consumption of toddy among the poorest of the population is not much and to that extent it may not vitiate the poverty estimate.

Thus we see that indirect estimate based on all-India norms and price indices comes to the same as our direct estimate based on actual prices paid by the consumer. The exact equivalence of the figure of Rs.64/- per capita per month might be a coincidence, but this also gives reason to belive that in general the poverty lines worked out in these two ways may not be very different from each other.

3.4 Index of poverty

Most of the studies on poverty regard the proportion of people below poverty line as the index of poverty. This rate is known as head count ratio.

More specifically,

$$H = \frac{q}{n}$$

Where H = Poverty Index

q = The number of people below poverty line

n = The total number of the people in the community.

Sen[29] feels H is obviously a very crude index. This index is highly insensitive to the extent of the aggregate shortfall of the income from the poverty line as well as the distribution of income amongst the poor. Inspite of these limitations, H is still widely used. The debate on whether or not rural poverty in India is on the increase, Dandekar and Rath[30], Ojha[31], Minhas,[32] and Bardhan[33] have used this ratio.

Another measure is the 'poverty gap' which is based on the aggregate shortfall of the income of all the poor from the poverty line. That is,

$$I = \frac{\sum_{i=1}^{q} g_i}{qz}$$

Where $g_i = z - y_i$

z = poverty line

y_i = income of the i^{th} person

q = number of poor people.

The above measure tells the proportion of their mean shortfall from the poverty level. This measure is insensitive to the number of people below poverty line.

Sen[34] was perhaps the first to propose a distributional measure of poverty within the framework of the Gini Index. He feels H and I together are not sufficiently informative, since neither gives adequate information on the exact income

distribution among the poor. Hence he suggested a measure which is sensitive to the income gaps of the poor. Sen's measure is :

$$P = H\,(I + (1-I)\,G) \qquad \ldots(1)$$

Where $H = \frac{q}{n}$, ... Head count ratio

$I = \frac{\sum_{i=1}^{q} G_i}{qs}$ ... Income gap ratio

and G is the Gini coefficient of the income distribution of the poor.

Subsequently, Sen modified his equation of poverty index as follows :

$$P = H\left[1-(1-I)\left(1-G\left(\left(\frac{q}{q+1}\right)\right)\right)\right] \qquad \ldots(2)$$

For large q, equation (1) can be used while the equation (2) can be used when q is smaller.

Since poverty is primarily an absolute phenomenon and hence in defining an index of poverty, care should be taken to minimise the scope of the subjective factors to make comparisons of index possible. It is believed in general the magnitude of poverty, its trend over time and space, in a given context would not be significantly different when different measures are used. This arises because the problem of measuring a socio-economic phenomenon like poverty happens to be generally rooted in abstract conceptual framework.

3.5 Incidence of poverty

For studying the incidence of poverty in the surveyed villages, we have mainly relied upon the head count ratio though income gap ratio and Sen's poverty indices have also been worked out. The head count ratio has been worked out following the poverty line demarcated by (a) Calorie requirement of 2250 per capita per day based on direct estimates of calories from the quantities of food items consumed, (b) consumption expenditure estimate of Rs.64 per capita per month (as discussed in section 3.3 above). The results are presented in table 3.4. The following points can be noted from table 3.4:

Table 3.4

Incidence of poverty by head count ratio in surveyed villages based on different poverty line.

Poverty Line	1. Silandegudi			2. Siriyur		
	Percentage of poor-			Percentage of poor -		
	Persons	House-holds	Labour force	Persons	House-holds	Labour force
1	2	3	4	5	6	7
a) Calories	61.05	54.54	57.64	24.17	18.06	19.35
b) Consumption expenditure on food Rs.64	63.42	55.84	59.64	33.06	22.02	25.65

Source: The household survey, 1981-82.

Note:

a) Calorie requirement of 2250 per capita per day based on direct estimates of calories from the quantities of food items consumed.

b) Consumption expenditure on food of Rs.64 per capita per month by direct estimates expenditures from the survey which will give an average of 2222 calories.

(a) The two measures do not give vastly different results in terms of percentage of poor below poverty line, particularly in the first village, which shows higher incidence of poverty.
(b) The convention-based norm of Rs.64 gives consistently higher estimates of poverty.
(c) The percentage of poor households and the percentage of poor in the labourforce are consistently lower than the percentage of poor persons. This implies that the size of the households among the poorer households is larger and the larger size of household does not contribute proportionally larger numbers to the workforce, which further implies that the proportion of dependents is higher among the poor. This itself may be a cause of poverty.

Table 3.5 presents the incidence of poverty as per the head count ratio, income gap ratio, and Sen's poverty index. Out of the two head count measures (as described in table 3.4), the one giving the higher incidence of poverty is adopted and that is the measure based on direct estimates and also satisfies conventional norms. This measure of poverty line has been retained in further discussions.

Table 3.5 shows that irrespective of the index of poverty that is adopted, the first village shows much higher incidence of poverty than the second village. However, different indices describe the poverty very differently.

Table 3.5

Incidence of poverty by different norms

Village	Head count ratio	Income gap ratio	Sen's poverty index
1	2	3	4
1. Silandegudi	0.6342	0.2572	0.2911
2. Siriyur	0.3306	0.1800	0.1053

Source: The household survey 1981-82.

In the first village, higher incidence of poverty is found in the case of artisans, agricultural labourers and marginal farmers. The small farmers, medium farmers and the residual category show lower incidence of poverty. In the second village the poverty incidence is more evenly spread. The 'other' occupation category tops the list, while all artisan households are above poverty line (Table 3.6). The incidence of poverty as presented in tables 3.4 and 3.6 indicate to another important point. The incidence of poverty by minimum calorie requirement norm and in terms of equivalent money expenditure norm do not give the same proportion of poverty incidence. This is different between the villages as well as for different economic classes also.

This kind of discrepancy was confronted in other studies also. Derivation of calories from a given basket of commodities depend upon the income levels of the consumers and price of

Table 3.6

Incidence of poverty by head count ratio for different economic classes by alternative norm

Village / Economic classes	Percentage Incidence of poverty	
	Monthly per capita consumption expenditure	Calories Intake
1	2	3
1. Silandagudi		
I. Marginal farmers	60.13	62.93
II. Small farmers	51.85	62.96
III. Medium farmers	28.57	28.57
IV. Agricultural labourers	77.30	66.03
V. Artisans	100.00	38.10*
VI Others	41.46	56.10
All	63.42	61.05
2. Sirlyur		
I. Marginal farmers	19.05	19.05
II. Small farmers	44.62	27.69
III. Medium farmers	21.70	16.04
IV. Agricultural labourers	40.74	37.04
V. Artisans	00.00	00.00*
VI. Others	49.35	32.00
All	33.05	24.17

Source: The household survey 1981-82.

Note:

In Col.2: Monthly per capita consumption expenditure on food of Rs.64 is the cut-off point.

In Col.3: The minimum calorie intake of 2250 per capita per day is the cut-off point.

* Numbers of artisan households are only 3 in the first and the second village.

items consumed. Marginal propensity to consume calories is found to be different for different income groups. Radhakrishna[35] finds that the marginal propensity to consume calories for the bottom class is 200 per day while for top class, it is as low as 37 calories per day. The variation in prices of commodities of consumption basket also affects the marginal propensity to consume calories considerably. The expenditure elasticities decline as we move from lower to higher income groups. Among price effects, a real price effect is dominant and its impact is relatively less for the top income class. Hence, even within a given commodity group, the poor will derive more calories.

Panikar[36] observes that calorie intake is a function of not only income and price, but also its availability. Output of foodgrains of the region will be positively correlated to calorie intake. But calorie intake will be negatively related to inequality in distribution of land. Amartya Sen[37] endorses this view and observes that proportion spent on food varies not merely with habits and culture, but also with relative prices and availability of goods and services.

As the commodities of consumption can be expensive and cheap sources of calories, what constitutes the consumption basket matters most, in terms of their cost and calorie content. Hence Sawant[38] feels that simple conversion of quantity into

monetary units by using price arbitrarily, tend to give different levels of incidence of poverty. This kind of mechanical conversion procedure will not take into account the impact of substitution and income effects.

Free and self-produced goods constitute sizeable portion of consumption of rural people. Computation of values for these items in money terms (at market prices) may be another source of error.

Lack of awareness about least cost diet to maximise calorie intake result in discrepancy in poverty incidence due to mis-allocation. This brings out the need for differentiation in terms of primary and secondary poverty. An individual may be judged as non-poor as his money expenditure may be above the cut-off line, but he may not be drawing the expected level of nutrition out of that spending due to frittering away of money on non-essentials and will be grouped as poor.

3.6 Intensity of poverty

Da Costa[39] classified the incidence of poverty into different intensities such as severe destitution, destitution and poverty. Based on this classification, Kurien[40] classifies those who attained the consumption level expenditure which is half of that of the poverty line as under extreme poverty. Those in the consumption expenditure range of 50 per cent to 75 per cent

of the poverty line are identified as under acute poverty. Those above 75 per cent and below poverty line are identified as being on the borderline of poverty. Similarly, Sarveswara Rao[41] classifies the poor as the poorest, very poor and marginally poor. These are some attempts to identify the intensity of poverty in terms of certain approximations. Sen[42] provided an index of poverty based on the Gini coefficient ratio of consumption inequality. It is a synthesis of the conventional head count ratio and income gap ratio. This index varies between 0 to 1, which will be indicative of the intensity of poverty. Normally, it is expected to be less than 0.5.

In the present study besides the Sen's index, the classification of poor on the basis of criteria suggested by Kurien was tried. Table 3.7 shows that 8 per cent of the population are extremely poor, 26 per cent are acutely poor and 30 per cent are on the borderline of poverty and only 36 per cent are non-poor. Whereas in the second village, the intensity of poverty is not that severe. Only 13 per cent are acutely poor and 25 per cent are on the borderline of poverty. More than 61 per cent are above poverty line. The economic class-wise break-up shows that marginal farmers and agricultural labourers are relatively more poor in both the villages.

Table 3.7

Intensity of Poverty by Head count ratio (poverty line = Rs.64)

Intensity of Poverty	Percentage of population						All
	Marginal farmers	Small farmers	Medium farmers	Agri. labourers	Artisans	Others	
1	2	3	4	5	6	7	8
1. Silendagudi							
i) Extreme poverty	4.96	14.81	-	8.70	33.33	-	8.25
ii) Acute poverty	25.53	12.96	-	35.51	38.10	15.38	25.73
iii) Borderline poverty	32.62	24.07	21.05	33.33	28.57	25.64	30.34
iv) Above poverty	36.89	48.16	78.95	22.46	-	58.98	35.68
v) All	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2. Siriyur							
i) Extreme poverty	-	-	-	-	-	-	-
ii) Acute poverty	19.05	12.50	9.52	25.93	-	9.46	13.17
iii) Borderline poverty	23.81	31.25	16.19	14.81	33.33	40.54	25.49
iv) Above poverty	57.34	56.25	74.29	59.26	66.67	50.00	61.34
v) All	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: The household survey 1991-92.

Note: Extreme poverty below Rs.32 per month. Acute poverty between Rs.32 and 48
Borderline poverty between Rs.49 and 63.
Above poverty Rs.64 and above.

The percentage distribution of total consumption expenditure on essential items like food, clothing, fuel and light and other non-food items is examined in Table 3.8.

Table 3.8

Percentage distribution of monthly per capita consumption expenditure on major items for poor and non-poor

Village / Group	Food	Clothing	Fuel & light	Other non-food items	All
1	2	3	4	5	6
1. Silendagudi					
Poor	71.67	8.20	7.79	12.34	100.00
Non-poor	77.34	5.31	6.15	11.20	100.00
All	74.90	6.56	6.86	11.69	100.00
2. Siriyur					
Poor	63.59	10.69	8.74	16.99	100.00
Non-poor	66.79	7.53	7.75	17.53	100.00
All	66.22	8.14	7.92	17.72	100.00

Source: The household survey 1981-82.

Percentage distribution of total consumption is not significantly different between the poor and the non-poor. This may be due to the fact that absolute consumption ranges are not very wide in the surveyed villages. The per capita consumption expenditure range is between Rs.29 to Rs.131 in the first village. For the second village, it is Rs.43 to Rs.142. Also the habits and living styles are more homogenous in a village community. Table 3.9 presents the consumption pattern according to economic classes, which again show a large degree of homogeneity.

Table 3.9

Percentage distribution of total monthly per capita consumption expenditure on major items of consumption for different economic classes.

Village / Economic classes	Food	Clothing	Fuel and light	Other non-Food items	All
1. Silandampudi					
i) Marginal farmers	75.83	5.53	8.92	9.72	100.00
ii) Small farmers	74.04	7.50	5.42	13.03	100.00
iii) Medium farmers	83.75	4.90	4.75	7.00	100.00
iv) Agricultural labourers	72.73	7.32	6.30	13.66	100.00
v) Artisans	76.73	8.42	5.45	9.41	100.00
vi) Others	74.99	6.38	6.65	12.05	100.00
All	74.91	6.55	6.85	11.69	100.00
2. Siriyur					
i) Marginal farmers	64.36	8.69	8.98	17.97	100.00
ii) Small farmers	68.05	6.88	7.45	17.62	100.00
iii) Medium farmers	66.86	8.25	8.25	16.64	100.00
iv) Agricultural labourers	67.65	7.09	10.32	14.93	100.00
v) Artisans	75.58	8.70	6.02	9.70	100.00
vi) Others	63.12	9.42	5.61	21.85	100.00
All	66.45	8.10	7.89	17.56	100.00

Source: The household survey 1981-82.

3.7 Determinants of poverty

The relationship of family size and its composition, to poverty is important. Large families with a high proportion of children and low proportion of workers, would have lower per capita income and consumption than those of smaller families with a low proportion of children and a high proportion of workers.

As shown in Table 3.10 the average size of household and dependency ratio in both the villages, are negatively related with the monthly per capita consumption expenditure. This is true even for different economic class groups like, marginal farmers, small farmers, medium farmers, agricultural labourers, artisans and others, as can be seen from Table 3.11.

In traditional society, in the past, there was much greater consistency between the class system and the caste structure. It can be said that in course of time the class system was largely subsumed under the caste structure. Hence in the content of the Indian villages the relationship between caste and poverty has a special significance. The families belonging to the lower level castes in the traditional caste hierarchy are families which are wholly or mainly dependent on unskilled manual labour and wages for livelihood. The supply of labour from these castes generally tends to exceed demand.

Table 3.10

Average size of household, labour force participation ratio and dependency ratio for different levels of monthly per capita consumption expenditure on food.

M.P.C.E. in Rs.	No.of house-holds	Popu-lation	No.of work-ers	Average size of house-hold	Labourforce partici-pation ratio (%)	Depen-dency ratio
1	2	3	4	5	6	7
1. Silandagudi						
Less than 32	5	34	15	6.8	44.12	3.27
33-48	17	106	52	6.2	49.06	1.04
49-64	22	125	67	5.7	53.60	0.86
65-80	16	84	42	5.3	50.00	1.00
81-96	8	33	19	4.1	57.58	0.74
97-112	4	19	13	4.8	68.42	0.46
113 & above	5	11	9	2.2	81.82	0.22
All	77	412	217	5.4	52.66	0.90
2. Siriyur						
Less than 32	-	-	-	-	-	-
33-48	6	47	21	7.8	44.68	1.24
49-64	16	91	39	5.7	42.86	1.33
65-80	14	69	33	4.9	47.83	1.09
81-96	16	70	40	4.4	57.14	0.75
97-112	7	30	19	4.3	63.33	0.58
113 & above	13	50	32	3.9	64.00	0.56
All	72	357	184	5.0	51.54	0.94

Source: The household survey 1981-82.

Note: M.P.C.E. Monthly per capita consumption expenditure on food.

Table 3.11

Family size, participation ratio and dependency ratio in the households for different economic classes for poor and non-poor groups.

Item	Marginal farmers			Small farmers			Medium farmers			Agricultural labourers		
	BPL	APL	Total	BPL	APL	Total	BPL	APL	Total	BPL	APL	Total
1	2	3	4	5	6	7	8	9	10	11	12	13
1.Silandagudi												
a.Family Size	6.85	5.20	6.10	7.00	5.20	6.00	4.00	5.00	4.80	5.63	3.80	5.10
b.Participation Rates (%)	46.07	53.85	48.94	50.00	53.85	51.85	75.00	66.67	68.42	52.34	58.06	53.62
c.Dependency ratio	1.17	0.86	1.04	1.00	0.86	0.93	0.33	0.50	0.46	0.91	0.72	0.86
2.Siriyur												
a.Family size	9.00	4.00	5.30	5.60	3.60	4.30	6.75	5.20	5.50	5.50	3.56	4.20
b.Participation Rates(%)	66.67	58.33	61.90	50.00	58.33	54.69	37.04	50.00	46.67	36.36	62.50	51.85
c.Dependency ratio	00.50	0.71	0.62	1.00	0.71	0.83	1.70	1.00	1.14	1.75	0.60	0.93

	Artisans			Others			All		
	BPL	APL	Total	BPL	APL	Total	BPL	APL	Total
	14	15	16	17	18	19	20	21	22
1. Silandagudi									
a. Family size	7.00	-	7.00	4.00	3.29	3.50	6.02	4.45	5.4
b. Participation Rates (%)	52.38	-	52.38	56.25	56.52	56.41	50.57	56.56	52.66
c. Dependency ratio	0.91	-	0.91	0.78	0.77	0.77	0.98	0.77	0.90
2. Siriyur									
a. Family size	6.00	6.00	6.00	6.17	4.63	5.30	6.27	4.38	5.00
b. Participation Rates (%)	33.33	58.33	50.00	37.85	62.16	51.54	43.48	56.62	51.54
c. Dependency ratio	2.00	0.71	1.00	1.64	0.61	0.94	1.30	0.77	0.94

Source: The household survey 1981-82.

Note: BPL: Below poverty line of Rs.64 monthly per capita consumption expenditure on food.
APL: Above poverty line of Rs.64 monthly per capita consumption expenditure on food.

The analysis of the survey data reveals that relationship between caste and poverty is not that simple and straight forward. However the incidence of poverty is relatively high among the household belonging to the middle level and lesser dominant caste groups as shown in the Table 3.12.

Table 3.12

Percentage distribution of poor and non-poor population for different caste groups.

Caste-group	Poor	Non-poor	All
1	2	3	4
1. Silandagudi			
a) Dominant	68.45	31.55	100.00
b) Secondary	15.38	84.62	100.00
c) Tertiary	81.48	18.52	100.00
d) Scheduled Caste	-	-	-
All	63.42	36.58	100.00
2. Siriyur			
a) Dominant	35.64	64.36	100.00
b) Secondary	44.44	55.56	100.00
c) Tertiary	41.37	58.62	100.00
d) Scheduled Caste	39.62	60.38	100.00
All	33.06	66.94	100.00

Source: The household survey 1981-82.

The incidence of poverty was highest among agricultural labourers, marginal farmers and artisans who belong mostly to the middle level or lesser dominant castes and whose primary occupation was mostly other than agriculture.

Educational attainments of the population is found to be negatively related with incidence of poverty. In the first village, among the poor, illiterates top the list and the corresponding percentage of population for higher educational levels decreases gradually (Table 3.13). The same was true of the second village also.

Table 3.13

Incidence of poverty by head count ratio for different levels of educational attainment groups.

Village / Educational attainment status	Incidence of poverty by MPCN
1	2
1. Silandagudi	
a) Illiterates	64.30
b) Primary level	64.29
c) Middle school level	58.46
d) Secondary Grade and above	54.54
All	63.42
2. Siriyur	
a) Illiterates	37.72
b) Primary level	29.90
c) Middle School level	2.50
d) Secondary grade & above	25.00
All	33.06

Source: The household survey 1981-82.

Note: M.P.C.E. indicates the minimum monthly per capita consumption expenditure on food i.e. Rs.64.

Table 3.14

Percentage distribution of population of different economic classes for different intervals of monthly per capita consumption expenditure (on food).

M.P.C.E. in Rs.	Percentage of population						
	Marginal farmers	Small farmers	Medium farmers	Agricultural labourers	Artisans	Others	All
1	2	3	4	5	6	6	8
1. Silamadagudi							
Less than Rs.32	4.96	14.81	-	8.70	33.33	-	8.25
33-48	25.53	12.96	-	35.51	38.10	15.38	25.75
49-64*	32.62	24.07	21.05	33.33	28.57	25.64	30.34
65-80	17.02	38.89	26.32	15.94	-	30.77	20.39
81-96	14.18	-	-	5.07	-	15.38	8.01
97-112	5.67	1.85	52.63	-	-	-	4.61
113 & above	-	7.41	-	1.50	-	12.82	2.67
All	100.00	100.00	100.00	100.00	100.00	100.00	100.0
2. Siriyur							
Less than Rs.32	-	-	-	-	-	-	-
33-48	19.05	12.50	9.52	25.93	-	9.46	13.17
49-64*	25.81	31.25	16.19	14.81	33.33	40.54	25.49
65-80	35.71	21.88	15.24	31.48	33.89	-	19.35
81-96	9.52	25.00	20.00	16.67	27.78	20.27	19.81
97-112	-	-	17.14	5.56	-	12.16	8.40
113 & above	11.90	9.38	21.90	5.56	-	17.57	14.81
All	100.00	100.00	100.00	100.0	100.00	100.00	100.0

Source: The household survey 1981-82.

Note: *Poverty line by direct estimate which is also equal to conventional norm.

The Table 3.14 indicates the distribution of population over consumption class intervals for different economic classes. The distribution is more or less similar for all the classes. The overall incidence of poverty for different economic classes, as we have seen in Table 3.14, is found to be greater in the vulnerable groups such as agricultural labourers, marginal farmers who are classified as such because of negligible or very low holdings. The size of operational holdings of land and occupation of the household thus are related to poverty.

3.8 Conclusions

Though this study is a case study of two villages, the overall pattern that emerges from the study is not much different from the national or regional trends in terms of poverty incidence and the associated issues. The following specific conclusions can be drawn from the study :

(1) The poverty line worked out by direct estimates from the survey data is Rs.64/- per capita per month expenditure on food which is not different from the conventional norm, and used at the national level as recommended by the Expert Committee of the Government of India.

(2) Poverty line drawn in terms of minimum calorie intake and its equivalent money expenditure norm differ due to

consumer preferences, price and availability of consumption items.

(3) Incidence of poverty by head count ratio, income gap ratio and Sen's poverty index give varied results. However, by all the norms, the first village is poorer than the second village. The proportion of chronically poor also is much higher in the first village than in the second village.

(4) The relative better-off condition of the second village is also reflected in the distribution of total consumption expenditure on essential items. In comparison to the first village, the population in the second village spend a larger percentage on items other than food.

(5) These differentiated incidence of poverty between the two surveyed villages is attributed to the distribution of land, its quality, irrigation potential and availability of allied inputs. The second village is relatively better endowed in these respects.

(6) In both the villages, the bigger families with lower labourforce participation ratio and higher dependency ratio face higher incidence poverty.

(7) The poverty of the lower caste groups in the social hierarchy is not that high. Even dominant communities in the village society report higher poverty incidence in both villages.

(8) Lesser number of poor are found in the households with higher educational attainments. There is also significant positive relationship between the size of landholding and literacy ratio.

(9) Primary occupation of the household and the size of the land holding influence poverty proportion significantly. The marginal farmers and agricultural labourers report higher percentage of poverty incidence.

References

1. Rein, M., Problems in the definition and measurement of poverty in P.Townsend (Ed.), The Concept of Poverty, Heinemann, London, 1971.
2. Joshi, P.C., Perspectives on poverty and social change, Economic and Political Weekly, Annual Number, February, 1979.
3. Rowntree, Seebohm, in J.E. Meade (Ed.), Poverty in the Welfare State, Oxford Economic Papers, November, 1972.
4. Sastry, S.A.R., in Employment, Poverty and Public Policy, Monograph Series 9, Sardar Patel Institute of Economic and Social Research, Ahmedabad, 1981.
5. Centre for Development Studies, Trivandrum, Poverty, Unemployment and Development Policy, A case study of selected issues with reference to Kerala, Orient Longmans, Madras, 1977.
6. Morris, David Morris, Measuring the Conditions of World Poor: The Physical Quality of Life Index, PergamonPress,
7. Bardhan, P.K., in Poverty and Income Distribution in India, (Eds.), T.N. Srinivasan and P.K. Bardhan, Statistical Publishing Society, Calcutta, 1974.
8. Dandekar and Rath, Poverty in India, Indian School of Political Economy, Poona, 1971.
9. Ojha, P.D., A configuration of Indian poverty - inequality and levels of living, Reserve Bankof India Bulletin, Jan.1970.
10. Rao, V.K.R.V., Rural Poverty increases despite economic growth, Capital, Annual Number, April 1979.

11. Government of India, Sixth Five Year Plan1980-85, Planning Commission, New Delhi, 1981.

12. Ahluwalia, Montek S., Rural Poverty in India 1956-57 to 1973-74, (mimeographed), World Bank Staff Working Paper, Washington, 1978.

13. Kurien, C.T., in Poverty and Landlessness in Rural Asia (ed.), International Labour Office, Geneva, 1980.

14. ———————— , Poverty in Tamil Nadu - an assessment, in Bulletin, Madras Development Seminar Series, Vol.X, No.12, 1980.

15. Government of Tamil Nadu, Incidence and Level of Poverty Profile for Tamil Nadu, (mimeographed), Department of Statistics, Madras, 1978.

16. Kurien, C.T., in Techniques of perspective planning(, ed.) M.S.Adiseshiah, Madras Institute of Development Studies et al., Madras, 1972.

17. Indian Council of Medical Research, Nutrition Expert Group, Recommended Daily Allowances of Nutrients and Balanced Diets, Hyderabad, 1968.

18. Dandekar and Rath, op.cit.

19. Bardhan, P.K., op.cit.

20. National Institute of Nutrition, The Nutritive value of Indian Foods and the Planning of Satisfactory Diets, Indian Council of Medical Research, Hyderabad, 1977.

21. Ramamurthy M., Poverty and Supply of Wage Goods in Tamil Nadu, Sangam Publishers, Madras, 1974.

22. Kurien, C.T., op.cit.

23. Dandekar and Rath, op.cit.

24. Minhas, B.S. Planning and the Poor, S. Chand and Company Limited, New Delhi, 1974.

25. Dandekar and Rath, op.cit.

26. Bardhan P.K., op.cit.

27. ---------- , op.cit.

28. Ahluwalia, M.S., op.cit.

29. Sen, Amartya, Poverty an ordinal approach to measurement, Econometrica, Vol.44, No.2, March, 1976.

30. Dandekar and Rath, op.cit.

31. Ojha, P.D., op.cit.

32. Minhas, B.S., op.cit.

33. Bardhan, P.K. op.cit.

34. Sen, Amartya, op.cit.

35. Nadakrishna R., and N.C. Shah, in Employment, poverty and Public Policy , Monograph series 9, Sardar Patel Institute of Economic and Social Research, Ahmedabad, 1981.

36. Panikar, P.G.K., Economics of nutrition, Economic and Political Weekly, Annual number, February 1972.

37. Sen, Amartya, Poverty and Famine: An Essay on Entitlement and Deprivation, Oxford University Press, Delhi, 1981.

38. Sawant, S.D., Incidence of undernutrition in rural India: An interregional perspective, Indian Economic Journal, Vol.29, No.4, April-June, 1982.

39. De Costa, in A Configuration of Indian Poverty (Ed.) A.J. Fonseca, Vikas Publications, Delhi, 1971.

40. Kurien C.T., op.cit.

41. Sarvesvara Rao, B., A Study of Rural Poverty and Inequalities in a Developed District, Sangam Publishers, Madras, 1978.

42. Sen Amartya, op.cit.