CHAPTER III

METHOD AND SCOPE OF STUDY

Introduction

The study considered entrepreneurs from the state of Maharashtra. A majority of them had begun their enterprise as small scale entrepreneurs. Entrepreneurs considered for the purpose of the sample were those who had won awards for their innovative products. However, all such awards which did not consider product innovations were thus not considered. Awards given to individuals for their innovative business approaches; for industrial excellence or citations given for recognition of individual work, were not considered. All the awards considered for determining the sample had the following requirements -

1. To be Indian Nationals.
2. To have an innovative (new) product.
3. To submit the financial details of the working of their enterprise of the past three years.

Most of the award winners were noted to have applied for the awards, only after their products were already put in the market. However, as a measure of the increasing popularity of the awards, the G S Parkhe awards in the second half of the 1970s were given to certain appreciable R & D work done by individuals. These individuals were employees of large organisations such as Larsen and Toubro, or the Public Works Department, Govt. of India too. Thus, though, these award winners were not entrepreneurs, their innovative products had been
commercially marketed by their parent organisations. These award winning products were also displayed before the evaluation panel as working models.

Awards were given to innovative products and not services. Thus all units considered were manufacturing units.

The following aspects are discussed in this chapter:
1. Scope of the Study.
2. Locations of the Industries.
3. Relevance of the Study.
4. Objectives of the Study.
5. Hypothesis.
6. Background of the Sample and Sample Selection.
7. Questionnaire.
8. Limitations of the Study.

**Scope of the study:**

This study is done for the state of Maharashtra. However, as many of the districts in the state did not have any award winners, these districts were not considered for sample selection, e.g. Beed, Parbhani, Jalna, Chandrapur, Gadhchiroli etc. had to be excluded from the sample, since there wasn’t a single award winner from any of these districts.
The first award given away by the Mahratta Chamber of Commerce and Industries was in the year 1947. Award winners up to 1993 were considered for the sample selection. Thus a period of four and a half decades was considered for this study. Also, though the state of Maharashtra was the area covered under study, Belgaum, Dharwad, Goa were a part of Maharashtra till 1960. Thus award winners belonging to these places prior to the division have been considered in the sample.

Though award winners were taken from varied locations of the state of Maharashtra, they were not representatives of that place. For instance there were 5 units each in Satara and Nasik. But only 2 entrepreneurs at each of the locations, had operating units and were traceable. Thus statistically 60% of the entrepreneurs, were not traceable. These units were also noted to be closed down. That does not mean that more number of units were non-operating in these locations. In this sense a study of locations may not be considered representative singularly.

Entrepreneurs considered in the sample had their units in commercially defined areas. None of the entrepreneurs had cottage or household operational industries. None of the units were tiny in nature. Most of the units were in the organised sector.

Though the sample was selected with a broad base, each of the industry grouping was so large in nature that units even within an industry were not
comparable e.g. in an industry group like engineering, there was an award winner who had won an award for a tiny import substitute spare whereas another had won an award for an entire plant/equipment development and were thus not comparable.

No published information was available about the award winners except data with the respective chambers of commerce on the award details of the award winners. All data was procured only from the questionnaires.
Goods manufactured by the small industries have little or no quality control or quality assurance. Thus the award winning products may not have been the best in the industry in terms of quality.

**Location of the industries:**

A map of the location of all the award-winners appears as annexure II. However for the purposes of data collection, areas were divided into seven locations as under:
1. Pune
2. Bombay
3. Satara / Sangli / Solapur / Miraj
4. Ichalkaranji / Kolhapur
5. Ahemdnagar / Aurangabad
6. Wardha / Amravati / Nagpur
7. Nasik
Out of these seven locations, quantitatively, the highest of award-winners were from Pune and Bombay. Award-winners were located in various parts of the state. But since it was physically impossible to contact all of them personally, some had to be contacted by post too. Some locations like Jalgaon, Belgaum, certain areas in Konkan; had a single award winner each. Table 3.1 shows an area wise classification of the sample.

TABLE 3.1 Area-wise classification of the sample

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Area</th>
<th>Number of units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bombay</td>
<td>49</td>
</tr>
<tr>
<td>2</td>
<td>Pune</td>
<td>182</td>
</tr>
<tr>
<td>3</td>
<td>Wardha / Amaravati / Nagpur</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Satara / Solapur / Sangli / Miraj</td>
<td>27</td>
</tr>
<tr>
<td>5</td>
<td>Ichalkaranji / Kolhapur</td>
<td>27</td>
</tr>
<tr>
<td>6</td>
<td>Ahemadnagar / Aurangabad</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>Nasik</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>Others</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>321</td>
</tr>
</tbody>
</table>

There were 435 award winners in the state of Maharashtra. Since this represents a good sample size, this study was limited to the state of Maharashtra.
The map in annexure II also illustrates that barring the areas of Osmanabad, Beed, Jalna, Parbhani, Yavatmal and Chandrapur, all the other areas were represented by award winning entrepreneurs.

Thus the scope of this study extends to all award winners who have secured awards for their innovative products, from the state of Maharashtra and fall generally in the small scale sector.

Certain restrictions had to be laid down so as to contain the study in the specified time frame:

1. Entrepreneurs considered were those who had won awards for their innovative products.

2. Most technocrat entrepreneurs begin their enterprise as a small scale industry. Thus as a corollary, this study was conducted mainly in the small scale sector. However, in cases where the enterprise had become medium scale, the scope was widened accordingly. Two award winners from the large scale were not considered at all: one an employee from Larsen And Toubro, and another a director on the board of Finolex Industries.

3. Since a large proportion of award-winners belonged to western Maharashtra, greater emphasis was automatically given to Bombay and Pune. However, so as to formulate an unbiased sample, the other districts of Maharashtra were considered representatively, too.
4. Though most of the units were situated in the notified industrial areas of the state, units outside the industrial areas as well as those within the city limits were also considered.

5. To make logical and authentic conclusions to the study, and yet to complete this study in the specified time frame, a good sized sample had to be considered. What could be the ‘appropriate size’ was not decided initially. As information began pouring in, a sample of nearly one hundred award winners or units was considered good enough to formulate representative conclusions.

6. To broaden the outlook of this study, units from varied industries were taken into the sample.

Select definitions: 

The phrase ‘award winning entrepreneur’ needs to be explained here. An entrepreneur in the context of this study meant a person in charge of an enterprise. It meant he could be a partner, a director, or even a person who had risen to a controllable order by the process of hierarchy. An entrepreneur here had to have been instrumental in setting up the unit and must have an active controllable interest in it.

‘Award-winning’ entrepreneur was an entrepreneur who had won at least one of the awards considered under the study. He had to have won this award for innovativeness of the product / process or the development of a new market. Also, mere participation was not considered enough for qualifying into the sample.
Relevance of the study:

The relevance of this study is to be appreciated from the point of view of the following:

1. Innovativeness among entrepreneurs.
3. Technocrat entrepreneurship in small scale industrialisation.

Entrepreneurs are the backbone of economic development. From the example of Japan and other developed countries, it has been noticed that small scale industrialisation has been the key to development. In India too, small scale industrialisation was encouraged by the Government. Subsidised financing for projects, as well as working capital, demarked industrial estates, sales tax / excise concessions, duty drawbacks, small scale reservation products etc. were some of the measures used by the state as well as central government to push small scale industries to the fore.

TABLE 3.2 small scale sector growth over four decades

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of units - lakhs</th>
<th>Employment nos.- lakhs</th>
<th>Investment Rs. Crores</th>
<th>Production Rs. Crores Current Prices</th>
<th>Exports Rs. Crores</th>
<th>% share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950 - 51</td>
<td>0.16</td>
<td>7.00</td>
<td>120</td>
<td>615</td>
<td>40</td>
<td>5.2</td>
</tr>
<tr>
<td>1960 - 61</td>
<td>0.37</td>
<td>14.00</td>
<td>235</td>
<td>1280</td>
<td>15</td>
<td>6.5</td>
</tr>
<tr>
<td>1970 - 71</td>
<td>1.4</td>
<td>35.50</td>
<td>1677</td>
<td>5161</td>
<td>150</td>
<td>10.9</td>
</tr>
<tr>
<td>1980 - 81</td>
<td>8.74</td>
<td>71.00</td>
<td>5850</td>
<td>28060</td>
<td>1643</td>
<td>24.5</td>
</tr>
<tr>
<td>1990 - 91</td>
<td>19.38</td>
<td>124.30</td>
<td>19302</td>
<td>155340</td>
<td>9100</td>
<td>28.2</td>
</tr>
</tbody>
</table>
Small scale industries have grown manifold over the years. Table 3.2 indicates that every decade has shown a growth of over 100% in terms of number of units, employment numbers, production levels, exports, investments etc. in the small sector.

In a labour abundant and capital scarce country like India, small scale industries play a significant role in the country's industrialisation. Small scale industries help dispersal of industries, provide employment locally, and nurture entrepreneurial talent.

Awards are a motivational vehicle to technocrat entrepreneurs and thus studying award winners is relevant to encouragement to technocrat entrepreneurs.

This study also tries to find out whether the financial institutions look at award winning entrepreneurs with a different view. Since technocrats are technically qualified professionals with no entrepreneurial history and background, they badly need financial support (which is expected to be offered by the financial institutions) and other entrepreneurial external motivations. An important question is - Do awards give this motivational support?

Also considering that innovative technocrats have a technically superior product as compared to the rest, is it that these entrepreneurs end up being financially successful?
A study of these aspects would certainly be relevant in the light of the present day emphasis on small scale industries and encouragement offered to technocrat entrepreneurs by the government in the process of industrialisation.

The relevance of this study lies in the fact that it concentrates on the motivational as well as the financial aspects of the entrepreneurs.

**Objectives of the study:**

The objectives of this study are:

1. To study entrepreneurship with a special emphasis on innovativeness.
2. To identify all the awards given in the state of Maharashtra to innovative entrepreneurs.
3. To study award winning entrepreneurs, their enterprise, products, financial working of the units and the motivational factors.
4. To deduce conclusions from the above study.

**The problem:**

With increasing emphasis and encouragement offered to technocrat entrepreneurs by the state government, it becomes important to study whether the financial subsidies are really going to the right entrepreneur. Do these technically superior entrepreneurs use these funds more effectively and efficiently than the others? Do the stipulated financial institutions treat such entrepreneurs differently and take any cognisance of their technical superiority?
Such and many more questions that arose from the small scale industrialisation process in the country led to the development of the problem for this study.

All technocrat entrepreneurs are necessarily entrepreneurs with adequate technical background and experience and expertise in their area of operations. This leads to their unusual confidence in the technical superiority of the product. They tend to side track or ignore the marketing aspect. In today's competitive field, marketing needs to be emphasised as a specific area of decision making. No effort should be spared in tapping new markets or newer market potentials, whatever be the technical superiority of the product. As Peter Drucker (*28) puts it, tapping newer markets is also innovativeness. The weakness in this area gradually leads to a mounting stock of finished goods. This in turn eats away the working capital. Most projects get delayed at the implementation stage, due either to the non availability of timely finance or improper project management. Mounting amortisation costs use up a portion of the working capital. Thus the enterprise goes into the funding problem cycle right in the beginning. It is ironical that the small scale sector which contributes to 40% of the total industry output, has been provided with just 22% quota of the total credit disbursed to the industrial sector by the commercial banks. This makes a lot many small scale industrialists depend upon non-institutional sources for their financial requirements (*29).


In most cases, for a small scale industry, the main promoter is the sole decision maker in the enterprise. However, he lacks in certain areas of operation of the unit due to his physical, educational and other limitations. Moreover, since he is a technocrat entrepreneur, he does not very often have a financial back up. This acts as a limitation to spending on product promotion, advertising and marketing too. He faces a resource crunch since the amount of money he can really spend on marketing becomes meagre.

Personal discussions with the award winners and the data collected led to pinpointing the real problem areas that all small scale entrepreneurs and especially technocrats face. Discussions with these entrepreneurs led to spelling out the problems faced by them. As stated in the earlier chapter, the solutions to these problems led to innovations.

Most of the problems noticed in case of the entrepreneurs studied, were in the following areas:

1. Finances: working capital as well as project finances given by the financial institutions.
2. Commercial application of the products, or more generally speaking - marketing.

In this study however, the aspect of marketing was not considered. In the personal discussions with the entrepreneurs it was noted that most entrepreneurs expected external help in the area of marketing. Some of them suggested that the award giving organisations could do this service, whereas some suggested that
the award giving organisations could help by co-ordinating with some marketing agencies for this purpose. Most of the award winners felt that the award giving organisations could contribute more than merely giving the awards.

Technocrats are more inclined towards manufacturing processes. However, as discussed in the earlier chapter, their achievement motivation (N-ach) is much higher. One of the motivational forces in the achievement process is rewards/awards which give social recognition to an entrepreneur.

Thus this study was made with two aspects:
1. Motivational force in applying for the awards and getting them.
2. Financial strength and health of these award winning entrepreneurs

Both these aspects were given importance in the study.

**Hypothesis:**

greater possibility for the award winning entrepreneurs to be successful in their ventures over a period of time.
Background of the sample:

Awards for industrial excellence, business excellence and innovation amongst entrepreneurs are given by a varied number of business organisations. These are either given by the various chambers of commerce located in different cities, the regional industries/associations, some philanthropic organisations/trusts or by government agencies like the DIC etc. For the purposes of determining the sample, all the awards given in the State of Maharashtra were enumerated.

Since the focus of this study is on innovation, awards given only for innovation of products/processes or markets were taken into consideration. However, an exhaustive list of other awards has also been dealt with in the earlier chapter.

The awards considered for the purposes of the sample were:

1. G D Parkhe awards given by the Maharatta Chamber of Commerce and Industries, Pune.
2. M L Dahanukar Entrepreneurship awards given by the Maharashtra Chamber of Commerce, Mumbai.
3. Dadasaheb Raval new entrepreneurship awards are given by the Maharashtra Chamber of Commerce, Mumbai.
4. Women entrepreneurship awards are given by the ladies wing of the Maharashtra Chamber of Commerce, Mumbai.

A number of awards are also given by other organisations like the awards initiated by the Ambad (Nasik) MIDC for entrepreneurs located in the area, or
the FIE Foundation awards given for business excellence or the rolls of honour given by the Nagpur Industries Association etc. But since these were not necessarily given to the entrepreneurs for their innovative skills, these awards were not considered for the purposes of selection of the sample.

Details of the awards initiated by them were taken from the respective Chambers of commerce in Pune and Mumbai. Both the Mahratta Chamber of Commerce, Pune, and the Maharashtra Chamber of Commerce, Mumbai, had the following details of their award winners and their enterprises:
1. Name of the award winner.
2. Name of the enterprise (the award winner’s firm)
3. Year in which the award was given.
4. The product for which the award was given.
5. Address and a brief write up of the enterprise.

The oldest of the four above mentioned awards is the G D Parkhe award given by the MCCI, Pune. These were first given away in 1947. Thus the earliest award winner taken in the sample had won an award in 1947 and the last year considered was 1993. In the period considered under study between 1947 and 1993, there were 435 award winners in all.

The 435 award winners were classified in the following manner:
1. According to the industry that their award winning product belonged to.
2. According to the decade in which they had won the award.
This incorporated award winners of four decades. Some of the earlier award winners were not alive any more and their second generation was now in charge of the operations.

Table 3.3 Classification of awards

<table>
<thead>
<tr>
<th>Year</th>
<th>G D Parkhe Award</th>
<th>M L Dahanukar Award</th>
<th>Women entrepreneurship award</th>
<th>Dadasaheb Raval Award</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947 - 50</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>1951 - 60</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>1961 - 70</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
<td>64</td>
</tr>
<tr>
<td>1971 - 80</td>
<td>125</td>
<td>22</td>
<td></td>
<td></td>
<td>147</td>
</tr>
<tr>
<td>1981 - 90</td>
<td>109</td>
<td>23</td>
<td>15</td>
<td>2</td>
<td>149</td>
</tr>
<tr>
<td>1991 - 93</td>
<td>25</td>
<td></td>
<td>10</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>TOTAL</td>
<td>363</td>
<td>45</td>
<td>25</td>
<td>2</td>
<td>435</td>
</tr>
</tbody>
</table>

Table 3.3 gives the decade-wise distribution of the award winners. According to this, 83% of the award winners had won the G D Parkhe award. Table 3.4 gives the industry-wise distribution of the awards, which shows that a majority of the award winners belonged to the engineering industry.
TABLE 3.4  Industry-wise classification of award winners

<table>
<thead>
<tr>
<th>SI No.</th>
<th>Particulars</th>
<th>Number of award winners</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Engineering and engineering spares</td>
<td>181</td>
</tr>
<tr>
<td>2</td>
<td>Chemicals including photographic articles</td>
<td>47</td>
</tr>
<tr>
<td>3</td>
<td>Pharmaceuticals and formulations</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Domestic / stationary / toys etc.</td>
<td>81</td>
</tr>
<tr>
<td>5</td>
<td>Educational apparatus</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>Electronics and allied</td>
<td>34</td>
</tr>
<tr>
<td>7</td>
<td>Electricals including lighting etc.</td>
<td>44</td>
</tr>
<tr>
<td>8</td>
<td>Others</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>435</td>
</tr>
</tbody>
</table>

From a total of 435 award winners, some award winners could not be included while selecting the sample. Table 3.5 gives details of all those award winners who had to be excluded from the sample. The reasons for their exclusion were:

1. Those not prepared to respond to the questionnaire - due to reasons given as being too busy / had no time for such activities, or as no interest in answering questionnaires.

2. Units or entrepreneurs who were not traceable - due to insufficient address or change in address.

3. Entrepreneurs who were unable to reply - either because the award winner had expired or the unit had been closed.
4. Entrepreneurs who were not traceable because their units had been closed down.
5. Entrepreneurs who did not respond in spite of contacts made by post, and subsequent three reminders.

Table 3.5 Sample Selection

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Criteria for selection</th>
<th>Number of award winners</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total number of respondents considered</td>
<td>435</td>
</tr>
<tr>
<td>2</td>
<td>Number of units considered</td>
<td>383</td>
</tr>
<tr>
<td>3</td>
<td>Respondents who replied that they can not answer the questionnaire (due to death, sickness etc.)</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Respondents whose units are closed</td>
<td>13</td>
</tr>
<tr>
<td>5</td>
<td>Respondents not prepared to respond</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Units not traced due to insufficient address, change in address etc.</td>
<td>38</td>
</tr>
<tr>
<td>7</td>
<td>Units contacted by post, but did not respond even after 3 reminders</td>
<td>58</td>
</tr>
<tr>
<td>8</td>
<td>Total final number of units considered</td>
<td>263</td>
</tr>
</tbody>
</table>

**Sample selection:**

In the above mentioned manner, 114 respondents were eliminated from the total population of 435 award winners. The total number of entrepreneurs considered for the determination of the sample thus were 321. These were further classified
area-wise, as shown in table 3.4. 57% of these entrepreneurs belonged to Pune and 15% to Bombay. Only 27% of the total sample was from the other areas.

Table 3.3 indicates that 58% of the total award-winners belonged to a couple of decades between 1971 and 1990. The maximum number of Parkhe awards were given between 1971 and 1980. This period also coincides with the time when the state government started encouraging small scale industry and offered special schemes to technocrat entrepreneurs. Around the same period, a committee from the Mahratta Chamber of Commerce and Industries, Pune, had made special visits to Kolhapur and Miraj, with a view to popularise their awards.

Table 3.4 indicates that 42% of the award winners had engineering products. This sector of the industry was too broad in nature and offered a vast opportunity in terms of import substitution as well as industrial advancement. The other industry which offered a good avenue for innovation was the domestic products group.

Since the highest number of award winners have got the G D Parkhe awards given by MCCI, Pune, it also indicates that it was easier for the local entrepreneurs from Pune to submit entries, display products, give demonstrations etc. One particular woman entrepreneur had complained that she had not even received the application form for the G D Parkhe award in time, due to
geographical distance. Table 3.1 also indicates that there are lesser number of award winners from the Vidarbha area.

The entire sample of 321 was contacted for data collection. The researcher visited the following places to collect data:

1. Bombay
2. Pune
3. Satara
4. Sangli
5. Miraj
6. Ichalkaranji
7. Kolhapur
8. Nasik, and

All the other areas were contacted by post. But the response in these cases was very poor. Despite sending three reminders, out of the 62 entrepreneurs who were contacted by post only 7 replied back along with the filled questionnaire. Three more who communicated their inability to answer the questionnaire.

Since the objective was to collect data from a sample as large as possible in the stipulated time period, no particular approach was followed while selecting the
sample, such as random / selective / stratified sampling. The method used for the selection of the sample was the 'No response error method'.

The idea was to reach a large sample so as to get more authentic data and better results. Questionnaires were handed out to all the 321 entrepreneurs. But barring a very few cases, more than three visits had to be made to retrieve a fully filled questionnaire. Many units which had initially responded enthusiastically to cooperate; in spite of reminders thereafter, did not do so. Entrepreneurs from location other than Pune did respond enthusiastically when visited, but did not continue to do so later. Repeated visits to all such were not possible. Repeated visits, however, were made to Bombay.

Table 3.1 denotes the numerical classification of the units in various locations of the State. This classification was done by grouping geographically various award winners for the purpose of making personal visits to select areas.

Table 3.3 shows the classification of awards decade-wise and awards wise. All the 435 award winners were classified in the following manner:
1. According to the industry that their award winning product belonged to, and
2. According to the decade in which they had won the award.

Table 3.2 gives an industry wise classification of the award winners. This classification is done on the basis of details given by the award winners in the
The background of the questionnaire:

The objective behind the in depth study was to get acquainted with the individuals who were award winners and discuss with them the problems that existed in their units. The questionnaire thus had to be designed in a manner such that all areas of study are covered, and offers scope for discussions with the entrepreneurs. To satisfy this intention, a wide spread and broad sample had to be considered. Whilst collecting data, no choice or selectivity was enforced. However, among the 99 award winners selected in the sample, 7 were those who were not engaged in any industrial activity. In other words, they were award winners who had won awards for their innovation. Though they had displayed the successful working of their award winning product, they did not do the same under the umbrella of an industrial activity. Obviously, these award winners would not reply to questions pertaining to financial details of the unit or questions on project financing, sales turnover or profit and loss etc.

There were award winners who had won awards many times. Double accounting of such award winners had to be avoided.

Following broad areas were questioned:

1. The background of the entrepreneur and his unit.
2. Details of the award winning product. This included the product idea, development of the product etc.
3. Motivation towards applying for the award and what it does for the entrepreneurs - whether it enhances the social status, offers financial gains, or changes the financial institutions' perception of the award winners etc.

4. Financial details of the concerned industrial unit - from project financing up to the balance sheet and profit and loss.

5. The product mix in a unit.

6. Suggestions and comments on the awards.

Thus, barring the suggestions, there were about 60 questions to be answered by the respondents. Each question had multiple choices for answering. Questions where quantitative answers were expected, YES/NO option was provided. Even for questions where expected answers were subjective in nature, e.g. 'whether giving awards can encourage small scale industries', YES/No option was offered.

Care had to be specifically taken for questions in the areas like financial details. This was one area where data sought had to be accurate, but on the part of the entrepreneurs, there could be utmost resistance for furnishing this data. Here, it was decided to take data in three stages of operations of the unit. Also in case of financial figures, a range was provided, so as to avoid any discomfort they might face in providing confidential or non-revealable information.

While addressing the questionnaire to the respondents, if questions asked required backtracking of information, this would reduce the probability of
getting complete questionnaires, and respondents would take much longer to fill up these. This could end up in an insufficient sample size. All these aspects had to be taken into consideration while preparing the questionnaire. A detailed questionnaire of seven pages was prepared. The questionnaire broadly covered the following areas:

1. The entrepreneur's background and experience.
2. Details regarding the award.
3. Development of the award winning product.
4. Project costs and financing.
5. Other financial details like the balance sheet, profit and loss a/c etc.
6. Sales and production details including the product range.
7. Suggestions of the award winners.

Except for suggestions, all the other sections of the questionnaire had 10 questions on an average. Thus there are about 60 questions in the questionnaire.

The questionnaire was served for sample testing to a sample size of 10 respondents between 15th June and 15th July 1992. Responses were received within a fortnight. These responses were then studied to check that the questionnaire was wholly answerable. Once it was confirmed that the questionnaire was flawless, it was administered to the other respondents in batches of 10 each.

The following procedure was followed while collecting data in the questionnaire:
a. The units and the award winners were located according to their available addresses.
b. The award winner was contacted either on telephone or in person where the respondent was not available telephonically.
c. An appointment was taken for a later date for discussions on the questionnaire, and then the questionnaire was handed over to him.
d. Detailed discussions were made on the entrepreneur's impressions about the awards, financial details, financial institutions he dealt with and other suggestions.
e. During the discussions, separate notes were prepared while the questionnaire was being answered by the respondent.
f. Discussions on other areas, not considered in the questionnaire were also made and noted separately.

Some entrepreneurs were not open enough to answering questions on financial details. This data had to be obtained through persistent discussions.

If the questionnaire was studied in advance, it took about half an hour for each respondent to answer it fully. In most cases, the questionnaire was not even read in advance. Since most of the award winners were the sole decision makers in their industrial units, getting a pre planned appointment for over half an hour needed a great amount of follow up. During the dialogue with the entrepreneur, the general authenticity of the details furnished was checked. Also due to this personal rapport, the possibility of any misinterpretation of data was ruled out.
In many cases, despite making several repeated visits, it was not possible to extract a completed questionnaire from the respondent. The maximum time given by any entrepreneur was 5-6 hours, when he insisted on taking the researcher to his factory on the outskirts of Pune.

Many entrepreneurs were interested in showing around the factory. They were also quite enthusiastic about explaining the various technical complexities about the product. Many of them handed over detailed product brochures, technical specifications etc. along with the filled questionnaires.

All respondents were communicative. Even those who were not doing well in their units did not display non-communicative attitudes. They were prepared to share their woes and triumphs with equal zest.

Though many respondents were not prepared to fill in the financial details in the questionnaire, they answered most of these questions pertaining to finance during personal discussions. In fact, they revealed much more than asked for during this dialogue. Whatever information was made available willingly was collected and noted in the questionnaire. There were some entrepreneurs who did not become friendly even at the end of the dialogue. The purpose of handing out the questionnaire was in fact to create a rapport with the entrepreneurs. This also helped in establishing the credibility of the researcher and her project.
Detailed discussions helped in pinpointing the real difficulties in entrepreneurship.

Personal visits to units outside Pune aided in gauging the general response outside Pune and popularity and importance of such awards in the State.

Annexure I consists of the questionnaire administered to all the award winners, while annexure II depicts the map of the location of all the award winners.

A total time of approximately one year and three months was taken to complete the survey.

The purpose behind designing a detailed questionnaire was:
1. To collect all information - general as well as specific - from as large a sample as possible.
2. To concentrate on the financial and motivational aspects of each entrepreneur.
3. To begin a dialogue with the award winners.

This study is not only based on information received from the questionnaire. The questionnaire served as a means to an end of creating a personal rapport with the entrepreneurs. The presence of the interviewer also adds richness to the responses, eliminates misunderstanding and provides more data than asked for.

A certain pattern was adopted while designing and developing the questionnaire so as to get unbiased answers.
All financial details and sales turnover details were taken in three stages:

- **Stage A**: at the time of development of the product or in other words prior to getting the award.
- **Stage B**: At the time of entering for the award and winning the award.
- **Stage C**: Financial year 1992-93 or the last financial year.

Since getting the financial details was expected to be more difficult, instead of asking for the figures to be filled in the questionnaire a range was offered in multiple choices for each head in the balance sheet. This avoided discomfort in disclosing the actual financial data on the part of the entrepreneurs.

Where questions were of the nature of a general opinion about the industry, small scale industrialisation, YES / NO options were offered with multiple choices. Specific answers were asked only in cases where specific names had to be cited e.g. the name of the bank and branch which gave project finances etc.

At the end of the questionnaire a section of questions pertained to suggestion on awards, award giving as well as this research project. Specific questions (not included in the questionnaire) about what the award giving authorities need to do additionally, were asked orally. This section also asked for the entrepreneur to make comparisons between different awards, thus suggesting improvements in the award giving.
Some assumptions were kept in mind while giving the questionnaires to the respondents:

1. That the respondent will provide data willingly.
2. That the respondent will provide data to the best of his knowledge and maximum accuracy.
3. That the respondent will answer questions as expected by the interviewer, and reply with integrity.
4. That the respondent will not question the purpose of the research.

Wherever required and asked for, questions were explained. Clarifications were given wherever required to avoid any misinterpretation of the questions.

Data collected through the questionnaire was classified decade-wise. Table 3.4 shows this classification.

Further, for the purpose of preparing comparative financial statements, all the fully filled in questionnaires were classified industry-wise. This classification is shown in table 3.2.

Codes were given to all responses according to the decade to which the award winning entrepreneur belonged to. Codes 1 to 100 were given to entrepreneurs from five decades who had filled in the questionnaires fully. Codes 101 to 110 were to entrepreneurs who were either not in business or had submitted incomplete questionnaires.
Similarly, industry classification was done on the basis of the industry to which the award winning product (broadly) belonged to, as reported by the award winners. The classification of the industries was rather broad in nature and therefore the highest number of award winners are found to belong to the Engineering industry.

**Computerised data processing:**

The entire sample was analysed in all the areas in the questionnaire with the help of computerised data processing. All data collected through the questionnaires was compiled in the following manner:

1. Every question on each page that was answered was taken in for data compilation. It was analysed statistically.
2. Every page of the questionnaire was converted into a tabular format, and analysed separately.
3. Classification done decade-wise was used for sub-totalling and developing sub-samples.
4. Sub-samples were also made for studying the comparative financial details of industries which had the largest number of entrepreneurs as well as the smallest number of entrepreneurs.
5. Financial details were compiled on separate sheets.
Establishing correlation within a sub-group as well as between sub-groups becomes easier and faster with the help of computerised data maintenance. Spreadsheets were prepared in LOTUS 123, EXCEL, tables in WINWORD, and text in WINWORD.

Easy availability of data for documentation, ratio analysis, and accuracy of calculations were the main advantages of computerisation.

Codification was adopted for all the questionnaires. All the data entry for the purpose of tabular analysis was done on the basis of this code. All the 106 units were analysed statistically. Results of the tabular analysis have been elaborated in the chapter on Analysis. Inter-industry studies were also made as a part of the analysis. Though each unit was considered individually, all aspects were also analysed statistically so as to draw meaningful conclusions.

This data processing helped in the following ways:
1. To give a statistical representation at a glance of all the units in the sample.
2. Statistical analysis of the following aspects of the study was made:
   a. Motivational aspects behind applying for the awards and getting awarded.
   b. Financial details of growth of the units.
   c. Project financing details of the units.
   d. Working capital details and control by the entrepreneurs.
e. Overall growth in assets creation as well as sales turnover of the units.

These were the major aspects of the study, and these were analysed statistically.

**Limitations of the study:**

The study had its major limitation in that the information gathered through data collected was incongruent, not leading to definite conclusions. Financial details offered by the entrepreneurs were in a rather sketchy form. Many entrepreneurs had in fact not given any financial details while returning the filled questionnaire. In all such cases, financial details of the unit had to be retrieved from personal discussions with the entrepreneurs. The reasons for the inability in giving the financial details were:

1. Since the sample belonged largely to small scale industry category, the organisational structure of the units was of a low level. Not being able to afford suitable professionals to head all departments, systems in the various departments were noted to be insufficient. The entrepreneur himself was a technical qualified or technically inclined and experienced person. But more often than not, he was the sole decision maker in that industrial unit. This led to neglect of certain areas at certain times by the entrepreneur.
2. The maintenance and retrieval of accounting/finance data in the units was noticed to be lacking. Most award winners had a broad picture of the financial working of their unit. Therefore they could offer only sketchy financial details at the time of replying to the questionnaire.

3. Details given about working capital expenses have also revealed that specific systems towards maintaining such kind of data did not exist in the units. No different trends were noticed amongst different industries when a comparative study was made in the areas of working capital control.

4. Despite being innovative award winners, in the initial project financing a large number of entrepreneurs had preferred borrowings from friends and relatives, as against borrowing from financial institutions.

5. System of collection of financial details in three stages as developed by the researcher was noticed to be insufficient and could not be used for drawing any meaningful conclusions.

6. Though in the broader sense growth was noted statistically among the award winning entrepreneurs, since the financial details were sketchy, no proper conclusions could be drawn about the growth determinant factors of the entrepreneurs.

These were the limitations related to the data collection of financial details.

There were certain other limitations limited to physically carrying out the study. These were:
1. There was no published information available on the entrepreneurs other than what was given by the award giving organisations. This was just the name and address of the entrepreneur, details of the award winning product and the address of the manufacturing location. All information used in the study was collected from data made available from the questionnaire only.

2. The physical limitation of the researcher to reach each and every award winner led to varying response. In fact in locations where there were singular award winners, it was not possible to visit such locations personally. Despite adequate follow up, the feedback by post was poor. This led to a natural pruning down of the population for the sample selection.