

CHAPTER-3

RESEARCH METHODOLOGY

1. Introduction

In this chapter, an attempt has been made to discuss about the research methodology used in collecting data for present study. In the process, an attempt has been made to describe the rationale of the study along with its objectives, statement of the study and hypothesis. Researcher had explained the research design and data collection tools and techniques, along with sampling and universe design for the present study. Researcher had also incorporated Focus Group Discussion (FGD) in the study so to make the study more meaningful and to make a deep insight in the present study.

2. Rationale of the study

Regions from the north to the west of our country are better examples of neglect and discrimination of girls, and excessive female mortality is prevalent in these regions. Historical data also confirms such discriminatory behavior in the past. This phenomenon is present today also in these regions. The deficit of girls increased 1981 onwards, till the census of 2011. Census revealed that, there were 49 districts in the country, where for every 1000 male children age 0-6 years there were less than 850 female children. The majority, or 38 of these districts, was located in just three northern and western states – Punjab, Haryana, and Gujarat (census 2001). Juvenile sex ratio declined by 9% in Haryana (from 902 in 1981 to 820 in 2001) and by nearly 13% in Punjab (from 908 to 793 between 1981 and 2001) Himachal Pradesh and Gujarat states also experienced a decline in the juvenile sex ratio of the order of 7.5 per cent, which is higher than the national average of around 4.5 per cent. Thus, an almost entire belt extending from

northwest India to parts of Rajasthan and Gujarat experienced a severe decline in the juvenile sex ratio in recent decades in comparison to southern states where condition of women was better than other regions. The decline of 60 to 83 points in the juvenile sex ratio between 1991 and 2001 i.e. just one decade observed in many of these districts can be explained solely by the practice of discrimination against girls in this region, which has continued for several decades, because at no other time in the history of census taking has the sex ratio of children declined so drastically (UNFPA, 2003). Gujarat is one of the developed states of India. Economy of the state is totally based on trade and commerce. Every district of Gujarat is famous for its trading purpose directly or indirectly. Like for example if we take Surat district it is famous for diamond cutting. Ahmedabad was earlier considered to be the Manchester of India; Anand district was known for its dairy products namely "AMUL". All this shows that each district of Gujarat is contributing to the economy of Gujarat and is making the economy of Gujarat sound. Gujarat can be considered a modern and developed state of India. Despite being a developed state, the question arises as to why the sex ratio of Gujarat is showing a declining trend. Thus, it is important to understand why and how the juvenile sex ratio and total sex ratio has declined in Gujarat state in particular, and in India in general. This abnormal situation alarmed many scholars like me to study the declining sex ratio in Gujarat state. Some improvements have been noticed in the survival of young girls. In spite of all this, the deficit of girls in the society or population had also increased several questions like what factors are responsible for the skewed sex ratio in Gujarat. This skewed sex ratio has resulted in increase in sexual and social crimes against women. Thus, the declining sex ratio in Gujarat inspired me to conduct this study, and to find out the factors contributing to decline in sex ratio of Gujarat, and also about various consequences of declining sex ratio.

3. Objectives of the study

The present study is carried out to understand the perceptions of peoples and stakeholders about the declining sex ratio and to study gender discrimination in Gujarat state. The data for this study has been collected from Mahesana district. This study has tried to highlight the various socio-demographic factors for the declining sex ratio in Gujarat. The objectives of the study are:

- 1) To study social, demographical and economical profiles of men, women, and stakeholders.
- 2) To study perceptions or opinions of respondents on various issues related to declining sex ratio in Gujarat.
- 3) To examine and study the various trends in sex ratio of Gujarat state.
- 4) To highlight the consequences of declining sex ratio.
- 5) To study relationship between different variables with sex ratio.
- 6) To identify strategies and suggest different measures to curb the problem of declining sex ratio in the state.

An attempt has been made by the researcher to examine some of the research questions mentioned below because not many efforts have been made in order to explore these below mentioned questions especially with regard to Gujarat state in particular focusing on the problem of declining sex ratio. Some of these questions are:

Q.1) What are the factors responsible for declining sex ratio in Gujarat?

Q.2) What are the consequences of declining sex ratio in Gujarat state?

4. Hypothesis

This study aims to determine relationships between variables. Hypothesis provides guidance for the same. It is a tentative answer to the research problem and the objectives of the study. Based on the review of literature the following hypotheses

are formulated for empirical verification in the proposed study. They are as follows:-

- 1) There is no significant relationship between caste variable and factors of sex ratio.
- 2) There is no significant relationship between family structure variable and factors of sex ratio.
- 3) There is no significant relationship between Income variable and factors of sex ratio.
- 4) There is no significant relationship between Education and factors of sex ratio.
- 5) There is no significant relationship between Occupation variable and factors of sex ratio.

5. Methodology

In simple words, methodology refers to the procedure and apparatus, which helps in data collection and analysis of data. Thus, methodology for the present study includes research design, sample selection, data collection tools, techniques, and methods of data analysis. Here we will discuss them one by one.

a) Research design

The term ‘design’ means “drawing an outline” or planning or arranging in details. Research design is planning a strategy of conducting research. Research design is a detailed plan of how the goals of research will be achieved. According to Henry Manhein (1977:140) research design not only anticipates and specifies the seemingly countless decisions connected with carrying out data collection, processing and analysis but it presents a logical basis for these decisions. Similarly, William Zikmund (1988:41) has described research design as a master plan specifying the methods and procedure for collecting and analyzing the needed information. Martin Blumer said that research design is the specification

of the problem, conceptual definitions, and derivations of hypothesis to test and defining of population to be studied (Encyclopedia of Sociology 1974:86)

First, researcher has collected secondary sources of data to explain the importance of the study with the help of reviewing existing studies related to present research problem. In this process of identifying secondary data, Researcher has emphasized and utilized some of the websites, articles, journals from internet, and various libraries. This researcher has utilized the census data from Gujarat census directorate, some data from PRC Baroda and other related data from CWDS, New Delhi, National Institute of Public Cooperation and Child Development, New Delhi for secondary data purpose. After understanding all the secondary sources, researcher involved himself with primary data collection for the present research. This part of data includes interview schedule or interviewing of the respondent. This is the best way to collect the data because this provides direct communication with the interviewee. It helped this Researcher to understand the social behavior of respondents or interviewed people.

b) The Rapport Building and the Target Group

Every research work and its data collection involve creating a rapport building. The present research work also had passed through this stage of rapport building. The concept of rapport building emphasizes on meeting and communication. This meeting or communication involves meetings with local leaders, village sarpanch and key informants. In the process of creating rapport building for the present research, the local leaders, village sarpanch and respondents were told about the purpose of conducting the research, which was explained in terms of the declining number of females in their respective areas. Both the languages Hindi as well as Gujarati were used as medium of communication with the people. During this period of data collection, it had been noticed that people were more comfortable with Gujarati language. Interview Schedule was printed in two languages namely English, and Gujarati. This gave them sufficient time to understand to questions and simultaneously to answer those questions correctly. Different attitudes from

respondents were observed during data collection. For example, some respondents showed their keen interest in understanding the problem and giving the answers to the questions, while there were others who found it awkward to answer the questions.

Before the starting of an interview, each respondent was told that the purpose of the inquiry for the research only. They were assured about complete confidentiality of their data. In the present study data was collected from the respondents such as women, men and mother-in-law belonging to different caste and religious groups. Data was also collected from health functionaries too. While interacting with the women respondents the social and ethical issues were kept in mind while addressing some of the sensitive questions.

The Interaction with the health functionaries and ICPD functionaries helped a lot in understanding the correct situation and factors responsible for declining sex ratio in the particular area. While collecting data from the health and ICPD functionaries, care was taken not to disturb the working of the functionaries.

c) Sample selection and universe of the study

When the population is large and is physically not accessible, research depends on sample survey only. A sample is a portion of people drawn from a larger population. It will be representative of the population only if it also has the basic characteristics of the population from which it is drawn (Ahuja R, Research Methods, p-155). A sample is any subset of a population selected to represent and draw inferences about that population. Sampling techniques are used widely in the social sciences to gather information on large, complex populations without the expense of conducting a census (Johnson 200: 240). According to Manheim “a sample is part of the population which is studied in order to make inferences about the whole population” (1977:270). The present study had been conducted in Gujarat state. According to census 2011 there are 26 districts in Gujarat. Therefore, it is obvious that we cannot study the entire population of many

districts because of size, time, cost or inaccessibility factors. The state has a population of 6,03,83,628 in which males are 3,14,82,282 and females are 2,89,01,346 (census, 2011). Sex ratio of state is 920 and 0-6 year sex ratio is 833(census, 2001) and total OSR is 918 (Census 2011) and 0-6 year sex ratio is 886 according to census 2011. In the present research one district has been selected for the study namely “Mahesana” district. The criterion, which has been used in selecting the district, was based on lowest sex ratio in terms of lowest total sex ratio, lowest Scheduled caste sex ratio, lowest 0-6 child year sex ratio, and lowest Scheduled tribe sex ratio, lowest urban-rural sex ratio of districts. Census reveals that among few districts of Gujarat in terms of lowest sex ratio, Mahesana district is one of such district. Thus, the present district has been selected for data collection including Mahesana city and its adjacent villages namely Nagalpur, Jagudan and Nandasan. Accordingly, data for the study is collected through systematic and stratified random sampling method. The sample size for the present study is 200 respondents. The perceptions of different respondents- women, men, mother in law/elderly women (18 and above), and perceptions of different stakeholders like opinion leaders, and health care providers of the ICDS and health functionaries were interviewed for the study. The reason for selecting the ICDS functionaries as stakeholders for our study was that, ICDS is one of the world’s most unique community programmes for catering to the nutritional, health and developmental needs of children, adolescents and women in India. Thus, ICDS programme is wide spread in the country and the human resources associated with this programme are aware about the drastic decline of the sex ratio in the state and condition of the women in the society. The ICDS functionaries include CDPO, SUP, and AWW and health functionaries include MO, LHV, and ANM. These were some of the human resources, which were interviewed during the study.

d) Data collection tool and techniques

Social scientists and researchers use some scientific techniques to collect data for their studies. Various research techniques are available for data collection. They have their own merits and demerits. The present research is comprises of both primary and secondary data sources. It utilizes both qualitative and quantitative data, which were gathered with different data collection tools. The secondary collection included various relevant literature related to the present research problem. These included various articles, journals from various libraries, websites from internets, and other direct or indirect sources. On the other hand, to make data more qualitative, primary data collection tools such as structured interview schedule is included in the present research. In this technique all, the respondents were interviewed at their homes individually. According to (Ahuja 2001:194) Interview schedule is “The set of structured questions in which answers are recorded by the interviewer himself”. Apart from these techniques for data collection, one more technique that is “Focus Group Discussion” (FGD) was also incorporated in the present study so as to make the study more meaningful and qualitative.

e) Method of analysis

For the analysis of data and testing the hypothesis, the statistical tools like average, percentage standard deviation methods are applied in the present study. Collected data were analyzed through Statistical Package for Social Sciences (SPSS). The data have been presented in tabular, diagrammatic, and textual forms.

6. Definitions of Terms

For the purpose of the present study, some important terms have been used and they have been elaborated as under:-

- 1) Caste: Caste is a group where membership is determined by birth. Castes are endogamous.
- 2) Mortality: Mortality is death. It is also linked with mortality rate or death rate. The study of mortality deals with the effect of death on the population. Thus, death as a component of population change constitutes mortality.
- 3) Fertility and fertility rate: Fertility is defined as the actual reproductive performance of an individual, a couple or a group. Fertility rate refers to the ratio of the total number of births in a given population during a given period to women in the reproductive span of life during that period is called fertility rate.
- 4) Value of child: Value of child in the present study deals with the social, psychological, and economical dimensions related with male and female children. For example social value dimension is related to values such as “having son leads to moksha, old age security etc. Similarly, there are various psychological and economical dimensions related with son and daughter child. These values are discussed in upcoming chapters of this research.
- 5) Migration: Migration is a form of geographical mobility or spatial mobility across specified boundaries (i.e. between one geographical unit and another) generally involving a change of the place of departure to the place of destination or the place of arrival to establishing a new permanent residence. It is of two kinds- international and internal migration.
- 6) Dowry: Dowry in this study refers to money, gifts, goods that wife brings to her husband in marriage. It is also viewed as a social problem in the present research.
- 7) Child foeticide or Foetal death: Death prior to the complete expulsion or extraction from the mother’s womb of a product of conception irrespective of the duration of the pregnancy is called foetal death. In present study, this term is related with the practice of illegal abortion with the help of sex determination tests.

- 8) Family planning: Family planning is defined as a conscious effort on the part of a couple in planning the size of the family and thus consists in the restriction of births; or limitation of births either temporarily to achieve the planned interval between successive births or permanently to prevent more births than planned by the usage of various contraceptive techniques.
- 9) Birth Order: Birth order is defined as the rank or numerical order of live birth to a mother.

7. An overview of the study area:

Geographical Location

For the present study, Mahesana district of Gujarat state has been selected. Geographically, Mahesana district is situated in the north of Gujarat state. It lies between the parallels of latitude 23°2' and 24°6' and the meridian of longitude 71°56' and 72°52'. It is bounded on the north by Banaskantha district, on the east by Sabarkantha district, and south east by Gandhinagar district, on the west by Patan district, on the south and south-west by Ahmadabad district. The area covered by this district is 4,371 Sq.Km and ranks 16th in comparison to the other districts of the state.

Brief history of the district: - The history of the present Mahesana district can be distinctly traced from the end of the seventh century onwards. Towards the end of the 7th century, Raja Bhuvad of Kalyan invaded Panchasar and destroyed this town, but the queen Roopsundari, survived to give birth to Vanraj in the woods. In the first half of the 8th century, Vanraj Chavada founded two mighty cities viz. Champaner and Anhilvad Patan. Anhilvad Patan was administratively important since the earliest time as it was the capital of Gujarat for over 600 years between 8th and 14th centuries and had attained prosperity during Chavada and Solanki period.

Mahesana district derives its name from the town of Mahesana, which is the head quarter of Taluka as well as the district. It is said that the town of Mahesana was founded by Mahesaji and Massaji, a ruler in the Chavada dynasty. The last in Chavada line was Savant Singh who abdicated his throne in favor of Murlaj Solanki, the founder of the Solanki dynasty. The kings of Solanki dynasty contributed largely to the political and cultural development of Gujarat.

Mahesana district is famous for its temples in Gujarat. Some of which are famous for their architectural beauty and sculptural wealth are Becharaji, Sun temple, Hatkeshwar temple etc. The history of the medieval period of Mahesana district may broadly be divided into four ruler periods: Turkish invasion, Sultans of Gujarat, the Mughal rule and the Maratha rule. During the period of freedom movement, district joined the prevailing trends in the nation. The Quit India Movement in 1942 saw the intensification in the activities by Prajamandal under the guidance of the congress in the British India. Kadi, Mahesana, Saij and Lodal became active centers of this political movement. Post independence era was characterized by merging of smaller states in the Indian Union. Separate district of Gandhinagar and later on Patan were carved out by merging talukas of earlier Mahesana district with adjoining talukas of other districts. Since formation of separate Gujarat state in 1960 Mahesana district had been part of the Gujarat state (Census, 2001, district census hand book).

Socioeconomic and Demographical Situation of the district: A Brief Look

Mahesana district is the 13th district in terms of population in the state. According to 2001 census total population of Mahesana district stands at 1,837,892. The SCs constitute a good proportion i.e. of 8.1% (1,48,597) in the total population whereas STs make up 0.5% (8,975) of the total district population. It has nine talukas and 593 inhabited villages, where as urban area is 3.6% of the district area. Mahesana district is the 10th dense district in the state. In terms of the sex ratio district stands at 16th rank in comparison to that of other districts. The sex ratio of the district is 927 females per 1000 males and child sex ratio is 801 per 1000 (2001 census). Literacy rate of the district constitute of 75.2% (1,188,224) in which

86.2% (698,626) are male and 63.6% (489,598) are female literates. In terms of religion maximum number of the people follows Hinduism followed by Islam.

The economy of the district is basically dependent on agriculture as 47.8% workers are engaged in primary sector. Important industries of the district are the cotton textiles, nonmetallic mineral products, basic chemicals and chemical products and food products industries. Important crops of the districts are wheat, cotton, pulses, and groundnut. The district is also famous for the production and export of Ayurvedic pharmacy products like Isabgul (Census, 2001, district census hand book).

8. Limitations of the study

It is not possible for any research to be comprehensive in all respects. Some of the limitations are always found in almost all research studies. Some of them are as follows:

- 1) The present research is concentrated mainly in the Mahesana district of Gujarat state in India.
- 2) Since the universe of the study is Mahesana district in India, the results based upon the local data collections will be useful only to explain the problem of declining sex ratio in that particular area rather than the country as a whole.
- 3) Being a descriptive study, time and cost was another major constraining factor.
- 4) The present research is based on the assumption that the statement or answers that are provided by the respondents are true and valid.