CHAPTER-II
STUDY DESIGN AND METHODOLOGY

One of the prime objectives of developing countries in general and India in particular has been to make the process of income and employment generation more efficient and equitable. With the gradual acceptance of informal sector as an instrument of employment and income generation and redistribution by policy makers in India, evaluation of its spatial growth becomes all the more important. It is in this context and for some other reasons listed below that we have selected the class-I town of Cuttack for our survey.

(i) Most of the earlier studies on IMS have been conducted in large cities. With the gradual acceptance of smaller cities/towns as focal points of development, studies of their IMS become necessary for formulating suitable micro level employment and investment planning policies and for testing the earlier theories developed in this regard.

(ii) In Orissa till date, not a single systematic study has been undertaken on IMS\(^3\). Samal (1989) had undertaken one study in the class-I town of Sambalpur in the western Orissa in 1989. But that was on IS as a whole - and here also Samal's study is the only study on Informal Sector in Orissa. There has been no second study on this sector till date. The class-I town of Cuttack happens to be one of the most important commercial and business centres of Orissa and it has long been considered as a typical case of urbanisation in the state. Cuttack unlike the other bigger towns of Orissa like Bhubaneswar, (the present state capital of Orissa) and Rourkela, grew from villages to towns. Hence it was chosen as a representative of the general urban areas of the state. We have consciously chosen the manufacturing segment of Cuttack city's informal sector to make the intervention policies more meaningful.
I. LOCATION OF STUDY

The study area is Cuttack town in Orissa. Orissa is a separate province within the Indian state. Known as the land of Lord Jagannath it lies on the east coast of India. The provinces (called states in India) of West Bengal, Bihar, Andhra Pradesh and Madhya Pradesh surround it on the north-east, north, south-east and west respectively. The Bay of Bengal surrounds it on the east. Known as Kalinga in the ancient days, it rose to prominence in 2nd century B.C. when the great Kharvela ruled over it. It had been invaded in the past by a number of rulers and kings like Ashoka, Samudragupta, the Mughals and the Marathas. The British took over Orissa in 1803 and amalgamated its administration with Bihar and West Bengal. It emerged as a separate province in the year 1936. The present day Orissa is having an area of 1,55,707 sq. kms. Its total population as per the latest census of 1991 is 3,15,12,170, density of population per sq. km. is 202, literacy percentage is 48.55 (male literacy is 62.37 per cent, female literacy 34.40 per cent) and the percentage of urban population to total population is 13.33. The state's economy is based on agriculture. Nearly 76% of its total population are dependent on agriculture. The state has vast amount of mineral, marine and forest resources. In spite of it, it is one of the economically poorest provinces of India. Bhubaneswar is the present state capital of Orissa. It is known as the city of temples.

Our study area that is the class-I town of Cuttack is situated in 20°-28° latitude and 85°-53° longitude. It is on the Howrah-Madras section of the South-Eastern Railway and on the Calcutta-Madras national Highway No. 5. Situated at the apex of the delta formed by the river Mahanadi and Kathajodi, this millennium silver class-I town of Orissa is having a rich socio-cultural history.
of its own. History reveals that right form the day, when the Ganga kings of Orissa shifted their
capital form Choudwar to Cuttack (King Ananga Bhima Deva-III built this town as the capital of
his empire) in the 12th Century A.D., Cuttack remained the capital (except may be with small
breaks) and the most important nerve centre of commerce, trade, administration and culture of
Orissa continuously. During the reigns of the Mughals, the Marathas and the Britishers, Cuttack
continued to remain their administrative head quarter. Even after shifting of the capital of Orissa
to Bhubaneswar in 1948, the class-I town of Cuttack is maintaining its prime position in the state
in commerce & trade, academics, culture & art and social fineries. The town was recognised as
the first class town in 1951 and has been declared a Municipal Corporation in 1994. It is now
also a divisional head quarter.

In 1951 the geographical area of the town was 59.57 sq. kms. with a total population of
102,505 which became 121.91 sq. kms. with a total population of 403,418 in 1991. This shows
that while the area of this town increased by 104.63 per cent during the said 40 years, its
population increased by 293.56 per cent. The decadal growth rates of population during the inter-
censal period of 1971-81 and 1981-91 have been 43.5 per cent and 36.3 per cent respectively.
By any means this growth rate has been very high. The sex ration as per the 1991 census is 799
females against 1000 males, average size of house hold is 5.4 and the literacy rate 56.8 per cent.
Its literacy rate is higher than the state average and is much higher than the other areas of the
state.

1991 census shows that out of the total population, the percentage of main workers is
30.28 per cent and marginal workers is 0.39 per cent (corresponding rates for the state being
32.70 per cent and 4.83 per cent respectively). The percentage of main workers in 1961 was
This implies that there has been a slight decline in the percentage of main workers over the last two census decades. Occupation wise distribution of main workers in 1990-91 shows cultivators, agricultural labourers, household industry workers and other workers forming respectively 0.78, 1.41, 2.93 and 94.88 per cents of the total main workers. In 1991 77.44 per cent of total workers of the town were engaged in informal sectors whereas 22.56 per cent were engaged in formal sectors. However, the percentage of total workers in informal sector has been gradually declining from 80.47 per cent in 1971 to 79.00 per cent in 1981 and further to 77.44 per cent in 1991. On the other hand, the percentage of total workers in the town in the formal sector has been gradually increasing from 19.53 per cent in 1971 to 21.00 per cent in 1981 and further to 22.56 percent in 1991.

The town exhibits a predominantly urban character, a spurt in commercial, industrial, educational and cultural activities. Above 4000 units of shops and commercial establishments were registered under Orissa Shop and Commercial Establishment Act and were renewed in the end of 1995. With regard to the provision of social infrastructure, the town has a good number of educational institutions but so far as civic amenities are concerned they are grossly deficient.

II. METHODOLOGY

The study is essentially primary data based. For comparison with formal sector enterprise in certain cases, secondary data sources have been resorted to. Primary data in respect of IMS units for the year 1994-95 are collected from the sample enterprises by administering a schedule-cum-questionnaire through personal interview. The data were collected from the owners of these sample enterprises. The important information sought through the schedule-cum-questionnaire are:
(i) Identification and operating characteristics of the enterprise.
(ii) Extent of income and employment generation
(iii) Constraints under which they operate
(iv) The ways and means adopted by them to overcome the constraints
(v) Their access to various organisations, institutions, markets and resources.

Secondary data for formal sector are collected from various government publications, reports and standard journals (such as census reports and publications of Bureau of statistics and Economics, Government of Orissa). They are required for comparison of the informal sector with that of the formal sector. The focus of our study is the informal manufacturing sector units as defined in the previous chapter.

The analysis and presentation of field data have been undertaken with the help of tables, simple percentages, ratios, correlation coefficients and multiple regression models.

III. SAMPLE SELECTION

The universe of informal manufacturing sector units with employment size of less than 10 was derived by pulling together the lists of such manufacturing and repairing units provided by (i) Assistant Labour commissioner, Cuttack; (ii) Directorate of Industries, Cuttack; (iii) Municipality Cuttack and (iv) street counting. Due care was taken to overcome the problems of overlapping by identifying the units common to all or some of these aforesaid sources and including them only once in the universe. Initially it was proposed to limit the universe of the study to units enumerated by the office of the Assistant Labour Commissioner, Cuttack. However, latter on, it was found that a good number of units have not been registered under the Shops and
Commercial Establishment Act. Thus, it was felt to prepare a list combining all the units enumerated by various organisations including street counting and including once only units which are common to all or some of the sources. On the basis of such a pulling together exercise it was found that the Universe consisted of about 1800 manufacturing and repairing units. Considering the facts that this research project is not financed by any external agency and this individual researcher had to meet all the expenditures in connection with this research work form his own sources, we had initially taken a sample of 10 percent of the Universe which came to 180 units\(^1\). These sample units were selected from the universe by means of simple random sampling. However, for various practical reasons we were able to survey ultimately 156 units. The samples so selected and surveyed when classified on the basis of major raw materials used were spread over nine industry groups.

**Table 2.1**

**Sample Distribution In Informal Manufacturing Sector**

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Industry Group</th>
<th>Sample Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Wood-Based</td>
<td>35</td>
</tr>
<tr>
<td>2.</td>
<td>Iron and Steel-Based</td>
<td>28</td>
</tr>
<tr>
<td>3.</td>
<td>Leather-Based</td>
<td>25</td>
</tr>
<tr>
<td>4.</td>
<td>Cloth-Based</td>
<td>10</td>
</tr>
<tr>
<td>5.</td>
<td>Food Grain-Based</td>
<td>08</td>
</tr>
<tr>
<td>6.</td>
<td>Stone-Based</td>
<td>06</td>
</tr>
<tr>
<td>7.</td>
<td>Garbages/Workshop</td>
<td>40</td>
</tr>
<tr>
<td>8.</td>
<td>Cement-Based</td>
<td>02</td>
</tr>
<tr>
<td>9.</td>
<td>Paper-Based</td>
<td>02</td>
</tr>
<tr>
<td></td>
<td>IMS as a whole</td>
<td>156</td>
</tr>
</tbody>
</table>
IV. ISSUES RAISED

The important issues raised in this study are: Does this sector have any strengths? and if yes, what should be the appropriate intervention strategy to support this sector? Do the informal manufacturing units promote higher employment opportunities and income distribution as conceived? Do they depend heavily on informal finance for their capital needs and growth? Is there any link between the informal manufacturing sector and formal sector? and if any, is it supportive or exploitative? Whether informal manufacturing sector units are more productive than formal sector manufacturing units?

V. OBJECTIVES OF THE STUDY

The major objectives of the study are as follows:

(i) To study the capital structure and generation of output, employment and income in IMS.

(ii) To analyse the indebtedness of the IMS and the importance of informal finance in it.

(iii) To examine the nature and types of linkages between the IMS and formal sector.

(iv) To study the socio-economic profile of the entrepreneurs in the IMS.

(v) In the light of the findings, to specify appropriate policy measures to facilitate the growth of IMS.
VI. HYPOTHESES

The following hypotheses are formulated and tested in the course of investigation of this study.

(i) IMS provides higher employment and output per unit of capital.

(ii) Informal credit plays a major role in financing the working capital as well as fixed capital requirements of IMS units.

(iii) The existence, expansion and growth of IMS depend on the formal sector.

VII. OUTLINE AND PLAN OF THE STUDY

The study is organised into seven chapters and the scope of each chapter is as follows:-

Chapter-I entitled "Introduction and study of literature" has dealt with the origin, evolution, working definition and significance of informal sector.

The present Chapter (i.e. Chapter-II) "Study Design And Methodology" provides a brief description of Methodology (sampling process, data collection sources etc.), area, objective, hypotheses and plan of the study.

The third chapter is entitled as "Structure and operation of the urban informal sector". It gives an account of the identification characteristics of the informal manufacturing units, their employment, output, capital structures and other operational characteristics.
Fourth chapter entitled "Socio-economic Profile of the Entrepreneurs" explains the personal characteristics of the entrepreneurs and their earning potentials.

In the fifth chapter "Source of Finance and Informal Manufacturing Sector" an attempt is made to analyse the pattern and role of finance (both formal and informal) in the growth of IMS.

The sixth, "Linkage Patterns in the Informal Manufacturing Sector" deals with the various kinds of linkages that the IMS is having with different agencies. It also explains the implications of such linkages for the IMS.

The last chapter is entitled "Summary, Conclusion and Policy Implications". It summaries the findings of the study and provides relevant suggestions for policy formulation on the part of the government and other bodies.