CHAPTER II
METHODOLOGY

2.1 Introduction

This chapter briefly discusses the methodology of the survey including the choice of the study area, design of the questionnaire and sampling procedure.

2.2 Selection of the Study Area

Since the major thrust in this dissertation is to study the Muslim community in detail, we have chosen an area in Maharashtra State where the Muslims form a numerical majority. There are a few places in Maharashtra such as Bhiwandi and Malegaon where Muslims are well represented in the population. According to 1981 census, Muslims formed 60 percent of the total population in Bhiwandi, while they formed 66 percent in Malegaon. Both these places are known for their power-loom industry. Compared to Bhiwandi (1.2 lakh, 1981 census), Malegaon had larger population (2.5 lakh, 1981 census). In 1991, the population of Malegaon increased to 3.4 lakhs and the proportion of Muslims in the total population increased to 73 percent. Besides Muslims in Malegaon are expected to be more religious than their counterparts in Bhiwandi as Malegaon is known to be a seat of Islamic religious learning. Muslim students from different parts of India and abroad come to Malegaon to attain religious education. It is one of the class I cities in Maharashtra State which is considered as one of the backward urban areas in terms of several development indicators. Hence, Malegaon city has been chosen as the study area for field investigation.
2.3 Sample Design (Sample Size and Allocation)

After taking into account various factors like cost and objectives of the study, it was decided to have a sample of 800 households which is thought to be adequate for the research purpose. For the selection of sample units, we need to have a reliable sampling frame. The possibility of using either voters list or list of ration-card holders was explored. Selecting sample households from the list of ration-card holders is extremely a time-consuming job. A voter's list is not a comprehensive sampling frame either because only adults are included in the list. So it was decided to use the 1991 census houselisting as the sampling frame for selection of sample units.

According to 1991 census there were 60 wards in Malegaon city. The population of Malegaon city in 1991 was 3,42,593 and there were 48,782 households in these 60 wards. The average household size was 7.1. The ward wise population has been taken from the 1991 census. The wards were classified into three strata based on the number of households in each ward. All wards with less than 500 households were designated as small wards; those between 500 and 1000 as medium, and those with more than 1000 households as large. Thus there were 26 small wards, 20 medium wards and 14 large wards in Malegaon city. Average household size was 6.2 for large wards, 7.2 for medium wards and 8.8 for small wards.

We have followed a three-stage stratified sampling design. In the first stage, wards with Muslims in majority were selected. In the second stage, blocks were selected from
each selected ward. In the third stage, households were selected from the blocks.

As we wanted to study only Muslims we had to identify Muslim majority wards. This information was not readily available. So we had to resort to indirect estimates. According to 1984 voters' list there were 60 wards in Malegaon city. To identify Muslim majority wards, the proportion of Muslims in each ward was estimated. It was observed that in all there were 17 wards in which Muslim voters were found to be less than 50 per cent and in 43 wards they were above 50 per cent. The Muslim voters constituted less than 10 per cent in 11 wards, between 90 and 99 per cent in 16 wards and 100 per cent in 11 wards (Table 2.1). Muslims constituted over 50 per cent of total voters in eight out of 14 large wards, in 13 out of 20 medium wards and in 21 out of 26 small wards.

Table 2.1
Percentage of Muslim Voters in Malegaon City, 1984.

<table>
<thead>
<tr>
<th>Per cent of Muslim voters in each ward</th>
<th>No. of wards</th>
<th>Per cent of wards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10</td>
<td>11</td>
<td>18.3</td>
</tr>
<tr>
<td>10-20</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>20-30</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>30-40</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>40-50</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>50-60</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>60-70</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>70-80</td>
<td>4</td>
<td>6.7</td>
</tr>
<tr>
<td>80-90</td>
<td>7</td>
<td>11.7</td>
</tr>
<tr>
<td>90-99</td>
<td>16</td>
<td>26.7</td>
</tr>
<tr>
<td>100</td>
<td>11</td>
<td>18.3</td>
</tr>
</tbody>
</table>

Total 60 100.0

Source: Voters' List for Malegaon City, 1984.
As the 60 census wards were same as the Municipal wards in the 1984 voters' list, to select the Muslim majority wards taking 75 per cent as the cut-off point for majority, we concentrated on those wards which had 75 per cent and above Muslim population. Thus 35 census wards, where Muslims were found in majority were selected. Of these 35 wards, 5 were large wards, 10 were medium wards and 20 were small wards. The average household size was 7.0, 7.8 and 9.0 for large medium and small wards respectively. These 35 census wards had 265 census blocks. Of these 265 blocks 60 blocks were selected as it was decided to select 15 households from each block. The 60 blocks were selected by PPS systematic sampling of blocks. From each selected block, 15 households were selected by simple random sampling. The overall sample size was fixed as 900 to give some allowance for non-response. Thus the list of 900 households with their building numbers and name of the heads of the household was compiled from the 1991 Census Houselisting. Copies of census block maps for these 60 blocks were used to facilitate identification of the sample households before canvassing of the questionnaire. The listing of the households and copies of block maps were obtained from the Census Office, Nasik Road.

Sample Selection of Community Leaders

A list of the community leaders was compiled with the help of reliable and knowledgeable residents of Malegaon city. This list was verified with other reliable persons and was found to be fairly accurate. In order to allow for non-response a list of 67 opinion leaders was compiled even though it was
decided to have only 60 opinion leaders. This sample of opinion leaders comprised of educationists, teachers, politicians, social-workers, doctors, business-men, professionals and grass-root level workers. Most of the opinion leaders have shown their interest in the present study and extended cooperation for the survey.

2.4 Questionnaires

Keeping the objectives in mind, the questionnaires were carefully designed for administering it on the sample households in the study area for obtaining information on household characteristics, marriage and pregnancy history, family planning, religiosity, modernization and status of woman.

Three types of questionnaire were used: first is the household questionnaire in which information has been collected on the household characteristics such as age, marital status, literacy, occupation, duration of stay in Malegaon of each member of the household. Information on socio-economic status of the population was gathered by including questions on ownership of consumer durables, total monthly income of the household, housing conditions and source of drinking water. Further questions were included to get information on births and deaths that have occurred in the household during the two-year period before the survey. The two-year reference period was fixed as Ramzan - 5th April 1992 to Ramzan - 14th March 1994. This duration covers three consecutive Ramzans. We fixed this period as Ramzan is the major festival of Muslims and this would minimize omission
of vital events viz. births and deaths.

The second questionnaire used in the survey is the woman’s questionnaire which was administered to all ever married eligible women age 15-49 years. There are four sections in this questionnaire. The first section consists of marriage and pregnancy record in which information has been collected on socio-economic and demographic characteristics of the woman and her husband, reproductive history of woman and data on abortion and still births, and menstruation and breast-feeding.

The second section includes questions on family planning: data on knowledge, attitude and practice were obtained only from currently married women. There are four topics covered in this section: sterilization, past use and current use of spacing methods, never use of contraception and pregnancy status. First, it is ascertained whether the woman has knowledge of different family planning methods. If so, it is then ascertained whether she has been using some method. Depending upon her answer, she is categorized as sterilized, past user, current user or never user. Accordingly, detailed information about her attitude towards and practice of sterilization (if sterilized) and spacing methods (if past user and current user) is obtained. If she has not used contraception an effort is made to find out the reasons for non-use which may be the following: desire for more children against religion, opposition from husband, non-availability of contraception etc.
The third section covers questions on religiosity. These questions are mainly related to religious practices among Muslims. Besides a few questions have been included to ascertain whether Quran and Hadees contain a message on family planning.

The fourth section in the woman's questionnaire covers questions on modernization and status of woman. Here the level of modernization and status of woman is assessed through the respondent's attitudes towards and practice of purdah system, education of female children, female labour-force participation, marriage (in terms of dowry and dower), discrimination against girl-child, female property rights, son-preference, decision-making and general awareness.

The third questionnaire is the questionnaire for community leaders. This questionnaire has fourteen open-ended questions. Here in the beginning brief information on demographic and social characteristics of the community leader, his/her spouse and about his/her use/non-use of family planning methods, is gathered. Then detailed information is gathered on the opinions of the leaders regarding their perceptions of population problem, its nature, whether they approve the population policy including family planning programme of the Government of India, small family norms and the family planning advertisements on radio and T.V.. Later their opinions on knowledge, attitude, practice of family planning, economic backwardness, modernization, status of woman and religiosity among Muslims, are ascertained.
2.5 Pre-testing

The pre-testing of the questionnaire was done on a sample of 27 respondents - 10 from low income group, 10 from middle income group and 7 from high income group. The respondents were chosen from Muslim clusters from different localities in Poona and its suburbs, such as Vetal Nagar Zhopadpatti, Pandav Nagar Health Camp, Sayyad Nagar, Salisbury Park and Gul Tekdi. Of the 27 respondents, there were two widows, one divorcee and one in a polygamous union. Further there were two households in which the head of the household was a religious instructor.

In three houses, initially the respondents were unwilling to provide answers. Once the suspicion was removed by explaining that the information was being collected only for study purposes, the respondents became co-operative. It was observed that a majority of the households were having small families and were practising family planning. Of 24 currently married women interviewed, only two were not practising family planning. One woman said that she had become sterile after her first child and another woman said that she had never used contraception because she belonged to a religious instructor's family.

The questionnaire was originally framed in English. As the questionnaire was to be administered to Muslims in Malegaon city where Urdu is the local language, it was translated into Urdu in Devnagari script.

The questionnaires were modified by including some questions and deleting some others in light of the
experience gained from pretesting. All the three types of questionnaires are given as an appendix at the end of the thesis.

2.6 Data Collection

The field-work in Malegaon was conducted from October 1994 to March 1995. Ninety per cent of the field-work was completed by the end of January 1995. As Ramzan, the holy month of Muslims, coincided with the month of February 1995, the field-work had to be discontinued in this month. The remaining ten per cent of the field-work was completed in March 1995. The field-work of the community leaders was carried out during the period 21st - 30th April 1995.

Field-work was carried out with the help of 8 local Muslim women with a minimum education of matriculation who were recruited as field investigators. These investigators were aged between 25 and 39 years, mostly married and had children. A majority of this women were Burkha-clad. Only local Muslim women were employed as investigators in order to develop good rapport with respondents so as to get the information with ease and without any fear.

The purpose of the survey was explained to the investigators and a thorough training was given to them regarding method of interviewing. They were taken to the field and were asked to interview the respondents on trial basis.

This was intended to clarify different practical problems that might arise during main data collection phase. At regular intervals the researcher visited
Malegaon and interviewed the respondents along with the investigators. Whenever discrepancies were found in the answers, the investigators were asked to revisit those respondents and rectify the data. On the spot checking of the data and supervision of the data collected was done by the researcher herself. Thus all necessary steps were taken to ensure better quality of data.

The preparation for the survey started much earlier than the actual field-work. As such the researcher had to visit Malegaon nine times between February 94 and April 95, each visit, on an average, being seven days duration.

The average time required to fill household and woman’s questionnaire was an hour while the questionnaire for community leaders required 15 minutes to half-an-hour.

2.7 Difficulties in the Field-work

To begin with, we had to face some problems in recruiting field investigators for data collection. It was very difficult to find local Muslim women to work as investigators. With the help of the community leaders, eventually the investigators were recruited. Because of the conservative and religious atmosphere prevailing in Malegaon, the Muslim women were not willing to collect information from Muslim respondents specially on topics related to family planning. They had to be persuaded to do so.

Secondly, from the census house-listing it was possible to obtain the respondents names and building numbers only. The present survey began in October 1994, four years after the compilation of the 1991 census house-listing operation for
Malegaon in April-May 1990. During the intervening period many houses must have come up in the area and as a consequence, the 1991 census house-listing map was not much useful for the location of sample households. The investigators had to spend as much time on locating the houses as on filling the questionnaire. Block maps were helpful in locating the houses but about half of these notional maps were found to be wrong. It seems that census authorities did not pay much attention to match the ward numbers and block numbers on the house-listing with the ward numbers and block numbers on the block maps. Further in a particular block all the houses listed as per 1991 census house-listing were not to be found inspite of several visits. In another block, quite a few houses were found vacant as the respondents had sold them seven to eight years back and moved to other places. Hence, the possibility that the listers of 1991 census simply copied the building numbers from 1981 census house-listing without verification cannot be ruled out.

Investigators had to face problems while filling the questionnaire, for in many houses the respondents were suspicious to part with the information. In one particular house there were four eligible women. The mother-in-law was very co-operative. A week after the interview, this same lady caught hold of the investigator and threatened with dire consequences if there would be an income tax raid on her house. The researcher had to make a special visit to this lady to remove her misconception. It was later learnt that
In one of her relative's house, there was recently an income tax raid and so the lady thought that the investigator was going to give her household information to the income tax department.

In another house, the investigator informed that an old lady had sleepless nights for eight days prior to the interview for filling the questionnaire. The researcher visited this lady and assured her that there would be no interview in her house. Later in the absence of the old lady, the investigator filled the questionnaire. It was found that the lady was frantic because she was associating collection of information from households in Malegaon with collection of information from Muslim households by activists of a particular political party in Bombay prior to the communal riots in 1993.

In another locality the mother-in-law of the household questioned the investigator, "I have been living in Malegaon for the last 40 years. Never did any one come to collect so much information from my house?" Her son was harassing the investigator after the interview. The researcher had to meet this lady in person to convince her that no harm would befall her family.

Some respondents with the questionnaire visited a newspaper office in Malegaon to enquire whether the schedules were being filled to harm the Muslims. Sometime back there was a rumour circulating in Malegaon that those who had more than three children would get their ration cards cancelled. The Muslims of Malegaon seemed to have connected this rumour with
the present survey.

Ultimately to overcome the non-co-operation from the respondents, the researcher had to approach Urdu press. Bebak and Awami Mahaj (both dated 16/12/94) urged the Muslims of Malegaon to co-operate with the investigators. Shamnama (18/12/94) published an article based on the present survey and its usefulness to the Muslim community in future. Thus removing the fears about the survey from the minds of the Muslims was a major task for its smooth completion. This makes the researcher feel that the insecurity among Muslims is increasing.

There was another type of problem faced by the investigators. Some of the respondents were enquiring whether they would gain something in return for giving the interviews. Husbands of some of the respondents were keen to know whether their wives would be paid in cash for answering the schedules.

Another problem related to the reporting by eligible women. They were not interested in reporting about their dead children. They would say, "What is the use now? Bygone is bygone. No point in talking about dead children." They were also hesitant to report on family planning. They had to be persuaded to give details of the dead children and part with information on family planning practice.

2.8 Data Processing

After completing the interviews, the schedules were edited to ensure the completeness, comprehensibility and
consistency of the responses obtained. For convenience of data coding and scrutiny work, all questionnaires were divided into 16 groups of 50 households each so that the work of data entry and consistency checks were possible on a comparatively smaller group of families. All the files of 16 groups of one type were later added into one group of 800 households after all types of checks described below were undertaken.

Scrutiny of age reporting in different parts of the schedule, spacing between deliveries, age of mother in relation to age at marriage and all other within and between consistencies of different variables were done manually in the first instance and later by building different contingencies at the record level and inter-record level under computer programmes.

After scanning sample schedules, tentative code book containing record layout of all 13 sub-records was prepared in terms of the requirement of tabulation. Basic data without much of precoding such as grouping of ages, occupations and years were attempted as it is believed that precoding loses sight of initial details and if the frequencies subsequently reported are lopsided, then the very purpose of coding is lost. As such the figures like age, year were directly entered whereas for occupations and responses especially in the open ended questions, the code list was extended as and when a new case was reported while coding. This enabled us to know the details and possible grouping in case of quantitative figures like age, year etc.

While designing the record layout we kept one ID field
namely the household number within the household and coded only the reported cases in each sub-record. By reducing the record length, though the number of records were increased, it was much of an advantage while coding. Thus all the relevant schedules of each lot of 50 schedules were coded. The ID field was subsequently used by us in collating information from different sub-records pertaining to one family or one woman. Though the total number of records was rather large, in terms of standard 80 columns there were about 6000 records only.

All the sub-records were entered as files with appropriate labels in terms of lots of 50 schedules. After checking the column bounds, within a record and later across different related sub-records the logical and mechanical consistency, the relevant files were added for all 800 households. Data were entered as card like images and verified for mechanical counts, missing and duplicate records etc.

Keeping in mind the objectives of the study and level of reporting of the different questions, tabulation plan was prepared and later revised depending upon the nature of responses etc. Initially frequencies were taken on all the different questions coded in one or two column codes. At this stage the grouping of variables, both quantitative and qualitative were attempted. Basic data files were machine recorded for some variables for grouping, otherwise large list of codes or for the variables not coded at all like age. New files with these recoded variables and or otherwise newly
created indices, ratios were prepared under programmes. The data were then put to cross tables and other tables as per requirements.

2.9 Sample Implementation

Of 900 households selected, we successfully interviewed 800 households. In these 800 households there were 45 households with no eligible women. In the remaining 755 households, 992 women were identified as eligible for individual interviews. Of these, 961 eligible women were successfully interviewed giving an individual response rate of 97 percent. The average number of eligible women interviewed per household was 1.20. Non-response at the individual level was primarily due to eligible women not being at home despite repeated household visits.

The next chapter gives a detailed profile of the study area including that of Muslims, in terms of its history, economy and population growth.