CHAPTER IV

METHODOLOGY

Methodology stands for a set of tools and techniques to tackle a research problem\(^1\). Different problems, therefore, need different sets of tools and techniques. In social sciences, the systematic investigation cannot be compared with the methods employed in physical science, where the subjects of study are non-living objects. Therefore, quite an objective study is rather difficult to obtain in social science.

In the present study, first the conceptual and theoretical understanding was obtained through the review of existing literature on Islam and entrepreneurship in general and Indian entrepreneurship, in particular, in Chapters II and III.

Taking cue from the existing literature on entrepreneurship, the choice of the entrepreneurial group, region and span of the study, and relevant hypotheses\(^2\) were framed which were subsequently addressed to by a set of tools including data collected from secondary sources.

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2. The relevant hypotheses are stated in Chapter III.
interview schedule, scales of religiosity, modernity and, entrepreneurship, discussions with informed people and observations made during the field visits. The choice of sample was made by keeping representativeness of the population in mind as much as possible within the resource constraints. The data collected from secondary and primary sources were subjected to statistical analyses, including cross-tabulations, correlation and regression analyses, wherever felt desirable.

Data from Secondary Sources

The data on occupational distribution and industrial classification were mainly collected from census records, various gazetteers and monographs. The data specific to brassware industry, in general; and Moradabad town brassware industry, in particular; were further complemented from Industrial Outlook report, survey reports, doctoral dissertations, the register, files and documents of

the District Industry Centre and the U.P. Brassware Corporation, the Brass Artware Manufacturers' Association, through discussions with the District Administration officials, journalists, entrepreneurs and other informed group of people.

Interview Schedules

Keeping in mind the nature of the problem, an interview schedule was prepared to collect primary data on the socio-demographic background of the entrepreneurs, hard data on investment, production, employment and profits related to their enterprises. Some data were collected on actual religious and social behaviour. Some attitudinal data were also collected through the interview schedule. The interview scale was first field-tested and was subsequently modified according to the feedback from the field.

Rating Scales

A composite scale of Religiosity, Modernity and Entrepreneurship was constructed, which was further divided into dimensions; each dimension consisted of 3 items with

4. The actual Interview Schedule is given at Appendix I.
5. The rating scales of Religiosity, Modernity and Entrepreneurship are given at Appendix II.
The scale of Religiosity consisted of four dimensions. It included Belief, Practice and Experiences, Cognition, and Consequences. Obviously, it is an attitudinal scale as is the case with most of the rating scales. Therefore, the respondents were requested to state their choices on certain religious beliefs, on practices and experiences, cognition and consequences.

Similarly the scale of Modernity was constructed with five dimensions. The dimensions being: Rationality/Scientific Attitude, Equality and Legislation, Universalisation, Co-existence/pluralism, and Individualism and Humanism. These dimensions were separated though but were not mutually exclusive. They were revised, keeping in


mind the background of the respondents after field-testing. The scale of Modernity, therefore conformed to specific field situation and may not be appropriate in other field situations.

The scale of Entrepreneurship contained five dimensions. It included Innovativeness/Risk taking, Background, Managerial skills/Gap-filling, Achievement/Socialisation, and Status withdrawal, based on the literature review, and on what may be called entrepreneurial attitude. In fact, the dimensions could have been much more extended. For instance, Innovativeness and Risk-taking could have been separated from each other, and Socialisation from Achievement. But owing to the pressure on the entrepreneur originating from the lengthy interview schedule and scales, it was decided to compress the dimensions in the scale. Therefore, these scales may be treated as indicative of general pattern of attitudes.

Discussions and Observations

This method was employed to get the general feel of the field situation and to discern general pattern related to socio-economic structure of the Muslim entrepreneurship in the town under study. Observation as a

9. The scale was constructed keeping in mind the entrepreneurial competencies reported by various studies as reviewed in chapter III.
methodological tool was deliberately included to understand the social and entrepreneurial behaviour of the respondents by visiting their units and sitting with them for long hours, or visiting clubs, cinema halls and market. The relevant information originating from discussions and observations were incorporated at appropriate places in the thesis.

Experiences

However conscious a researcher of social sciences may be, it is never possible to arrive at true objectivity; and the tools never fulfil the desire of the researcher.

When the research problem on Muslim entrepreneurship was conceived, it was decided that the tools to be employed would be:

1) Interview Schedule
2) Thematic Apperception Test
3) Rating Scales
4) Selected case studies
5) Focussed Interview Technique
6) Discussion and Observation

The problems started with the secondary sources. It was not clear whether the complete list of the enterprises engaged in brassware would be available or not. On visiting
District Industry Centre, it was found that a list of registered units was available. If the selection of the sample were to be based on such a list, then it would represent a bias by excluding those units which were not registered. Besides, on inspecting the details of the units in the registration record, the information regarding investment, production and number of employees were not clear. Some units were de-registered and some were re-registered without much clarity about a unit. Therefore, a 10 percent sample was collected for the sake of analysis.  

For this sample more clarification was sought from the concerned staff. The lack of precision in the information was reported to be due to the shifting of registration location from U.P. Directorate of Industries in Kanpur to Regional Office in Rae Bareilley and to the Moradabad DIC over a period of time. The other reason reported was the transfer of staff from one district to another. The third reason was the general apathy towards work and 'non-paying desk' of maintaining proper and accurate records. 

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10. The data was collected from DIC Registration records and the results are included in Chapter VII.

11. Some officials confessed that the desks meant for statistical work provide no incentive, but dealing with registration provides opportunities for additional income, where entrepreneurs are harassed to yield to their demands.
Alternatively, the Uttar Pradesh Brassware Corporation was approached for the list of units in Moradabad engaged in brassware. To begin with, the staff was ignorant about such a list. However, on persistent probing a list and some survey reports based on the list were procured. Therefore, it was decided to base the sampling on this list. However, when the respondents were approached on the given address, very rarely the respondents could be located. This list, therefore, was found unusable. The person responsible for preparing the list was approached for clarification. However, he could not provide satisfactory answer. In sum, this survey was a mockery to professional ethics. Therefore, by necessity the list was abandoned, after losing six months without giving much substance.

According to the rough estimates, there were about 7000 units engaged in manufacturing brassware in the town.

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12. Initial attitude was of apathy arising out of ignorance and lack of concern for researches/researchers on the part of the officials. But talking to high officials yielded results.

13. On further enquiries it was discovered that the schedules used for the survey by the consultancy organisation were manipulated either by the investigators employed by the organisation or the officials of the organisation. Further, some of the castes reported in the survey were non-existent in the town. The business data collected was also inaccurate. It was also observed that to conform to an estimated number of units additional duplicate/triplicate computer cards were added as was clear from the list wherein the serial numbers changed but none of the 24 variables included in the survey.
It was a difficult task to prepare, even to get a preliminary list of the entrepreneurs to be used for sampling. A substantial precious time was already lost. Therefore, it was decided to prepare a rough distribution of Muslim units according to the colony and the process in which the unit was engaged, with the help of local persons. The informants reported, house by house, the number of persons owning a unit related to particular process of production. The boundaries of colonies posed a major problem. However, a rough distribution of units according to the production process was obtained.

Sample Selection

Keeping in mind the resource constraints, a stratified but purposive sample was drawn so that the major processes and localities are covered with a reasonable samplesize. Table 4.1 represents the total units and sample size (2.5%) distributed according to the various processes.

Beside these 6421 units, about 700 units were reported to be with non-Muslims, who were mainly concentrated in polishing (with lower castes and rural Hindus) and exporters (with higher castes, especially

14. The area under study is shown in the map in the next page. The list of Mohallas is given in Appendix III.
### TABLE 4.1

**SAMPLE DISTRIBUTION**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Process</th>
<th>Total Units</th>
<th>Percent Distribution</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Moulding/Casting</td>
<td>1360</td>
<td>21.2</td>
<td>34</td>
</tr>
<tr>
<td>2.</td>
<td>Scrapping/Filing</td>
<td>1163</td>
<td>18.1</td>
<td>29</td>
</tr>
<tr>
<td>3.</td>
<td>Polishing</td>
<td>800</td>
<td>12.5</td>
<td>20</td>
</tr>
<tr>
<td>4.</td>
<td>Engraving</td>
<td>803</td>
<td>12.5</td>
<td>20</td>
</tr>
<tr>
<td>5.</td>
<td>Soldering/Rivetting</td>
<td>523</td>
<td>8.1</td>
<td>13</td>
</tr>
<tr>
<td>6.</td>
<td>Welding/Brazing</td>
<td>284</td>
<td>4.4</td>
<td>7</td>
</tr>
<tr>
<td>7.</td>
<td>Turning/Grinding</td>
<td>162</td>
<td>2.5</td>
<td>4</td>
</tr>
<tr>
<td>8.</td>
<td>Sheet Work</td>
<td>159</td>
<td>2.5</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td>Electroplating</td>
<td>82</td>
<td>1.3</td>
<td>2</td>
</tr>
<tr>
<td>10.</td>
<td>Silli-Gulli Making</td>
<td>121</td>
<td>1.9</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>Composite Units*</td>
<td>521</td>
<td>8.1</td>
<td>13</td>
</tr>
<tr>
<td>12.</td>
<td>Exporting/Manufacturing</td>
<td>241</td>
<td>3.8</td>
<td>6</td>
</tr>
<tr>
<td>13.</td>
<td>Others(Enamelling/Lacquering/Pattern Making/Colouring)</td>
<td>202</td>
<td>3.1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>6421</strong></td>
<td><strong>100.0</strong></td>
<td><strong>160</strong></td>
</tr>
</tbody>
</table>

*The composite units represent the units engaged in more than one process. In addition to these units the 'Karkhanedar' category included single process units as defined in subsequent paragraphs.*
migrant Punjabis and Bania Caste). Therefore, about 7125 were reported to be engaged in brassware in Moradabad town in early 1984.

Difficulties were encountered when the entrepreneurs were approached for information. Establishment of rapport was found to be the most difficult task of the field situation. People were resistant. The causes owed to
1) biases arising out of their being Muslim
2) due to communal roits of 1980
3) fear of bureaucracy/government
4) secrecy surrounding the techniques of exports
5) past surveys

Relatively closed groups resist information to outsiders. Muslims being a threatened community, especially after partition resist information to outsiders, lest some undesirable consequences may follow. The resistance was relatively more after the 1980 communal riots, as if the information provided to outsiders would lead to framing of cases against them. Negative attitude of bureaucracy which often consisted of non-Muslims. Besides, there was a general fear if the information regarding business is leaked out, it would lead to punitive measures for avoiding taxes, specially sales tax or would lead to decline of work contract as if others will move into their trade/business.
Finally, there were biases; as often the respondents would retort, "In past there were surveys, however, the situation for us has not improved". The establishment of rapport in such a situation looked impossible and even if established, the guarantee of getting reliable data was very poor. However, the researcher being a Muslim could persuade by saying that his interest could not be different than theirs. Besides, it was argued that the work was for getting a degree, it was at best the help to the investigator. Nothing would follow, good or bad, as a result of the study. If at all, it would only help in framing general policies which would be beneficial for their businesses.

Moreover, the researcher made use of personal connections and kept the company of a local person in the beginning. This helped a great deal in collecting personal and business data. However, TAT and case studies were to be dropped. TAT was dropped as respondents more often provided physical descriptions of the pictures shown to them. Perhaps in such settings TAT does not work. The

15. Similar observations were made by other scholars who made Moradabad town or brassware industry of the town as the focus of their study. See Kumar, Naresh. The Brassware Industry of Uttar Pradesh with Specific Reference to Moradabad, Ph.D. Thesis, Deptt. of Commerce, Agra University, 1980; Bhatnagar, Shiv Premo The Brassware Industry of Moradabad : Its Origin, Development and Importance as a Medium of Earning Foreign Exchange, Ph.D. Thesis, Kanpur University, 1975.
exercise works better in training situation\textsuperscript{16}.

The indepth data for each case study also did not come by except for a few cases. Therefore, both the tools were dropped. At a later stage, the Focussed Behavioural Event Interview\textsuperscript{17} was also tried but it did not work to the satisfactory level. It may be concluded that psychological tools work better if rapport is strong; in this case it was not so strong. On subsequent visits the queries of the researcher were taken passively. Therefore, the dissertation is based on the data collected through Interview Schedule, Rating Scales and Discussion and Observation and is not completely reliable, as is the case with most such studies in social sciences. Only general patterns were expected to be discovered.

It may be stated that the production in the town is organised according to the processes as given in Table 5.2. However, the economic structure of entrepreneurship is

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\textsuperscript{16} On discussion with the trainers of a National Institute developing entrepreneurs, the fact was confirmed that for purely research investigation TAT does not work effectively, whereas it does in training situations.

\textsuperscript{17} The FBEI for assessing entrepreneurial competencies was developed by McBer and company with the active co-operation of David C. McCleland. For details see Mansfield, Richard S., McCleland, David C. and others 'The Identification and Assessment of Competencies and other Personal Characteristics of Entrepreneurs in Developing Countries', McBer and Co., Boston, 1987, mimeographed.
\end{flushright}
organised slightly differently\textsuperscript{18}. Therefore, a few terms need definition.

An 'entrepreneur' is defined, operationally as, "who owned a production unit in brass industry and is fully responsible for the decisions he takes about the unit". This excludes agents, middlemen and dealers, but includes artisans, Karkhanedars and exporter - manufacturer. A 'Muslim entrepreneur' is one who is an entrepreneur as defined above and follows Islamic beliefs, values, tradition and practices.

An 'artisan entrepreneur' is the one who owns and specialises in a particular process of production, and mainly runs the unit alone or with the help of family labour, including children and females, except occasionally hiring a labourer or two, and works with traditional simple tools.

A 'Karkhanendar entrepreneur' is the one who owns a unit, specialises in one or more processes of production, generally employs hired labour and uses modern machines and equipment, generally run by electricity.

An 'Exporter entrepreneur' is the one brings orders from the foreign markets, organises production 18. The processes of production and economic structure of entrepreneurship are detailed in Chapter VI.
through artisans, karkhanedars and hired labour, and supplies artware to the foreign buyers.

The artisan entrepreneurs are treated lower level/order of entrepreneurship, with higher levels/orders increasingly assigned to karkhanedars and exporter entrepreneurs. The heirarchy of levels/orders is established in Chapter VI.