CHAPTER - III

Objectives, Methodology and Definition of Concepts
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3.1 Need of the Study

A number of attempts have been made at the National and State Level to study the socio-economic inequalities in general but very few detailed and comprehensive studies have so far been conducted on the socio-economic inequalities among rural households in Mandi district of Himachal Pradesh. After reviewed some work in this field it is revealed that there is a research gap and none of these studies have been undertaken the work to establish the economic analysis of socio-economic inequalities among the rural households in Mandi district of Himachal Pradesh in the present scenario.

In the present study a detailed empirical verification of distribution pattern and extent of inequalities of household assets, income, employment and consumption expenditure among the sample household of Mandi district of Himachal Pradesh have been studied. An attempt has been made to evaluate the effectiveness of the rural development programmes in reducing the rural inequalities, the factors responsible for such inequalities and the remedies to cure the evil will further be useful for developing a set of suggestions for the more effective implementation of such Government Programmes and there by reduction in the socio-economic inequalities among the sample households in the area under study.

3.2 Objectives of the Present Study

The Present study has been undertaken in order to achieve the following objectives:-

1. to study the socio-economic profile of the sample households among the different size of holding groups;
II. to analyses the income, employment and consumption pattern of sample households among different size of holding groups;

III. to workout the inequalities in the distribution of household assets income and consumption expenditure among the sample households on the different size of holding groups;

IV. to study the nature and extent of unemployment with the help of multi-dimensional approach, among the sample households on the different size of holding groups;

V. to analyses the nature and extent of absolute poverty among the sample households on the different size of holding groups;

VI. to evaluate the impact of rural development programmes on the socio-economic conditions of the sample households; and

VII. to suggest measures for improving the welfare of the people by reducing of inequalities among the sample households;

3.3 Sampling Procedure

In the present study, Mandi district has been selected purposively for conducting the present empirical investigation on the rural inequalities among the sample households. There are ten development block in Mandi district viz. Mandi Sadar, Rewalsar, Drang, Chauntra, Chachiot, Siraj, Dharampur, Gopalpur, Sunder Nagar and Karsog. At the first stage all the block have been arranged in an ascending order on the basis of their respective population and two blocks have been selected randomly. At the second stage all the panchayats in each selected development block have been arranged in an ascending order on the basis of their respective population and two panchayats have been selected randomly from each selected block. Thus total four panchayats have been selected randomly in the study area. At the third stage a list of villages have been obtained from the office of each selected Panchayats and all the villages (Panchayat wards) in each selected panchayat have been arranged in an ascending order on the basis of their respective population and three villages (Panchayat wards) have been selected randomly from each selected panchayat of each selected
development block. Thus total 12 villages (Panchayat wards) have been selected randomly in the study area. At the Fourth stage a list of the households have been prepared in each of the selected village (Panchayat wards) and all the households in all the selected villages (Panchayat wards) have been arranged in an ascending order on the basis of their respective size of holdings viz; marginal (0-1 hectare), small (1-2 hectares), medium (2-4 hectare) and large size of holdings (4 hectare and above) and about 300 households proportion to the total number of households falling in each category have been selected randomly for collecting the required first hand information.

3.4 Nature of Data Used and Collected

Both secondary as well as primary data have been used in the study. The related information has been collected from the different Government publications and individual's publication as well as from the various level of administrative machinery. The secondary data have been collected from Directorate of Economic and Statistics, Directorate of Land Records Census, livestock census, Directorate of Agriculture Census etc. The required primary data have been collected with the help of pre-tested schedule from 300 sample household over 12 villages (Panchayat Wards) in the two selected development blocks of Mandi district of Himachal Pradesh. The information pertaining to age, sex wise family composition, occupation (main and subsidiary) educational status, value of household assets (i.e. both productive and household durables) land use pattern have been collected as it existed at the time of Survey. Data on family human labour days utilized in agriculture and non-agriculture activities, value and quantity of the agriculture inputs (i.e. both home produced and purchased) the amount of farm income (i.e. the value of main and by-products) have been recorded for each agricultural season and the amount of household non-farm income have been collected for the month preceding the survey. The information about the values as well as quality of food-item consumed out of home grown stock as well as out of purchases have been collected for the month preceding the survey, whereas, the value of non-food items have been
collected for the year preceding the surveys. The Information of the impact of rural development programmes on the indicators on the levels of living i.e., mainly on household assets, income and employment have also been collected. Information has also been collected for the willingness of workers for additional work and views of the household about the implementation of Rural Development programmes.

3.5 Tool and Techniques

The primary data collected have been tabulated by classifying into homogenous categories and the appropriate statistical tools and techniques have been applied to work out the results in order to achieve the objectives of the present study.

The measures of inequalities have been proposed in the economic literature fall broadly into two categories. On the one hand there are measures that try to catch the extend of inequalities in some objective sense, usually employing some statistical measures of relative variation of income; and on the other hand: there are indices that try to measure inequalities in terms of some normative measures, notion of social welfare so that a high degree of inequality corresponds to a lower level of social welfare for a given total of income.¹

3.5.1 Objective Measures of Inequalities

In order to measure the extent of relative inequality in the area under study, the following measures have been applied.

3.5.1a Head Count Ratio (H)

Let z be the poverty line, and yi be the income of the ith person with income arranged in ascending order so that yi ≤ yi + i for all i. Let 'n' denote the total number of people in the community and 'q' the number of people below poverty line. The head count ratio (H) is then

\[ H = \frac{q}{n} = q \]
But Sen observed in (1976)\textsuperscript{2} that Head count ratio (H) is a very crude index. This index is highly sensitive to the extent of the aggregate short fall of the income from the poverty line as well as to the distribution of income arranged amongst the poor. In spite of these limitations, H is still widely used.

3.5.1b Lorenz Curve

Income inequalities in different groups of sample households have been examined with the help of Lorenz Curve. In Lorenz Curve technique, the size of items and the frequencies are both cumulated and taking the total as 100, percentage, are calculated for the various cumulated values. These percentages are plotted on a graph paper. If there is proportionally equal distribution of the frequencies over various values of a variate, the points would lie in a straight line. This line is called 'line of equal distribution. If the distribution of items is not proportionately equal it indicates variability, and the curve would be away from the line of equal distribution. The farther the curve is from the line, the greater is variability in the series. A higher Lorenz implies more social welfare for the same total of income. The main drawback of Lorenz Curve is that it does not give any qualitative/numerical value of the extent of inequality. It merely gives a picture of the extent to which a series is pulled away from an equal distribution. It serves as a supplement and should be used along with some quantitative measures of inequality.\textsuperscript{3}

3.5.1c Gini-coefficient

Gini-coefficient is used to attach some absolute measures to the degree of inequality or give some idea whether the inequality is large or small. Gini-coefficient is not purely statistical and it embodies implicit judgment about the weight to be attached to inequality at different points on the income scale. This co-efficient may be interpreted in two ways. First, it may be seen geometrically in terms of Lorenz curve.

\[
\text{Gini - Coefficient} = \frac{\text{Area between Lorenz Curve and diagonal}}{\text{Total Area under diagonal}}
\]
The co-efficient may be seen to range from zero when income is equal (the Lorenz Curve follows the diagonal) to one and at the other extreme (the Lorenz curve have > shape). Secondly, it may be computed mathematically as follows.4

The value of Gini-coefficient for the income distribution of all sample households has been worked out with the help of following formula:

\[ G(Y) = 1 + \frac{1}{n} - \frac{2}{n^2 z} \sum_{i=1}^{n} (n + 1 - i) y_i \]

Where

- \( G(Y) \) = Gini-coefficient of the income distribution of sample households.
- \( n \) = population size
- \( Z \) = mean income
- \( y_i \) = income of the ith person

The value of Gini-coefficient of the income inequalities among the poor have been worked out with the help of following formula.

\[ G(Y) = 1 + \frac{1}{q} - \frac{2}{q^2 z} \sum_{i=1}^{q} (q + 1 - i) y_i \]

Where,

- \( G(Y) \) = Gini-coefficient of the income distribution of the poor
- \( z \) = mean income of the poor
- \( q \) = number of people below poverty line
- \( y_i \) = income of the ith poor person

The value of the Gini-coefficient for the distribution of sample household's expenditure has been worked out with the help of following formula:

\[ G(C) = 1 + \frac{1}{n} - \frac{2}{n^2 Z} \sum_{i=1}^{n} (n + 1 - i) C_i \]

Where,

- \( G(C) \) = Gini-coefficient of the Consumer expenditure distribution.
- \( Z \) = mean consumption expenditure
\( n \) = total consumer units

\( C_i \) = households expenditure of the ith consumer unit

The value of the Gini-coefficient for the distribution of assets among the sample households have been worked out with the help of following formula:-

\[
G(a) = 1 + (1/n) - (2/n^2) \sum_{i=1}^{n} (n + 1 - i) a_i
\]

Where,

\( G(a) \) = Gini coefficient of the asset distribution

\( n \) = total number of households

\( Z \) = mean value of the assets distribution

\( a_i \) = value of the assets of the ith person

### 3.5.1d  Sen’s Measure of Inequalities

The inequality measures have been modified by A.K. Sen (1973)\(^5\) by taking into account the following two factors:

a) we should be concerned not merely with the number of people below the poverty line but also with the amounts by which the incomes of the poor fall short of the specified poverty level; and

b) the bigger the short fall from the poverty level, the greater should be the weight per unit of that shortfall in the poverty measures. In the present study the poverty measure suggested by Sen (1973) have been applied in order to find out the number of poor households falling below the poverty line as well as the extent of poverty with the help of following formula:

\[
Ps = \frac{2}{(q^* + 1)nZ} \sum_{i=1}^{q^*} (Z - y_i)(q^* + 1 - i)
\]

Where;

\( Ps \) = Sen’s measure of poverty (1973).
q∗ = number of households falling below the poverty line.

n = total number of sample households.

Z = the value of the poverty index (Rs.)

Sen (1976)\(^6\) though in the same general tradition presented a somewhat different formulation of the poverty measures \((Ps)^*\) for large number of poor which has also been applied as under:

\[
Ps^* = H \left[ 1 - \frac{y}{z} + \frac{y}{z} G \right]
\]

Where;

Ps* = Sen’s measure of Poverty (1976).

H = head count poverty ratio

y = mean income of the poor (Rs.)

G = Gini-coefficient of income distribution of the poor.

The poverty measure \((Ps^*)\) is made up of the ‘Head count ratio’ \((H)\) multiplied by income gap ratio \((I)\) augmented by the Gini-coefficient \((G)\) of the distribution of income among the poor, weighted by \((1-i)\) i.e., weighted by the ratio of the mean income of the poor to the poverty line income level. One way of understanding its rationale is the following: 'I' represents poverty as measured by the proportionate gap between the mean income of the poor and the poverty line income. It ignores distribution 'among' the poor and 'G' provides this information. In addition to the poverty gap arising from the unequal distribution of the mean income, which is reflected by Gini-coefficient \((G)\), of the distribution multiplied by the mean income ratio. The income gap measure thus, augmented to take note of inequality among the poor i.e. \(I + (1-i) G\), is normalized per poor person and does not take note of the number of people below the poverty line which could be minute or large. Multiplying \(I + (1-i) G\), by the 'head count ratio' \((H)\) now produces the composite measures \(Ps^*\).
3.5.2 Normative Measure of Inequality

The measurement of inequality involves two distinct problems. The first is the specification of 'poverty line' which should be the value of consumption basket considered to represent the socially accepted "minimum" standard of living. Once the poverty line is determined the second step is that of determining an index of poverty. In the present study, the poverty line has been determined on the basis of the value of minimum nutrients requirement norms defined by the Government of India, Planning Commission and Indian Council of Medical Research. The Planning Commission has suggested 2400 calories per person per day for the rural areas and 2100 calories per person per day for urban areas.7 The total number of male, female and children of varying ages have been converted into, 'standard' consumption unit's or 'adult man value' by applying the scale of co-efficient suggested by the Indian Council of Medical Research e.g. a family consisting of father, mother and three children aged 10, 8 and 6 years has an 'adult man value' of consumption units of 3.9 (i.e. 1.0 + 0.8 + 0.8 +0.7 +0.6).8

Keeping in view of hilly topography and extreme climatic variations in the economy of the region, minimum food requirements are 'necessary' but not 'sufficient' for the survival of mankind. Therefore, in order to work out the value of 'poverty line' allowances have also been made to the minimum non-food requirements by working out the ratios of the total non-food expenditure to the total food expenditure for each holding group.9

3.5.3 Measures of Unemployment

Since long the estimates of rural unemployment have been worked out only with the help of Time Criterion (i.e. through uni-dimensional approach) according to which if a worker working for 8 hours a day, 25 days in a month or 300 days in a year has been considered gainfully employed but if;

i) The earning of such workers from the present work may not be sufficient to meet out their basic requirements. Hence according to 'Income criterion' such workers are unemployed and/ or underemployed.10
ii) The worker's are willing to work for additional hours on the existing wage rate either due to higher dependency ratios, higher price levels or higher debt repayment, etc. Such workers are termed as underemployed and/or unemployed according to 'Willingness Criterion'.

For the first time objection has been raised against the unidimensional measure by the committee of experts on unemployment estimates in 1970. Experts have suggested the use of multi-dimensional approach for working out the estimates of unemployment. The modified version of multi-dimensional approach has been presented by Raj Krishna (1973) which has been endorsed and supported with the help of empirical facts by Raj Krishna himself (1973), Kanta Ahuja (1978) and Nilkantha Rath (1980). Raj Krishna (1973) has given the four-fold classification of measures of unemployment and under-employment. He termed a person unemployed or underemployed, if either: i) he is gainfully occupied during the year for a number of days less than some normal or optimal days defined as full employment days. or (ii) he earns an income per year less than some desirable minimum"; or (iii) he is willing to do more work, then he is doing at present; he may either be actively searching for more work or be available for more work if it is offered on terms which he is accustomed. These criteria have been termed by Raj Krishna as (i) the time criterion, (ii) the income criterion, and (iii) the willingness criterion.

In the present study extent of unemployment has been worked out with the help of Time, Income and Willingness criteria. The woman, children and old person working days have been converted into standard Man days (MD) by attaching proper co-efficient of efficiency. One women day (WD) is presumed to be equivalent to 0.75 MD. In the present study the old person (greater than 59 years) and children (10-15 years) working day had been considered equivalent to 0.50 MD. Both family and hired labourers are taken into account in this study. In the present study the estimates of unemployment have been worked in term of 'idle', 'poor' and 'willing'.
According to ‘time criterion’ a person has been termed as unemployed or underemployed if he worked for less than 8 hours a day or 25 days in a month or 300 days in a year (idle). According to ‘income criterion’ a person has been termed unemployed or underemployed if he earned per month income less than desirable minimum i.e., Rs. 1355.53 the value of poverty index (poor) and according to ‘willingness criterion’ a person has been considered unemployed or underemployed if he is available or willing for additional work at the existing wage rate (willing).

3.6 Definition of concepts

Level of Living

The concept of levels of living includes the scale of preferences and satisfaction of wants of individual members in a family as also collective wants of groups and communities. Different classifications of the component levels of living have been proposed, some by the United Nations and the specialized agencies and some by others. The main components recommended by the Report of the Committee on International DEFINITION AND MEASUREMENT of Standard of Living (UN 1959) are (i) Food and Nutrition (ii) Health (iii) Condition of work (iv) Education including literacy and skills. (v) Employment situations (vi) Savings (vii) Human freedom. The first component includes the minimum Food requirements, and the remaining components consist of minimum non-food requirements. Ganguli and Gupta (1976) analysed the levels of living by means of set indicators classified into eight components: nutrition, housing, medical care, education, clothing, leisure, security and environment. The first five components have been termed primary and the last three as secondary components. Further, the first component includes the minimum food requirements and the remaining seven components consist of the minimum non-food requirements.

Poverty

A family is considered to be living in poverty if its total earning were insufficient to obtain the minimum necessaries for the maintenance of
merely physical efficiency'. In developing countries/areas where incomes are low, absolute poverty is generally reflected mainly in inadequacy of food intake and the consequent undernourishment on a mass scale, though, the definition of subsistence appropriate to such countries/areas might (in fact should) also include other essential minimum needs such as clothing, housing, fuel, light, education and health etc.\textsuperscript{18}

**Poverty vs. Inequality**

Poverty as a concept is closely related to inequality. Given the average income level, a higher level of inequality (reflected by the usual measures) will tend to be associated with a higher level of poverty. Furthermore, the so-called ‘poverty line’ may sometimes we drawn in the light of the socially accepted “minimum” standard of living and the later can be influenced by the average income level so that poverty measures, thus defined, may catch an aspect of relative inequality as well.\textsuperscript{19} Poverty line is necessarily defined in relation to social conventions and the contemporary living standards of particular society, and in this way somebody in the United States may be termed poor even though he has higher income than the average person in India.\textsuperscript{20}

There are two broad concepts of poverty: relative poverty and absolute poverty. The relative poverty is measured in the terms of inequality in the distribution of income; whereas, absolute poverty is reckoned in terms of some kind of notion of subsistence considered appropriate to the circumstances of the country (or group of countries) concerned. In developing countries where incomes are low; absolute poverty is generally reflected mainly in terms of inadequacy of food intake and the consequent undernourishment on the mass scale, though the definitions of subsistence appropriate to such countries might (in fact should) also include other essential minimum needs such as clothing, housing, fuel, light, education and health etc.\textsuperscript{21}

Both absolute and relative poverty are closely aligned to inequality in income distribution. ‘Relative Poverty’ arises entirely as a consequence of an unequal distribution of income irrespective of what the income level or the
corresponding state of deprivation of the people at the bottom end of the income scale might be. ‘Absolute Poverty’ on the other hand, expresses a collective view on deprivation in its somewhat physical manifestation. Thus, wherever be the line any society chooses to draw to separate the deprivation from the relative comfort, those on the wrong side of the line are defined as poor irrespective of how comfortable or affluent the other may be. The fact that the sense of deprivation among the poor may also depend on how wide is the gap between their income and the income of those who are not poor, is not a consideration relevant to the notion of absolute poverty, though it very much is the notion of relative poverty. Any measure of relative poverty is therefore, inextricably embedded in the measures of inequality, whereas, a measure of absolute poverty primarily depends on an exogenously determined standard or poverty line, which represent a socially acceptable minimum levels of living.22

Household Income

Household income includes current income of all the members of the household from all sources. It consists of both farm and non-farm income.23

Literate

Those members of the family, who can read and/or write and has formally joined institution dealing with such practices, have been treated literate.

Consumption Expenditure

Consumption implies utilization of goods and services to satisfy the human desire and wants. The pattern of consumption varies from place to place and may be influenced by the socio-economic and psychological consideration. But for the purpose of general studies, consumption expenditure implies all expenditure incurred by a household exclusively towards its non-productive domestic consumption, thus, excluding all expenditure towards the enterprise activities of the household, transfer payments in kind like loans advanced, charities, gift and other payments, in kind are not considered in consumption expenditure. But any consumption
out of transfer receipts in kind of free collection is considered for determining total consumption.\textsuperscript{24}

**Engel's Law**

The proposition of the Engel's Law of consumption is as income increases the expenditure on different items have changing proportions and the proportion diverted to urgent needs decreases, while on luxuries and semi-luxuries increases. Thus according to Engel's Law with given tastes or preferences, the proportion of income spent on food-items diminishes while on non-food items increases with an increase in income.\textsuperscript{25}

**Demonstration Effect**

The consumption standard of low income groups are greatly affected by the consumption standards of high income groups. This phenomenon is called demonstration effect.\textsuperscript{26}

**Standard Consumer Units**

The National Institute of Nutrition has calculated the 'standard consumer units' or 'adult man value' by assessing the calories needs of women and children in terms of the average man by applying various co-efficient of the different age and sex groups. For example of family consisting of father, doing sedentary work, mother and three children aged 10, 8 and 6 years, has an 'adult man value' or 'standard consumer units' of 3.9(i.e. $1.0+0.8+0.8+0.7+0.6$) and the minimum daily calories requirement of the family would be equal to the total number of standard consumer units multiplied by the per consumer unit per day minimum calorie requirements.\textsuperscript{27}

**Indebtedness**

Indebtedness includes hereditary debt, short and long term loans borrowed by the family for various purposes like socio-cultural activities, improvements of land, purchase of land and livestock, construction of house, purchase of other movable and immovable assets, crop loan and consumption expenditure etc. The indebtedness in this study does not include the routine loan or credit outstanding and settled within a month or a shorter period by the family.
Gainful employment

In general the full employment is a situation when all the workers in an economy area are in a position to get employment at the existing wage rate according to their skill, ability and qualification for the optimum number of days in a year.28

Unemployment and Underemployment

Unemployment is a situation when persons even after their best possible efforts are not in a position to get work/job at the existing wage rate or even at the low wage rates. Whereas, under-employment is a situation when person are engaged in work/job at a wage rate which is lower according to their qualifications and abilities. All those persons are considered to be underemployed if they are forced to take a job that is not adequately remunerative, or not commensurate with their skill, ability and training. According to time criterion unemployment and under-employment is a situation when persons are either gainfully occupied during the year for a number of hours (or days) less than some normal or optimal hours (days). According to willingness criterion workers are unemployed and/or underemployed if they are willing to do more work than they are doing at present. They may either be actively searching for more work, if it is offered on terms to which they are accustomed. According to income criterion a worker is termed unemployed and/or underemployed if he earns an income per year/month less than some desirable minimum (i.e., the value of poverty index).29

Voluntary Unemployment

Those persons may be treated voluntarily unemployed who are searching for specific types of work/job according to their educational qualifications and/or training and refuse to accept work/job, which they feel to be below their status.

Productive Activities

All those household activities (both agricultural and non-agricultural activities) which provide gainfully remunerative employment to the family
human labour and add directly to the household income have been treated productive activities for the purpose of present analysis.

**Necessary Activities**

All those household activities such as family and social affairs, though to involve the human labour days utilization, yet these activities neither provide gainful/remunerative employment to the family human labour nor they add directly to the household income but the utilization of human labour days in these activities, is necessary from the social obligations as well as survival point of view.

**Primary Occupation**

Primary Occupation has been taken as the one among the listed occupations from which a household derived maximum percentage of income, i.e., greater than 50 per cent of the total household income.30

**Assets**

Everything that the household owns and which has a money value is classified as an asset. The assets of the households are those items from which he hopes to get an income or which he keeps to protect his interest.31 In the present study the household assets have been divided into two categories viz., productive and unproductive assets (i.e. household durables). All these household assets (such as land, livestock, poultry, agricultural implements, household industries, commercial vehicles and rented-out building etc.) have been termed as productive assets, which provide gainful employment to the family human labour and directly add to the household income. The household durables constitute those assets which have no direct effect on household income and/or employment, but they indirectly help to raise the efficiency, skill as well as the levels of living of the households which include good housing conditions, electrical appliances, furnishing articles, bedding etc.

**Operational Holding**

An Operational holding includes all land which is wholly or partly used for agricultural production and is operated as one technical unit by one person alone as with others without regard to title, legal form, size or
location. The technical unit is that which is under the same management and has the same means of production such as labour force, machinery and animal.32

**Individual and Joint Holding**

If the land holding is operated either by one person alone or by a group of persons being members of same household, the holding is called individual holding. If two or more persons belonging to different households share jointly (as partners) the economic and technical responsibility for the operation of the agricultural holding, the holding has been termed as joint holding.33

**Net Area Sown**

The net area sown represents the total area sown with crops and orchards, counting areas sown more than once and/or only once in the same agricultural year.34

**Land put to Non Agricultural Uses**

Land put to non agricultural uses includes all land area occupied by free holdings, roads and railways or under water and land put to uses other than agriculture; whereas, land under miscellaneous tree crops and groves includes all cultivable land which is not included in net area sown but is put to some agricultural uses such as land under casuarina trees, thatching grasses, bamboo bushes and other groves for fuel etc., which is not included under orchards.35

**Land Holding Groups**

The farmers with land holdings up to 0.50 hectares of class ‘I’ irrigated land or the farmers with holdings up to 1.00 hectares of unirrigated land have been termed as marginal farmers. The farmers with land holdings between 0.50 – 1.00 hectares of class ‘I’ irrigated land or the farmers with land holdings between 1-2 hectares of unirrigated land have been termed as small farmers. The farmers with land holdings between 1-2 hectares of irrigated land or 2-4 hectares of unirrigated land have been termed as medium farmers. The farmers with land above 2.00 hectares of irrigated land or the farmers with land holdings above 4 hectares of unirrigated land have been termed as large farmers.36
Agricultural Labourer

A person without any land but having a homestead and deriving more than 50 per cent of his income from agricultural wages has been termed agricultural labourer.\textsuperscript{37}

Non-Agricultural Labourer

A person whose total income from wage earning does not exceed Rs.200 per month is termed as non-agricultural labourer. Persons who derive their income partly from agricultural and partly from other sources can also be brought forward under this category provided at least 50 per cent of their income is from non-agricultural sources. They need not have a homestead but most residents of the village in which they are identified.\textsuperscript{38}

Earner

All such household members who contribute financially towards the total family income are called earners. As earner is defined as one whose income is sufficient for his(or her) maintenance, and earning dependent as one whose income is not adequate of his (or her) maintenance and non-earning dependent as one who earned no income at all and is dependent for his(or her) maintenance on others.\textsuperscript{39}

Universe

The whole group from which the sample is to be selected, is technically called universe or population.\textsuperscript{40}

Sample and Sampling Unit

A small group as representative of the universe is called a sample and in order to draw a sample and in order to draw a sample from the universe, the unit of sample in terms of either a house, a family, an individual or a group has been decided which is termed as sample unit.\textsuperscript{41}

Sampling

Sampling is simply a process of learning about the universe/population on the basis of the sample drawn from it. A number of methods are used for drawing a sample. Random sampling is one where the individual units constituting the sample are selected at random and probability of the inclusion of each item of the universe in the sample is
equal. The selection of items is thus, entirely objective. Purposive sampling means selecting the items of the sample in accordance with some purposive principle and the probability of inclusion of the some units of the universe in the sample is very high, while the probability of inclusion of others is very low. In this method some criterion of selection is first laid down and items are selected in accordance with it. In mixed sampling there is mixture of random sampling and purposive sampling. The universe is first divided into some groups on the basis of purposive sampling and then from each sub-division certain items are selected in accordance with random sampling. If the universe is first divided into 'strata' by purposive method and then from each stratum some units are selected by random sampling, the method is called stratified random sampling method.\textsuperscript{42}

**Reference Period**

Reference Period means the period to which survey data refers.\textsuperscript{43}

**Household**

A household is a group of family members normally living together and taking food from a common kitchen; constituted a household for the purpose of this study.\textsuperscript{44}

**3.7 Limitations of the Present Study**

Though the present study is the first of its kind among the sample households of Mandi district in Himachal Pradesh, yet it suffers from the following statistical limitations;

a) the primary information on the most of the variable have been collected at a particular point of time hence, comparison over a period of time is not possible and;

b) this study relates only to the socio-economic inequalities among the sample households of Mandi district and due to varied topography, climatic conditions, cropping patterns, occupations, sources and levels of income, customs and traditions, faiths and beliefs prevailing among the population of different districts of the state; the result of this study cannot be applied with hundred per cent precision to the entire economy of Himachal Pradesh.
REFERENCES

1) Amartya Sen, *On Economic Inequality*, Oxford University Press, Delhi, 1974, p. 34.


24) This definition has been adopted by N.S.S. Organization in various N.S.S. Rounds, Also see, V.K. Malhotra, Studies in Consumption Expenditure, *Development Profile of Himachal Pradesh*, Directorate of Economics and Statistics, Shimla, 1985, p. 15.


