METHODOLOGY

CHAPTER III

METHODOLOGY

The methodology adopted in the current study on "Poverty among the Construction Workers in the Informal sector: A comparative analysis" is presented in this chapter and discussed under following heads

3.1 Selection of Area
3.2 Selection of sample
3.3 Selection of sample units
3.4 Period of study
3.5 Data collection
3.6 Tools of analysis
3.7 Limitations

3.1 SELECTION OF AREA

As per the 2001 Census data, in Tamil Nadu, Coimbatore stands in the third place in the total number of migrants with 10,30,625 immigrants next to Kancheepuram (10,38,499 migrants) and Thiruvallur (11,75,307 migrants) districts. The growth in the construction, business, service and industrial sectors attract workers and non-workers from other districts and states to Coimbatore district for better employment opportunities. As per the 2001 Census Report the district has a population of 42,24,107 persons with 21,56,280 males and 20,67,827 females. There are 1,77,211 construction workers; 3,97,614 agricultural workers; 70,255 workers in household industry and 13,24,252 other workers. The booming industrial activities largely attract labourers from various parts of Tamil Nadu and other states to Coimbatore. As Coimbatore city attracts people in terms of job opportunities from different strata and from different places in and around Coimbatore district and also from other states, the Coimbatore city was selected for the study.

3.2 SELECTION OF SAMPLE

To analyse the socio-economic and working conditions of construction workers it was decided to collect data from migrant and non-migrant construction workers. As construction work does not need any formal training or skill or educational qualification, people could easily be absorbed in construction works. The current study aims to bring out weather the non-migrant local construction workers

are in a better economic status compared to the migrant construction workers who constitute to the target group. For this, 100 construction workers, in which 50 are migrants and 50 are non-migrants were selected.

3.3 SELECTION OF SAMPLE UNITS

To select the sample units the following construction sites in which hospitals, group houses and apartments are being under construction were approached. From these construction sites, the required sample was selected as given in the following table 4.

TABLE 4

SELECTION OF SAMPLE UNITS

Construction site	Number of Migrant	Number of Non-migrant	All
Hospitals	30	14	44
Group houses	2	4	6
Apartments	18	32	50

Source: Field survey, 2010.

In the selection of the migrants the following criteria was applied. They should have been away from their last place of origin for at least one year.

3.4 PERIOD OF STUDY:

Data for study were collected during the months of January to March in 2010.

3.5 DATA COLLECTION

Data collected was primary in nature. Data was collected from the selected respondents by administering a pre tested interview schedule (Annexure I) which covers details on the socio-economic and demographic profile of the respondents, their work status, skill acquisition, problems, health hazards, etc.

3.6 TOOLS OF ANALYSIS

The following tools were applied in the analysis of the collected data.

3.6.1 Likert Five Point Rating Scale

3.6.2 Gini- co-efficient of inequality

3.6.3 Measurement of Poverty

3.6.4 Quality of life index

3.6.5 Average, Percentages and Graphs

3.6.6 Statistical Package

3.6.1 LIKERT FIVE POINT RATING SCALE

Likerts five point rating scale was applied to find out the opinion of the respondents on their work atmosphere. The respondents were asked to express their opinion on a 5 point rating scale as 'fully agreed' with a score of '2', 'agreed' with a score of '1', 'neutral' with a score of '0', 'disagreed' with a score of '-1' and 'highly disagreed' with a score of '-2'. If the average score is closer to '2' they 'highly agreed' and closer to '-2' means, they 'highly disagreed'.

3.6.2 GINI- CO-EFFICIENT OF INEQUALITY

To find out the inequality in the distribution of per capita income, per capita expenditure and total assets of the sample household Gini- co-efficient of inequality was used.

Gini- co-efficient of inequality developed by Angus Deaton (1997) was used to measure the inequality.

$$G = \frac{N+1}{N-1} - \frac{2}{N(n+1)u} \cdot \sum_{i=1}^{n} pixi$$

G = Gini- co-efficient of inequality
N = size of the sample
U = mean value of per capita income/ per capita expenditure / total assets
P = income rank

pi is p of person, i with high value of income / expenditure / assets such that xi >xi ±1 and the richest. The person with the highest value receives the rank of 1 and the lowest receives the rank n.

Gini- co-efficient of inequality lies between 0 and 1. If the inequality is high, Gini- co-efficient is closer to 1. If the inequality is less, it is closer to zero.

3.6.3 MEASUREMENT OF POVERTY

Poverty is a multi dimensional concept, which is expressed in terms of both income and non income measures. Any discourse on poverty is centered on two themes such as

i. Identifying the poor among the total population and
ii. Construction of an index for poverty using the available information on poor (Sen., 1976).

The first issue is essentially concerned with the choice of criterion (selection of poverty line) for identifying the poor. The measurement of poverty can be made on the basis of either income or the minimum calorie intake norm. The poverty line, based on the minimum consumption of 2400 calorie per day per person in rural areas and 2100 calorie per day per person in urban areas, can be regarded as a physical subsistence measure of poverty. Those who are unable to reach this level have a high risk of not having a long life. Poverty is measured using

3.6.3.1 Head Count Ratio

3.6.3.2 Poverty Gap Ratio

3.6.3.3 Poverty classification by the NCEUS

3.6.3.1 HEAD COUNT RATIO

Derivation and practical application of unambiguous poverty index is a debatable issue. The most popular and widely used measure is head count ratio of poverty. It states the proportion of people whose income is below a designated poverty line. If N is defined as the size of the population, Q is the number of people, with income below poverty line (z) and yi is the income of the individual, then poverty line is defined as,

$H = Q / N$

Head count ration is also known as poverty incidence ratio.

3.6.3.2 POVERTY GAP RATIO

Another closely related measure of poverty is the average gap ratio of the poor which is defines as

$$I = \frac{1}{Q} \sum_{yi<z} \left[\frac{Z - yi}{[\ z\ ]} \right]$$

Poverty gap ratio is also known as poverty intensity ratio.

3.6.3.3 POVERTY CLASSIFICATION BY THE NCEUS

The National Commission for Enterprises in the Unorganized sector (NCEUS, 2007), classifies the households under six categories based on their per capita annual income as shown in the following table

TABLE 5

CLASSIFICATION OF THE HOUSEHOLD

S.no	Classification	Expenditure class
1	Extremely poor	Up to 0.75 PL
2	Poor	0.75 PL to PL
3	Marginally poor	PL to 1.25 PL
4	Vulnerable	1.25 PL to 2 PL
5	Middle income	2 PL to 4 PL
6	High income	>4 PL

Source: NUEUS, 2007.

Where PL = poverty line income.

3.6.4 QUALITY OF LIFE INDEX

Of the several ways to conceptualize and operationalise poverty, in India, the state has defined poverty as income poverty. A poverty line represented by an income that commands a minimum calorie intake by individuals is first defined and then estimates are made of all those people whose income falls below this line. The method known as the 'Head count ratio' of poverty is the commonly used measure in Indian planning and development. The official estimates are, however, based on consumption expenditure-generated by the National Sample Survey (NSS) – instead of income to estimate the number of poor. These estimates are under scrutiny. The Planning Commission itself indicates that measurement of poverty needs multi-dimensional norms, instead of the calorie norm. For a developing economy, it is

necessary to develop a basic needs approach poverty line, instead of a uni-dimensional poverty line based on calorie intake of food primarily which is only a starvation line.

To meet the minimum needs of the people within a short span of time, the conventional procedure of measuring poverty and evaluation of plan performance in terms of changes in per capita income is adequate (Pramod kumar, 2001). Hence income as an indicator of poverty is less than adequate to identify the rural poor. Schultz is of the opinion that poverty cannot be defined simply in terms of low levels of income because there are families which have relatively little income but own substantial amount of wealth.

Sen (2007) pointed out that poverty alleviation has to be seen not only in terms of gross national product or even of raising the level of personnel incomes of the poor populations, but primarily as the enhancement of people of capabilities to lead minimally acceptable lines. A more reasonable way of identifying the poor is to use a number of indicators rather than one.

The Government of India, in collaboration with the UNDP split out in the urban poverty removal strategy that poverty has a social dimension-viz –poor quality of housing and the living environment and lack of access to basic services like clean water, education etc., Based on the methodology followed by Pramod kumar (2001), the quality of life index is constructed with a set of 10 quantitative and qualitative indicators.

The quantitative and qualitative indicators used in the current study are briefly discussed. In constructing the quality of life index, the parameters which are indicators of the quality of life are to be considered. With the criteria, ten indicators are chosen they are under five categories.

i. Social status

   i. Literacy level of the head of the household
   ii. Occupation of the head of the household
   iii. Occupation of the female member in the household
   iv. Annual per capita income of the household

ii. Nutritional status

v. Calorie intake per person per day

vi. Protein intake per person per day

vii. The proportion of food expenditure to total expenditure

iii. Clothing

viii. Per capita annual expenditure on clothing

iv. Housing

ix. Type of house and

x. Number of rooms per person

Sen (1976) has proposed a set of axioms for ideal poverty index. The axioms are

i. Focus axiom: any income gain of the poor, holding other incomes constant should reduce poverty.

ii. Transfer axiom" inequality reducing transfers among the poor should reduce poverty

Based on the above criteria, the quality of life index table was constructed and shown in table 5

3.4.5 AVERAGE, PERCENTAGE AND GRAPH

Apart from the above stated techniques, averages, percentage and graphs are used. To give a pictorial representation of the findings, graphs are used.

3.4.6 STATISTICAL PACKAGE

To carry out the analysis SPSS 16.5 version is used.

3.7 LIMITATIONS

1. The limitations pertaining to primary data are applicable to this study. The respondents had to give details based on recall method; which could not be cent percent accurate.

2. As the respondents are in informal sector, they could not give their monthly earning correctly. They were not employed through out the month.

3. During the field survey, the respondents were not willing to furnish the necessary data. The researcher has to wait to get the required data from them.