CHAPTER - 3

OBJECTIVES, METHODOLOGY AND DEFINITION OF CONCEPTS

Most of the studies reviewed are based on inadequate and scattered evidence and do not provide precise information about the economic conditions of agricultural labour households in totality. There is hardly any study which provides precise information about the duration of employment, off-farm income, and extent of poverty among the agricultural labour households. Most of the studies relate levels of living with wage rates (nominal or real). It is the level of income and not the wage rates upon which the level of living of the labour depends.

Moreover, most of the studies deal only with one or the other aspect of agricultural labour. Some studies deal with migration while others with wage-structure or labour employment. Practically, there is a very high degree of connectivity among different aspects of labour e.g., nature of agricultural employment (seasonal and non standardization of work) which affects the wage levels and wage structure of agriculture labour. Further, migration of labour also affects local employment and local wage rates. Combined together, these factors determine the level of living of workers. But most of the studies have analysed the socio-economic conditions and characteristics of the local labour and have ignored the migratory part of agricultural labour. Hence, for meaningful and fruitful conclusions, a comprehensive study, simultaneously covering
different aspects of agricultural labour, was needed. The main objectives of the present study are as under:

3.1 OBJECTIVES OF THE STUDY

1. To study the socio-economic and demographic profile of the selected native and migrant agricultural labour households.

2. To analyse the nature and magnitude of unemployment with the help of 'time', 'income' and 'willingness' criteria among the native and migrant agricultural labour households.

3. To study the pattern of income and assets among the agricultural labour households.

4. To examine the nature and magnitude of absolute poverty among the native and migrant agricultural labour households.

5. To analyze the nature and magnitude of indebtedness among the native and migrant agricultural households.

6. To study the problem of social seclusion among these agricultural labour households.

7. To study the reasons behind the influx of migrant agricultural labour to Punjab and the effects thereof on the socio-economic lives of the migrant as well as the native agricultural labour households.

8. To identify the problems of the agricultural labour households and to suggest appropriate policy measures for their increased incomes and improved levels of living.
The study is based on the primary data collected with the help of a well-structured schedule through direct interview method in the area under investigation.

3.2 SELECTION OF STUDY AREA

Ludhiana district of Punjab has been selected purposively and constituted the locale of the study for the purpose of empirical investigation. From the point of view of the number of agricultural labourers as well as the wage rates, Ludhiana district is the most representative. Moreover, being a local resident, it was also convenient and helpful to collect reliable first hand information from the selected sample labour households of district Ludhiana.

3.3 SAMPLING PROCEDURE

Multi-stage random sampling procedure has been adopted to select a representative sample. Ludhiana district constitutes 12 blocks viz; Ludhiana-1, Ludhiana-2, Jagraon, Doraha, Samrala, Machiwara, Dehlon, Sudhar, Pakhowal, Sidhwabet, Khanna, and Raikot. All these blocks have been arranged in an ascending order on the basis of their respective population and three blocks namely Ludhiana-1, Dehlon and Doraha have been selected randomly. In the second stage, all the villages in each of the above selected three blocks have been arranged in an ascending order and four villages from each of the above selected blocks have been selected randomly. Finally, a list of both the native and migrant agricultural labour households in the above selected villages has
been prepared and a sample of both the native and migrant agricultural labour households has been selected in proportion to their total number of households. A sample of 300 agricultural labour households has been selected which constitutes 140 native and 160 migrant agricultural labour households.

3.4 DEFINITION OF CONCEPTS

The definitions of a few concepts which have been extensively used in the study are as follows:

Agricultural Labourer

A person is defined as an agricultural labourer who works for a major part of his working days in the year on the farms of others for wages. He derives a major part of his income as payment for work on the farms of others.¹

Native Agricultural Labourer

An agricultural labourer who is a bonafide and permanent resident of Punjab is defined as a native agricultural labourer.

Migrant Agricultural Labourer

A person, 15 years or older, who has migrated from a state other than Punjab since 1990 to work or look for work on the farms of others is defined as a migrant agricultural labourer.

Household

A household is defined as a group of related persons who live together and generally share a common kitchen.²
Agricultural Labour Household

A household is defined as an agricultural labour household in which the major source of income is agricultural wages.

Consumption Expenditure

Consumption implies utilization of goods and services to satisfy human desires and wants. The pattern of consumption varies from place to place and may be influenced by the socio-economic and psychological considerations. But for the purpose of general studies, consumption-expenditure implies all expenditure incurred by a household exclusively towards its non-productive domestic consumption, (i.e. on food and non-food items). Thus, all expenditure towards the enterprise activities of the household, transfer payments like loans advanced, charities, gifts and other payments in kind are not considered in consumption expenditure. But any consumption out of transfer receipts in kind or free collection is considered for determining total consumption.

Poverty

A family is considered to be living in poverty if its total earnings 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 under-nourishment 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.^5.

There are two broad concepts of poverty viz; relative and absolute poverty. 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, a society chooses to separate deprivation from relative comfort, those on the wrong side of line are defined as poor irrespective of how comfortable or affluent the others 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 to be 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 of poverty line, which represents a socially acceptable minimum level of living.^6

**Household Income and Assets**

Household income includes current income of all members of
the household from all sources. It consists of both farm and non-farm income. All the physical items that the household owns and which has money value is classified as an asset. The assets of the household are those items from which he hopes to get an income or which he keeps to protect his interests. In the present study, the household assets have been divided into two categories viz; movable and immovable assets. All the household assets such as furnishing articles, electrical appliances, items of conveyance (scooter, cycle etc.), beddings, utensils, jewellary and livestock have been termed as movable assets. While, the assets like house and land have been termed as immovable assets. By adding together movable and immovable assets, total assets of a household have been obtained. In the present study, the value of total assets of the households has been calculated at the market price of the assets at the time of survey. The immovable assets of the migrant labour households also include the assets at their native villages.

**Indebtedness**

Indebtedness includes hereditary debt, short and long term loans borrowed by the family for various purposes like socio-cultural activities, improvement 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\(^9\).

**Employment**

Workers engaged in gainful activities for a normal period of time on wage and salary basis both in terms of cash and/or kind may be termed as employed. The gainful employment is a situation when the workers are in a position to get employment at the existing wage rate/salary according to their skill, ability and qualifications for the optimum number of days in a year\(^10\).

**3.5 STATISTICAL TOOLS AND TECHNIQUES OF ANALYSIS**

**3.5.1 Measures of Unemployment**

In the present study, the extent of unemployment or underemployment has been measured with the help of multi-dimensional approach. Under multi-dimensional approach, 'time', 'willingness' and 'income' criteria have been used for calculating the magnitude of unemployment or underemployment among the agricultural labour households. According to Raj Krishna\(^11\), a worker may be termed as unemployed or underemployed if either (i) he is gainfully occupied during an year for a number of days less than some normal or optimal days defined as full employment days (Time Criterion). In the present study, a person working for eight hours a day, 25 days in a month and 300 days in an year is termed as fully employed\(^12\) or (ii) he earns an income per year less than some minimum desirable i.e. the value of poverty index (Income Criterion); or (iii) he is willing to do more work if it is offered on
terms to which he is accustomed (Willingness Criterion).

In the present study, due to differences in the work efficiency of males, females, children and old persons, labour days have been converted into ‘standard mandays’ (M.D.) by attaching a proper ‘coefficient of efficiency’ i.e. one woman day (W.D.) has been treated equal to 0.75 of mandays (M.D.) and one child day (C.D.) has been treated equal to one old person day (O.D.) and both are treated equal to 0.50 of manday (M.D.) i.e. 1W.D.=0.75 M.D., 1 O.D.=1 C.D.=0.50 M.D.\textsuperscript{13}. This has been done to avoid overestimation or underestimation of unemployment among the agricultural labour. Old persons above 65 years of age and children below the age of 9 years have not been included in the calculation of ‘standard mandays’.

The value of poverty index has been worked out by taking into account the value of the minimum food and non-food requirements of the sample households at local retail prices in the area under study during the period of investigation i.e. 2009-2010. All those persons who were earning less than the value of the poverty index have been termed as unemployed and / or underemployed and those who were earning more than the value of poverty index have been considered as gainfully employed according to ‘income criterion’.

The workers, who were working at full employment norms according to ‘time criterion’ but were willing to work for additional hours and / or days on the existing wage rate, have been considered as
unemployed or underemployed according to ‘willingness criterion’.

3.5.2 Normative Measure of Poverty

In the present study, the extent of absolute poverty among the agricultural labour households has been estimated with the help of both ‘Nutrition’ and ‘Nutrition Plus Approach’.

3.5.2(a) Nutrition Approach

The poverty line on the basis of ‘Nutrition Approach’ has been constructed on the basis of per consumer unit per day recommended average diet which provides 2400 calories per consumer unit per day. It has been suggested by the Indian Council of Medical Research. The value of minimum per consumer unit per day consumption basket has been calculated by multiplying the quantities of different food items by their actual prices prevailing in the study area during the period of investigation i.e. 2009-2010. In order to avoid under or overestimation of poverty, the household members of different age and sex (with different consumption needs) have been converted into ‘standard consumer units’ with the help of a ‘calory consumption scale’ as suggested by the Indian Council of Medical Research.14

3.5.2 (b) Nutrition Plus Approach

The minimum food requirement is ‘necessary’ but not ‘sufficient’ for the existence of mankind. Therefore, a certain minimum amount of non-food items is equally important for the survival of human beings. Under the ‘Nutrition Plus Approach’ non-food items such as fuel, light, clothing,
footwear, health, education etc. have been given due importance. But, the problem in case of non-food items is that no specific norms comparable to 'minimum calorie requirements' have so far been suggested by any government agency or institution for non-food items. This is because of the reason that the 'minimum non-food requirements' vary among different socio-economic groups due to variations in topography and climate.

Many individual scholars have estimated the percentage of monthly expenditure on non-food items to the expenditure on food items. Sastry and Suryanaryan (1981) have suggested 36 percent for the rural areas and 46 percent for the urban areas of Andhra Pradesh as the monthly expenditure on non-food items to the food items. Thakur (1985) has suggested 46.63 percent expenditure for the rural poor living in the mid-hill zone of Himachal Pradesh as the minimum non-food components to the food components. Sharma (1994) has suggested 65 percent for the tribal poor of Kinnaur district of Himachal Pradesh as the monthly expenditure on non-food components to the food components. Sharma (1997) has suggested 65 percent for the tribal poor and 54 percent for the non-tribal poor of Chamba district of Himachal Pradesh as the minimum monthly expenditure on non-food items to food items.

3.5.3 Z-test of significance

To test the significance of the difference among different parameters among the native households and the migrants, the Z-test of
significance has been applied.

To test the significance of difference of 'mean' values among the native and migrant agricultural labour households, the value of $|Z|$ has been worked out with the help of the following formula:

$$|Z| = \frac{|\bar{X}_1 - \bar{X}_2|}{SE_{(x_1-x_2)}}$$

Where, $SE_{(x_1-x_2)} = \sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}$

and $\bar{x}_1$ and $\bar{x}_2$ = mean value among the native and migrant agricultural labour sample households respectively.

$n_1$ and $n_2$ = sample size of native and migrant agricultural labour households respectively.

$s_1$ and $s_2$ = standard deviations of the above two sample groups.

To test the significance of difference of 'proportions' of attributes among the native and the migrant agricultural labour households, the value of $|Z|$ has been worked out with the help of the following formula :-

$$|Z| = \frac{|p_1 - p_2|}{SE_{(p_1-p_2)}}$$

Where $SE_{(p_1-p_2)} = \sqrt{p.q \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}$

and $p$ = Combined proportion of both the samples

$q = 1 - P$

$n_1$ and $n_2$ = Sample size of native and migrant agricultural labour households respectively.
The calculated value of $|Z|$ has been compared with the critical value of $Z$ at 5 percent level of significance ($= 1.645$ for one tailed test). If the calculated value is less than the critical value, the difference of parameters has been declared as insignificant and vice versa.
REFERENCES


