CHAPTER III RESEARCH METHODOLOGY

3.1. Introduction

The present study investigated the impact of the Janani Suraksha Yojana (JSY) concerning the reduction of maternal mortality. The study analyses the relevance of the JSY in accomplishing the planned objectives, the effectiveness of the JSY in the actualization of the programme objectives, the impacts of the JSY on the mothers and the efficiency of the JSY to bring out significant changes. The study was conducted in 7 Community Development Blocks of Karimganj district in Assam State. This chapter describes the need and importance of the study, field of study, research objectives, research design adopted in the study, sampling techniques used, the tool used in data collection, operational definitions, analysis and interpretation of the data and limitations of the study.

3.2. Need and Importance of the Study

According to the Census 2011, the maternal mortality ratio of Assam was 328 which was the highest in the country compared to all India level which was 178. The Annual Health Survey Report 2010-2011 showed that the MMR in the districts (Karbi Anglong, North Cachar Hills, Chachar, Karimganj, Hailakandi) in the Hills and Barak valley was 342. In 2005, under the auspices of National Rural Health Mission, the Janani Suraksha Yojana (JSY) was introducted with the intention of reducing maternal mortality rate (MMR), infant mortality rate (IMR) and improving the health delivery mechanism and thereby ensuring the health status of the population.

Karimganj District is one of the most backward districts in Assam in the spheres of education, health care, road communication, socio-economic condition, etc. The sex ratio of the Karimganj district was 963 according to the Census 2011. The sex ratio of the child population in the age group of 0 – 6 years was 969. To what level the JSY have improved the health status of the pregnant mothers and promoted institutional and safe deliveries is the primary quest of this study. On this context, this study analyses the impact of the JSY on pregnant women in the Karimganj district. This research is significant because it will disclose the level of JSY programme being implemented in the district of Karimganj and determines the health status of the women who underwent pregnancy and safely delivered children.

3.3. Field of Study

The field of study is Karimganj district in Assam. Figure 3.1 displays the location of the Karimganj district.

Karimganj district is the southernmost district of Assam located in the valley of Barak. The topography of the district includes floodplains, wetlands, hills and forests. It is surrounded by Bangladesh and Cachar district of Assam in the north, Mizoram in the south, Bangladesh and Tripura in the west and Hailakandi district of Assam in the east. (Ministry of Minority Affairs, 2006)

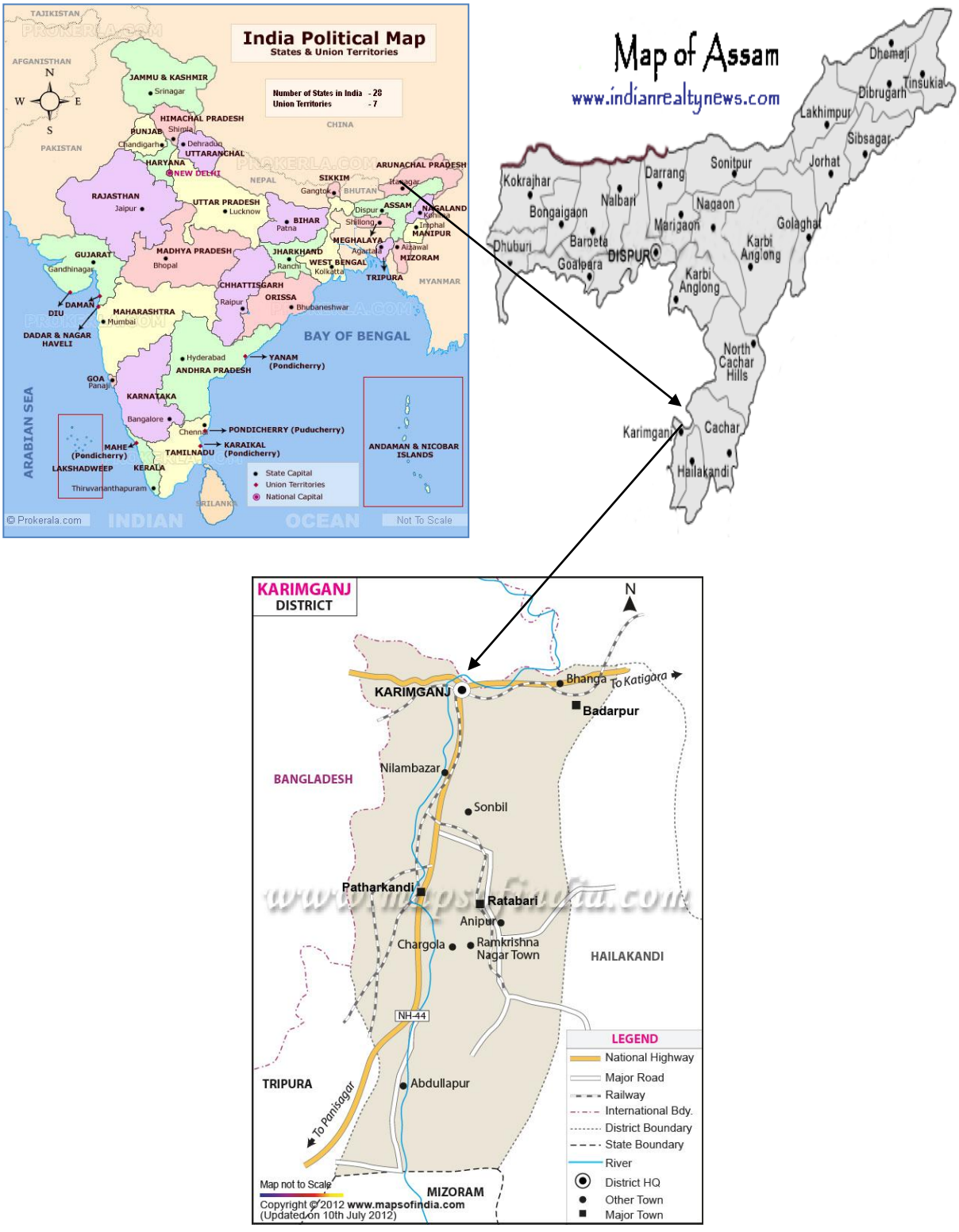
Karimganj district is 338 km away from Guwahati, the capital of Assam. The district has a land area of 1,809 square kilometres. Geographically, it is located in the north latitude between $24^{o}15'$ and $25^{o}55'$ and in the east latitude between $92^{o}15'$ and $92^{o}35'$. (District Collectorate Karimganj, 2016)

The major rivers such as Kushiara, Longai, Singla and Barak flow into the district. Karimganj City is the headquarters of the district. It has one sub-division. There are 5 Tehsils viz., Karimganj, Badarpur, Nilambazar, Patharkandi and Ramkrishna Nagar. There are two urban areas (Karimganj and Badarpur), 3 towns (Karimganj, Badarpur and Badarpur Railway town), 7 community development blocks (Badarpur, Dullav Cherra, Lowairpoa, North Karimganj, Patherkand, Ramkrishna Nagar and South Karimganj) and 96 gram panchayats. Totally, there are 1130 villages. (District Collectorate Karimganj, 2016)

According to official Census 2011, Karimganj district has a total population of 1,228,686, of whom 625,864 are males and 602,822 are females. The density of the district is 679 persons per square kilometre. The average literacy rate of the district in 2011 was 78.22 compared to 66.24 of 2001. The male literacy rate is 84.12% and the female literacy rate is 72.09%. Concerning to Sex Ratio in Karimganj district, it stands at 963 females per 1000 males. The child sex ratio is 969 girls per 1000 boys. (Census 2011, 2015)

Karimganj district has 217 Sub-Centres of Primary Health Centres, 27 Primary Health Centres, 6 Community Health Centres and 1 District Headquarters Hospital. As per the records of the Joint Director of Health Services of Karimganj, the total number of Auxilliary Nurse Midwives (ANM) is 347 and the number of Accredited Social Health Activists (ASHA) is 1195.

Figure -3.1. Map Location (India, Assam State, Karimganj District)



3.4. Research Questions

The overall aim of this research is to observe the impact of Janani Suraksha Yojana on the health development of the pregnant women in the district of Karimganj, in order to assess whether the effects have been beneficial, detrimental or neutral. In order to achieve the overall aim, the following objectives are pursued:

1. To Study the socio-economic conditions of Janani Suraksha Yojana beneficiaries in Karimganj district.
2. To study the awareness of beneficiaries towards JSY.
3. To assess the causes of Maternal Mortality in Karimganj district.
4. To evaluate the current status of Maternal Mortality in Karimganj district.
5. To study the role of JSY in reducing Maternal Mortality .
6. To find out the scope for social work intervention in reducing Maternal Mortality .

3.5. Research Questions:

1. What are the socio economic conditions of JSY beneficiaries in Karimganj district ?

2. What is the level of awareness among beneficiaries towards Janani Suraksha Yojana (JSY)?

3. What are the causes of Maternal Mortality in Karimganj district?

4. What are the roles of JSY in reducing Maternal Mortality ?

5. What will be the scope for Social Work intervention in reducing Maternal Mortality ?

3.6. Hypothesis

- There are no significant mean differences between the extent of ANC and PNC coverage and socioeconomic variables.

- There are no significant mean differences between the extent of ANC and PNC coverage and health related variables.

- There are no significant mean differences between the level of knowledge about the objectives of JSY and socioeconomic variables.

- There are no significant mean difference between the level of knowledge about the objectives of JSY and health related variables.

- There are no significant mean differences between the level of awareness about the health and JSY and socioeconomic variables.

- There are no significant mean differences between the level of awareness about the health and JSY and health related variables.

- There are no significant mean differences between the classification of the performance of JSY and socioeconomic variables.

- There are no significant correlations among the extent of ANC and PNC coverage, the level of awareness among the respondents about health and JSY, between the level of knowledge of the objectives of JSY and the classification of the performance of JSY.

3.7. Research Design

This study employed descriptive research design to garner empirical information on the impacts of the Janani Suraksha Yojana programme on the pregnant women. This study ascribes the socio-economic conditions of the pregnant women, the health and educational facilities available in the village, knowledge of the JSY beneficiaries about pregnancy, micro-birth plan and JSY, the view point of the JSY beneficiaries about early marriage, family responsibility and family planning, the level of antenatal and postnatal care received by the JSY beneficiaries and the level of awareness about the health and JSY programmes. The views of the women respondents are described in detail.

3.8. Sampling Techniques

Karimganj is one of the highest maternal mortality districts in India. The researcher obtained data from the Joint Director of Health Services of Karimganj about the number of pregnant women registered under JSY and Mother and Child Tracking System (MCTS). In the month of June 2016, as per the available health record, the number of pregnant mothers who had ANC check-up in Karimganj district was 12458 (one year record). This datum has been considered as the universe of this study.

As the universe of this study was 12458 mothers, it was decided to select 373 samples from the study population based on the computation of the margin of the error (fixed at 5%), the confidence level (95%), the population size (12458) and the

response distribution (50%). **Stratified Proportionate Simple Random Sampling** was employed in the selection of the samples**.** The number of JYC beneficiaries who received at least 1 ANC checkup in each block was considered as 'strata' and proportionately the samples were selected from each Block of 7 Blocks of the district. Thus, the total number of samples collected were 373 from 36 villages. However, the representation of the samples was emphasized on the Blocks. Sampling selection is described in table 3.1.

Table -3.1. Number of Samples Selected from each Block

S.No.	Block	Number of Women registered under ANC	Number of Samples selected
1	Badarpur (5 villages)	1611	48
2	Dullav Cherra (5 villages)	1799	54
3	Lowairpoa (4 villages)	1179	35
4	North Karimganj (4 villages)	1537	46
5	Patherkandi (5 villages)	1789	54
6	Ramkrishna Nagar (5 villages)	1804	54
7	South Karimganj (8 villages)	2739	82
	Total	**12458**	**373**

3.9. Tools for Data Collection

Interview schedule was constructed based upon the objectives and hypothesis to collect field level data. The mothers who were beneficiaries of JSY programme are the primary respondents of this study.

Interview schedule with 7 parts was administered for primary data collection. Part I derives data on socio-economic background of the women respondents, Part II on health and educational facilities available in the village, Part III on knowledge about pregnancy, micro-birth plan and JSY, Part IV on perspectives about early marriage, family responsibility and family planning, Part V on antenatal and postnatal coverage, Part VI on level of awareness about health and JSY and Part VII on performance of ASHA and JSY programme.

Initially, the interview schedule was developed in English and then it was translated into Bengali to collect the primary data from the selected JSY beneficiaries.

3.10. 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. Forty respondents were interviewed to check the responses. Reliability analysis for items from part II to part VII (89 question items) was wholly measured,

and the Cronbach's alpha showed 0.78, which means the internal consistency of the data is good.

3.11. Sources of Data

The primary data for the study was collected from the selected JSY beneficiaries in 7 Blocks of Karimganj District. One to one interview was conducted using the interview schedule. Secondary source data concerning 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.

3.12. Operational Definition

Maternal Mortality Rate (MMR): MMR is the incidences of female deaths in an area while pregnancy or within 42 days of pregnancy termination owing to pregnancy-related complications.

Janani Suraksha Yojana (JSY): JSY is a social and health welfare scheme sponsored by the National Rural Health Mission to reduce maternal mortality and infant mortality rates. It is aimed at strengthening the health delivery mechanism for improving the health status of the population.

3.13. Fieldwork

The researcher prior to the primary data collection visited 5 Block Primary Health Centres. They arranged the Accredited Social Health Activists (ASHA) to facilitate the researcher to identify the JSY beneficiaries for data collection. With their supports, the women respondents were selected and interacted. The respondents were given assurance that the data will be kept confidential. Some of the respondents were contacted through phones and confirmed their dates to conduct the interview. After fixing the date, time and venue, the interview was conducted. The researcher used local language i.e., Bengali for collecting the primary data. It took averagely one to one and half hours 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 if they feel uneasy. Professional rapport was maintained in the interview sessions. The actual data collection was done from June 2016 to December 2016.

3.14. Analysis and interpretation of data

The collected and collated data were codified, fed into the 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. Frequency distribution, chi-square, correlations, ANOVA, T-test were administered and presented.

3.15. Limitations of the Study

- Standardised tool was not employed in this study.
- Some of the interviews went for a long period than expected. In such cases the respondents were tired.
- For certain questions, some women felt reluctant to answer, they were made comfort to respond.

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