CHAPTER II

RESEARCH DESIGN AND OBJECTIVES OF STUDY
CHAPTER II

RESEARCH DESIGN AND OBJECTIVES OF THE STUDY

The methodology adopted in sample design, collection, analysis and interpretation of data for the study has been discussed in this chapter. The data processing, the objective of the study, and hypothesis of study has been elaborately discussed in this chapter.

II.1) RESEARCH DESIGN AND METHODOLOGY

The term Research Design is the logical strategy of the study. “A Research Design is the arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure.”

Required data was mainly collected from two sources i.e. Primary source and Secondary source.

II.1.1) PRIMARY SOURCE:

This was obtained by administering the interview schedules and questionnaires, which are specially prepared for getting reliable information from the authoritative sources. An exhaustive and detailed questionnaire was prepared to collect information.

II.1.2) SAMPLING DESIGN:

In order to collect the primary data, the researcher has studied different activities and loan procedure of MSFC, while selecting the sample units, then the researcher obtained the lists of such units, financed by MSFC, from the regional office Goa (Panaji) for Sindhudurg district and Kolhapur for Kolhapur district. It was observed that MSFC branch Sindhudurg had received 84 loan proposals during 1993-94 to 2004-05 and sanctioned 70 of them. Accordingly MSFC branch Kolhapur received 542 proposals and 481 proposals had been sanctioned in the same period.

MSFC has classified these loan proposals under 25 types of industries. For the present study it has stratified into 8 categories on the
basis of the nature of their product and each stratum. A brief description of the categories in which units are classified is as follows.

A] AGRO BASED INDUSTRIES:

The universe of this stratum comprised 14 units in Sindhudurg district and 69 units in Kolhapur district out of which 3 units and 13 units respectively were selected. These units included (a) Textile industries i.e. Manufacturing of textile, Processing Cloths, Sizing activity of cotton yarn, Synthetic fabrics, Readymade garments, Weaving of cotton and polyester yarn, Manufacturing of texturised polyester yarn, Weaving knitting of sweaters, Sizing work etc. (b) Food industries i.e. Food manufacturing industry, Production of Gur (jaggery) and khandsari, Oil and oil cake, Bread, Food product, Pepsi, Ice cream, Shake, Juice, Milk and Dairy product, Cashew product, Garam masala, Chilly powder etc.

B] FOREST BASED INDUSTRIES:

The universe of this stratum comprised 21 units only in Kolhapur district out of which 4 units were selected. In this category the units included (a) Paper industries i.e. Paper and paper, Corrugated boxes, Wood and wooden boxes etc. (b) Rubber industries i.e. Manufacturing of Rubber etc.

C] ENGINEERING BASED INDUSTRIES:

These were 12 and 149 Engineering units in this stratum in Sindhudurg and Kolhapur district respectively, out of which 2 units and 30 units respectively were selected. These included the units were Metal product, Basic metal, Manufacturing of Metal product, Manufacturing of transport equipments, Manufacturing of Machines, Manufacturing of spare parts etc.

D] CHEMICAL BASED INDUSTRIES:

The universe of this stratum comprised 1 unit in Sindhudurg district and 12 units in Kolhapur district out of which 2 units in Kolhapur district were selected. In this categories, the units were Dissolve acetylene
calcium hydroxide, Detergent powder, Manufacturing of sodium hydrosulphate by zinc oxide, Cosmetic and Beauty aids, Teflon coating on sizing cylinder, Shampoo, Pharmaceuticals, Foundry chemical, Coating non stick cookware etc.

E] MINING & MINERAL BASED INDUSTRIES:

The universe of this stratum comprised 7 units in Sindhudurg district and 19 units in Kolhapur district out of which 2 units and 4 units respectively were selected. These units included Non Metallic Mineral products, Cement, Granite slab, Granite tiles, crushed stone metal, Resin coated sand etc.

F] SERVICE BASED INDUSTRIES:

These were 26 units in Sindhudurg district and 125 units in Kolhapur district out of which 3 units and 26 units respectively selected. These units were (a) Hotel industries i.e. Hotel, Restaurants etc. (b) Hospital i.e. Medical services, Hospital and Nursing etc. (c) Printing i.e. Printing and Publishing, Computer Data processing, Xeroxing etc. (d) Other Services i.e. Dry-cleaning of cloths, Music recording, TV Cable service, Beauty Parlor cosmetic and treatment, Internet service etc. (e) Transport service i.e. Transport of goods, Transport of Passengers etc.

G] ELECTRONIC BASED INDUSTRIES:

The universe of this stratum comprised 4 units in Sindhudurg district and 6 units in Kolhapur district out of which one unit each selected. These units were Manufacturing of Electronic machinery, Manufacturing of Motor starter (Relay), Automobiles spare parts, D.C. Liners, Power supply single phase protector, Stabilizers, Tungsten filaments, Electric motors storm pings, Batteries etc.

H] MISCELLANEOUS INDUSTRIES:

Units that were spread over diverse line of activities and that did not come under any one of the above mentioned categories were included under this category. Out of 12 units in Sindhudurg district and 80 units in
Kolhapur district 3 units and 16 units respectively were selected. These units included Block vulcanizing, Spare parts, PVC rigid pipes, Wooden metallic and Aluminum, Manufacturing of steel furniture’s, coated sand, Radiators and water coolers, Injection molded packaging items, Tyre remolding, Plastic pipes, Computer testing machine, Surgical bandage, Plastic molded creates, Blow molded articles, Silver ornaments, Rot or Bearing corer, Printing bags, Drilling of holes, Agriculture inputs, Plastic items, Shot blasting, Dental Lab, HDPL box, Shell grit, Repairs of Engines of Motor vehicles, Lubrication of shutters/doors/ windows, Manufacturing of gunmetal bronze/Bushing, Engineering job work, Shell grit for Poultry feed, Pump valves and spares, Manufacturing of gunmetal, Laundry and washing of cloth, Printing lamination, Manufacturing of Hydraulic pipes, Repairs of fuel injectors pump, Fly wheels etc.

The unites are selected in each tahsil and Industrial area developed by Government in Sindhudurg and Kolhapur district except Vaibhavawadi tahsil in Sindhudurg district and Radhnagari, Gaganbavada, and Shahuwadi tahsils, Kagal five star MIDC, Gadhiglaj MIDC in Kolhapur district due to no finance from respective branches of MSFC and Dodamarg tahsil in Sindhudurg district and L.K. Akiwate MIDC, Kagal and Ajara tahsils in Kolhapur district due to negligible finance, these tahsils and MIDC’s are excluded from survey. The Maps No.II.1 and II.2 show the locations of financed units by MSFC both branches. Due care is taken and attempt is to be made to select these industrial units.
SINDHUDURG DISTRICT
INDUSTRIAL ESTATE / AREA AND TALUKA-WISE FINANCED BY MSFC
Map No.II.1

KOLHAPUR DISTRICT
INDUSTRIAL ESTATE / AREA AND
TAHSIL-WISE FINANCED BY MSFC
Stratified simple random sampling technique was adopted for selection of sample. 20 percent sample units (from each category) i.e. total 14 units out of 70 units in Sindhudurg district and total 96 units out of 481 units in Kolhapur district were selected for intensive study. The following Table No.II.1 shows the number of units up for study.

Table No.II.1

<table>
<thead>
<tr>
<th>Category of Unit</th>
<th>SINDHUDURG</th>
<th>KOLHAPUR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Units</td>
<td>Sample 20%</td>
</tr>
<tr>
<td>A] Agro Based Industries</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>B] Forest Based Industries</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>C] Engineering Based Industries</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>D] Chemical Based Industries</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>E] Mining &amp; Mineral Industries</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>F] Service Based Industries</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>G] Electronic Based Industries</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>H] Miscellaneous Industries</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

Source- Compiled by Researcher

II.1.3) PILOT SURVEY:

In order to collect the primary data, the researcher first designed a rough questionnaire, which was pre-tested before it was finally administered.

For effective questionnaire, the researcher has conducted pilot survey. The structured interviews were conducted of 10 industries from different categories. In the light of the experience gathered through pilot survey, the researcher modified the original questionnaire to make it more comprehensive and suitable for eliciting the maximum information from the respondents. A pilot survey was not included in the study.
II.1.4) FIELD WORK AND COLLECTION OF DATA:

After pilot survey the researcher prepared final questionnaire and completed filed work with the help of such structured questionnaire. The questionnaire is designed with due care and is divided into General information, Employment generation, Wages, Production, Financial and loan information etc.

The researcher had contacted first owner or manager or Departmental head or related Authority of the industry and takes appointment for interview then prepare scheduled for interview. As per interview schedule researcher had taken interviews. All the interviews are taken in a number of sitting. The attempt is also made to collect important information through cross-questions. In few areas, relevant suggestions of the borrowers and staff of MSFC are considered.

At the time of interview detailed discussion, that were held with the concerned officers of MSFC, were of much use in throwing light on the problems faced by them, while sanctioning the loans as well as the problems faced by the borrowers while taking the loans and other facilities provided by MSFC.

During the industrial survey, the researcher has taken short notes i.e. information relevant but not the part of the questionnaire. These short notes are considered with due care at the time of the thesis writing. The survey was conducted in Sindhudurg and Kolhapur districts.

About 14 sample borrowers in Sindhudurg district and 96 sample borrowers in Kolhapur district were interviewed in detail with a view to understand their problems through a questionnaire, which is enclosed in Appendix.

II.1.5) DATA PROCESSING:

The collected data was processed with the help of computer by using following quantitative techniques.

1) Simple Growth Rate (SGR)-

Two observations SGR used to calculated Growth of Production, Fixed Assets, Working Capital, Total Capital Employed, Number of units,
Employment generated, their wages of Sindhudurg and Kolhapur districts.

SGR calculated with the help of following formula.

\[ SGR = \frac{Y_t - Y_o}{Y_o} \times 100 \]

\( Y_t = \) Current Year
\( Y_o = \) Previous Year

2) Compound Growth Rate (CGR)-

CGR used to calculate the Growth of Investment in Machinery in Sindhudurg and Kolhapur districts

Two observations Compound Growth Rate -

\[ CGR = \frac{(Y_t)^{1/t}}{(Y_o)^{1/0}} - 1 \times 100 \]

\( Y_t = \) Current Year
\( Y_o = \) Previous Year

3) Co-relation analysis used for study between relationship of age and education of respondents. Correlation co-efficient calculated as under.

\[ r = \frac{N \times \Sigma xy - (\Sigma x \times \Sigma y)}{\sqrt{N \times \Sigma x^2 - (\Sigma x)^2} \times \sqrt{N \times \Sigma y^2 - (\Sigma y)^2}} \]

4) Range is used to measures to absolute and relative variability.

\[ \text{Range} = \text{Maximum level} - \text{Minimum level} \]

5) Mean-

\[ \frac{\Sigma x}{N} \]

6) Ratios-

1) Fixed assets to Total capital employed = \( \frac{\text{Total Fixed Assets}}{\text{Total capital employed}} \times 100 \)
II. Working capital to Total capital employed = \[ \frac{\text{Total Working capital}}{\text{Total capital employed}} \times 100 \]

II.1.6) METHOD OF DATA ANALYSIS:

After processing, data was analyzed with the help of following descriptive statistical tools.

1) Tabular Analysis
2) Graphical Analysis
3) Ratio Analysis
4) Average
5) Percentages

Data is analyzed and interpreted table-wise or in opinion type and then conclusions are drawn. At the end suggestions are given at point of inquiry itself.

II.1.7) SECONDARY SOURCE:

For the purpose of study the necessary data was made available from secondary sources. The main sources of data were as follows

- Annual Reports of MSFC for the year 1992-93 to 2005-06
- Records maintained by Sindhudurg and Kolhapur branches of MSFC were able to provide detailed information regarding industrial units, loan applications, loan sanctions, loan disbursements, recovery performance etc.
- The pamphlets, brochures and booklets published by MSFC were able to provide detailed information regarding various financial assistance scheme of MSFC.
- Golden Jubilee SOUVENIR published by MSFC provides information regarding performance of MSFC.
- Record maintained by MIDC and DIC Sindhudurg and Kolhapur branch.
- The currency and finance report of RBI and RBI bulletins for various years were very much useful in generating the data regarding the financial assistance of various financial institutions for respective years.
II.2) OBJECTIVES OF THE STUDY:

The Maharashtra State Financial Corporation completed fifty years of its services to the nation in the year 2003. Fifty years in the life of an institution may not be a long period. Yet it is quiet a reasonable period making an objective assessment of its working. It is a financial institution, which provides financial assistance to the industrial concerns, each industrial units has an interest in it, which would like to work successfully. This study has been undertaken to consider the role played by MSFC.

The objectives of the study are –

1) To study the financial schemes of MSFC and its impact on industrial development in Sindhudurg and Kolhapur districts.
2) To understand the role of MSFC in development of Sindhudurg and Kolhapur districts.
3) To study the working pattern under different activities of MSFC.
4) To know the opinion of the clients about the MSFC assistance in success their business.
5) To understand the problems faced by MSFC in fulfilling their objectives.
6) To offer the suggestions for further development, if necessary.
II.3) HYPOTHESIS OF THE STUDY:

In the parlance of this study hypothesis implies basic statement formulated their confirmation in subsequent analysis done in different chapters of the study, these are the outcomes set before the study for conclusions.

The present study is mainly oriented with the analysis of the performance of MSFC and their impact on industrial development of Sindhudurg and Kolhapur districts.

Precisely the hypothesis set before the studies are–

1) MSFC has contributed towards growth and development of Sindhudurg and Kolhapur districts.

2) MSFC is successful in carrying out its activity smoothly.

3) Beneficiaries approaching to MSFC are facing various types of problems.

II.4) CHAPTER SCHEME:

The research work divided into seven chapters is as follows.

Chapter I: INTRODUCTION

This chapter deals with introduction. It also covers Role of institutional finance, Significance of study, Development Banking in India, Role of State Financial Corporations, Performance of Development Banks, Scope of the study and Limitations of the study.

Chapter II: RESEARCH DESIGN AND OBJECTIVE OF THE STUDY

This chapter covers Research Design and Methodology along with Objectives of the study, Hypothesis of the study and Chapter scheme.

Chapter III: PROFILE OF MSFC

This chapter brings out Introduction of MSFC, Historical development of MSFC, Bombay State Financial Corporation, Formation of MSFC, Managing Directors, Functions and objective, Organization setup of MSFC, Services rendered by MSFC, Management of MSFC, Board

Chapter IV: PROFILE OF SINDHUDURG AND KOLHAPUR DISTRICTS:

This chapter is about Profile of Sindhudurg district, Profile of Kolhapur district and Industrial area and estate in Sindhudurg and Kolhapur districts

Chapter V: ROLE OF MSFC IN SINDHUDURG AND KOLHAPUR DISTRICTS

This chapter elaborates Introduction, financial schemes implemented for Sindhudurg and Kolhapur districts, Performance of MSFC in Sindhudurg and Kolhapur districts and Problems of Industrial units

Chapter VI: ANALYSIS AND INTERPRETATION OF DATD

This chapter highlights the comparative analysis of collected data in respect of the role of MSFC in general and industrial development in Sindhudurg and Kolhapur districts in detail. Chapter covers Introduction, General aspects of study, financial activity of MSFC and Performance, Development/Growth and Problems

Chapter VII: CONCLUSION AND SUGGESTION

This chapter summarizes drawn conclusions and suggests some measures.