CHAPTER-III

RESEARCH METHODOLOGY

The sources and methods of collecting data, information, problems and analysis are discussed in this chapter. For the purpose the previous research studies were reviewed and secondary data was collected to enhance the understanding of the area and the development process. Actually, it was a process to make an assessment of the issues raised by the members of the industrial associations. Based on the understanding from literature review, the data needs were established and options for data gathering techniques were considered. Questionnaire survey was adopted to gather information regarding the problem of the study.

The present chapter is divided into two parts. In the first part, development of research model or plan of study, which highlights that why this study is planned or what is targeted to achieve and what need to be done. It represents the whole picture of the study. Second part is the application of research plain in the field. This is the main part of the chapter. It also represents the tools and techniques used in implementing the research model.

Industries are diminishing in the Wagle industrial area and it is the need of the hour that gap between the government and the industries is bridged with the help of an industrial association. The topic was selected as this area is grossly under researched.

The research is confined to the micro and small scale sector in relation to the word done by TSSIA. So the review of the available literature on different issues in the MSME sector thereby highlighting their problems and what role an industrial association can play in the development of the same.

It is clear that the needs of the large scale industries and the MSME is totally different and
that the associations catering to such different needs cannot be one and the same for both the large scale sector and the MSME sector. Therefore, it is necessary to review the facilities or services offered by the industrial associations to the MSME sector. The MSMEs are over burdened with lots of problems generally being a one man army and hence they have to run pillar to post for solving their problems with a lot of government departments, officers and licenses involved to run a show.

Though the technology and economy is developing, MSME have still the burden to face critical situations, bad finances, manpower crunch, high interest rates, lack of infrastructure. Therefore all these issues provide help in selecting the topic for this thesis.

**Objective of Research:**

1. The need of Industrial Associations
2. The problems faced by the MSME sector and how the associations address them
3. Growth of Industries through the Associations
4. Role of Associations in “Policy Making” at the State and Central Government level
5. Role in bridging gap of Technological gap.
6. Contribution of Other Associations from the nearby regions in TSSIA’s growth
7. TSSIA’s Achievement of the Public Private Partnership between Government and the Industries
8. TSSIA’s Role in Technological enhancement

**Hypothesis**

A hypothesis is an assumption about the relationship between variables or the level of influence of independent variables on the dependent variable. In our research here the Independent variable would be TSSIA

\[ Ha = \text{TSSIA leads to Industrial Development in Thane} \]

\[ Ho = \text{TSSIA doesn’t lead to Industrial Development in Thane} \]
**Research Design**

Descriptive method is being used up in this research design. The research method for a study has different stages and strategies to work on the issue. The ways by which the data is collected are called research tools. These are important though different in different studies. Based on the nature of the study the most appropriate methods are used that can answer the questions related to the objectives and hypotheses of the study. In this study, the research tools are a combination of different techniques; primary data and secondary data have been used and analyzed using statistical techniques.

**Sample Method**

The most frequently used approaches for statistical analysis of survey data and estimation of input/output relationship using regression analysis are based on a simple random sample for data collection. Unfortunately simple random sampling is rarely practical in large scale surveys. A multi-stage procedure can greatly simplify construction of a sample frame, while ensuring that the survey population is adequately covered.

However, the conventional formulae yield biased population parameter estimates for samples that are not randomly selected. Alternative, and often far more complex formula are required to reduce or eliminate biases.

**Sample Size**

The primary data for the study is collected from the pre-tested interview schedule. The samples are chosen by the method of simple random sampling without sample replacement. 580 samples have chosen from the study area and collected samples were scrutinized to check the validity and found 79 questionnaires as defective and they are removed finally 501 sample was taken for the purpose of the study.

The sampling procedure is narrated below;
The formula for sample size is as follows
\[ n = \frac{(ZS/E)^2}{2} \]
Where,
Z= Expected confident level of 95 percentile 1.96
S= Population Standard Deviation
E= Acceptance level of sampling errors
\[ n = \frac{(1.96)(0.25)/0.0216)^2}{2} \]
= 514.61
Then,
\[ n^* = \frac{(N-n/N)}{n}n \]
\[ n^* = \frac{(20590-514.61)/20590} * 514.61 \]
= 501.74
Sample Size = 501

The sampling framework developed for the current study is multi-stage sampling method. In the first stage, the study area is selected which are the industrial belts in thane city limits, second stage, the members of the industrial association are given more preference in the study areas.

**Research Area**

The research or Sample areas are Wagle estate, Punjani industrial estate, Upvan. These areas are forming the part of the industrial hub at thane and the industries in these areas and are within the Thane Municipal Corporation limits though comes under semi urban area have a wide business and educational surroundings. Thane in the TMC limits is a multi dimensional city with all types of sectors like industrial, service, residential, real estate, retail etc.

Thane is a very important city when its comes to the industrial development as wagle estate was the first industrial hub in then Mumbai. And thane is a city which has seen the industrialization evolve, saturate and the life cycle of the industrialization in Mumbai.

All the participants in this research are connected to the industries and or industrial development
and/or are members of TSSIA and a most include the micro, small and medium size business holders. The activities of the businesses are closely related to the industrial sector and allied services sector.

The participants include both male and female, belong to different age groups, educational qualifications, occupations, levels of income, type of living place, purpose of business/industry, tenure of business, problems faced, market segmentation etc. All the participants belong to thane city and some way or the other related to industrial sector.

**Collection of Data**

The collection of data consists of both primary and secondary data. The primary data shall be collected by floating a structured questionnaire. The discussions opinions and interactions with the people would provide a better understanding of the industrial associations in thane.

In course of preparation of the thesis, exploratory studies have been undertaken. In the ambit of exploratory research strategy, detailed search of the literature has been carried out. Literature review has been performed in order to get secondary data.

Apart from documentary sources viz.-books, journals, reports of various committees constituted to look into tax reforms; multiple sources like area based sources viz.-government reports, budget documents, economic surveys and time-series based sources like statistical reports published by government have also been consulted. Tertiary literary sources called search tools have been used to locate relevant secondary literature.

The structured questionnaire consists of 53 No of questions.

**Statistical Methods:**

The classified data were subjected to the statistical method of analysis. Data collected from the survey is analysed using various statistical techniques by IBM SPSS Ver 20. The statistical
methods adopted consisted of Simple Arithmetic mean, coefficient of contingency, and for testing Null hypothesis Chi-square test and Students t-test were adopted.

The data and methods were classified in different tables and chi-square tests of different null hypothesis are given in the technical analysis of the subject.

**Methods of Reporting**

The research reporting text consists of graphs, tables, bar diagrams, line diagrams, pie charts for effective understanding.