CHAPTER III RESEARCH METHODOLOGY

This study attempted to observe the social outrage of manual scavenging practice in Tirunelveli district of Tamil Nadu. This chapter describes the research design adopted in the study, field of study, sampling techniques, tool for data collection, operational definitions, analysis and interpretation plan and limitations of the study.

Research Design

This study employed descriptive research design to describe the socially stratified communities in the lowest ladder being forcibly engaged in manual scavenging practices. The study delineates about the manual scavengers engaged in various forms of scavenging practices and its related occupational and health hazards, and to analyse whether the manual scavengers are treated in respect and dignity as envisaged in the constitution of India; in the society.

Besides, the behaviour patterns of the manual scavengers, the status of their children and attitude of the society towards them are described. Eventually, the level of awareness on the entitled laws for protection and development of manual scavengers and the mechanism to eliminate the manual scavenging practices are described.

Field of Study

The field of study is Tirunelveli district of Tamilnadu in India. Figure 3.1 shows the location of the study area. Among the 8 southern districts of Tamil Nadu,
Tirunelveli has higher proportion of Arunthathiayar population, of whom a considerable proportion of them are engaged as manual scavengers. It is obvious that majority of the manual scavengers belong to Arunthathiayar community, and hence Tirunelveli district has been selected as field of study.

Tirunelveli District is located in southern part of Tamil Nadu state, India. The city of Tirunelveli is the district headquarters. A unique feature of this district is that it consists of all five geographical traditions of Tamil Literature; Kurinji (mountains), Mullai (forest), Marudham (paddy fields), Neithal (coastal) and Palai (desert). Tirunelveli District was formed on September 1, 1790 by the East India Company (British Government) which comprises present Tirunelveli and Tuticorin district and parts of Virudhunagar and Ramanathapuram district. It is the second largest district as on October 2008 after Villupuram district. The district is located in the southern part of Tamil Nadu and surrounded by Virudhunagar District in the North, Western Ghats in the West, Kanyakumari District in the south and Thoothukudi District in the East. The district covers an area of 6,823 kms. It lies between 8°.05’ and 9°.30’ of the Northern latitude and 77°.05’ and 78°.25’ of Eastern longitude. The district has diverse geographical and physical features. It has lofty mountains a stretch of Western Ghats and low plains. It has a perennial river Tamirabarani and various other small seasonal rivers. This district is blessed with beautiful waterfalls and cascades. Its diverse features include sandy soil and fertile alluvium, a variety of flora, fauna and protected wild life. To add its beauty it has inland and mountainous forests.

Tirunelveli has been an agricultural state right through the ages. The district is a major producer of Paddy (Rice), Coconut, Banana, Spices and forestry based products. Tirunelveli, being a coastal district, is also involved in fisheries.
development and production. For the period 2005 - 2006, the total inland fish catchment stood at 1,874 tonnes while the total marine fish catchment was 7,014 tonnes. The district is also rich in mineral wealth. It has a total 407 mining and quarrying units. Limestone, granite and garnet Sand are some of the minerals mined/produced here. The major industries in the district include textile, food products and forestry products. A Special Economic Zone (SEZ) was started at Nanguneri in 2001. A pharma park, Windmill spare parts units and a television manufacturing unit has been planned in this SEZ.

Tirunelveli district had a population of 3,077,233 in 2011. Of whom 1,520,912 are males and 1,556,321 are females. The density of the district is 460 persons per square kilometer. The average literacy rate of the district in 2011 was 82.50. The male and female literacy rate were 89.24 and 75.98 respectively.
Figure 3.1. Location of the Study Area


**Sampling Technique**

Since the exact size of universe engaged in manual scavenging is unknown in Tirunelveli district, the researcher employed snowball sampling technique. In Government records, the number of manual scavengers mustered is comparatively lesser than those actually engaged, since most of them are engaged in contract occupation without entry in the muster roll. Using snowball sampling, the manual scavengers in various occupations i.e more than 9 manual scavenging practices were identified from one respondent after another respondent. The total samples selected were 400.

**Tools for Data Collection**

Interview schedule was constructed based upon the objectives. The interview schedule was submitted to the observance of the social scientists for measuring the validity. The questions covered on socio-economic profile of the manual scavengers, various scavenging occupations the manual scavengers engaged, family details, working conditions, behavior pattern of the manual scavengers, the attitude of the society towards the manual scavengers, forced labour and menial practices and social discrimination in the living area awareness about the legislations, membership in associations and suggestions for eliminating the manual scavenging and improving the socio-economic conditions of the manual scavengers. The developed interview schedule in English was then translated into Tamil for collecting the primary data from the manual scavengers.
Pre-Test

The constructed interview schedule was pre-tested for reliability and validity. Content validity and face validity were administered to collect appropriate responses to measure the intended objectives and to avoid misinterpretation of the questions, respectively. Fifteen respondents were interviewed to check the data. Reliability analysis for items from part 2 to part 7 was wholly measured, and the cronbach’s alpha showed 0.741, which signifies the internal consistency of the data is good.

Sources of Data

The primary data for the study was collected from the manual scavengers living within the domain of the Tirunelveli district in Tamil Nadu. One to one interview was conducted using the interview schedule. Secondary source data concerning to the subject matters of the study were collected from journals, books, edited books, reports, documents and websites. The collected literature reviews were utilised for identifying the gaps in the studies and for developing the tool.

Operational Definition

Social Outrage: The societal act against the manual scavengers that violates the human values and dignity is termed as social outrage.

Manual Scavenging: It is an age-old routine practice that forcibly engages the persons belonging to scheduled castes to manually clean the human excreta from service/dry latrines or manually removing the hazardous substances that have no space for technological utilisation in sanitary practices.
Field Work

The researcher prior to the primary data collection visited certain packets in Tirunelveli district, and interacted with the key informants. The purpose of the study was explained to the key respondents. With the consensus of the respondents, the other respondents engaged as manual scavengers were identified. The various work spots of the manual scavenging workers were visited. Thus, with the consent of the respondents, the primary data were collected. They were given assurance that the data will be kept confidential and utilised only for research purpose. After fixing the date, time and venue, the interview was conducted. It took 45 minutes to one hour to collect data from each respondent. The data were checked then and there to find out any missing or omission of data. For questions with attributable scales, the respondents were explained about the responses on the choice of their level. The respondents were informed that their participation in the interview was voluntary and they were made easier to have a break, when they felt uneasy.

Analysis and Interpretation Data

The collected and collated data were codified, fed into computer and analysed. The Statistical Package for Social Sciences was used for data feeding and analysis. The analysed tables and statistical tests were presented with suitable interpretation. Chi-square test, t test and correlation were administered and presented in the analysis and interpretation chapter.
Limitations of the Study

- The research focused only Tirunelveli district.
- Initially, when the manual scavenging workers were approached they were reluctant to provide the required information.
- Some of the interviews went on for a longer period than expected. In such cases the respondents were tired.
- For some questions the respondents had doubts and their doubts were clarified in positive manner.

In spite of the above challenges, the primary data from the respondents were collected and used successfully for analysis.