CHAPTER III

METHODOLOGY

3.1 Introduction

Rashtriya Madhyamik Shiksha Abhiyan is the scheme of the Government of India started in 2009-10 with the objective to fulfil the need of Secondary Education in the country. In the same time the scheme was also started in the Sikkim and helping to fulfil the some of the needs in the secondary education of the state. After implementation of any schemes in the country or the state apposite investigation is needed to check whether the scheme is properly helping to the needy or not. For the reason of understanding the implementation of RMSA Scheme in the state of Sikkim the investigator studied the Rashtriya Madhyamik Shiksha Abhiyan of Samagraha Siksha Abhiyan in the State of Sikkim. The investigator explained all the steps that are involved in the study.

3.2 Scope of the study

The scope of the investigation was to evaluate the implementation of Rashtriya Madhymaik Siksha Abhiyan (RMSA) of Samagraha Siksha Abhiyan in the State of Sikkim. Till now no evaluative study on RMSA was conducted in Sikkim. The study conducted various components of RMSA as Access, Equity, Quality Intervention and Funding. The findings are designed to inform policymakers about the success and areas of improvement for the scheme. The findings will guide the future policy discussions. The study provide the insight to officials of Department of Education Government of Sikkim into the best practices on ground level challenges while implementing RMSA. Teachers will gain a understanding of their roles within the broad framework of RMSA in improvement of secondary education. The study will inform the people of Sikkim with regard to status of secondary education.

3.3 Research Method

Research Method is the systematic and scientific ways of showing the path for the researchers to conduct any research. It gives clear ideas of finding the solutions of a problems to the researchers and goes in-depth of the problems. Research design is the complete plane, structure, and strategy of a research study (Ramamurthy, 2015, p. 50). To bring constructive change in education system for the quality education we need a systematic approach to be fulfilled. This systematic approach is needed the systematic policies and schemes from the government. These policies and schemes cannot be carried out without conducting a planned research study. Because Research design forms the basis of every research study, as it provides vital information, such as topic of research, type and sources of data, and techniques of data collection, to the researcher (Ramamurthy, 2015, p. 50). Through the proper research study the reformation in systematic and quality education be fulfilled.

In every research appropriate research method has to be used according to the nature and objectives of the study. Hence, it was decided to use Evaluative Research Method by the researcher which was relevant and justified in view of objectives of the study.

3.4 Evaluative Research Method

Evaluation research involves a systematic assessment of the value or significance of the time, finances, energy, and resources to achieve objectives within programs, initiatives, and the advancement of educational institutions, private enterprises, and administrative activities. In educational contexts, evaluation occurs through methods such as school surveys, aimed at gathering comprehensive information to appraise the effectiveness of instructional facilities, curriculum, teaching and supervisory staff, and financial allocations based on educational standards and best practices (Best & Khan, 2006). Best

and Khan further emphasize that this approach has been employed to scrutinize school systems, assessing their status and adequacy.

Collecting relevant data for a comprehensive evaluation can involve quantitative, qualitative, or a combination of methods (Higgins, 2013).

The rationale for using evaluative research method in the study was to analyse and evaluate the programme in an in-depth way. Collecting relevant data for a comprehensive evaluation can involve quantitative, qualitative, or a combination of methods (Cohen, 2007). The investigator has used this design comprehensively to evaluate RMSA's effectiveness, efficiency, and impact in schools. This approach moves beyond exploration, offering evidence-based insights that guide decisions and improve outcomes. The evaluative research method used to provide rigorous insights for informed decisions, improved education, and efficient resource use within the Rashtriya Madhyamik Shiksha Abhiyan and to find the way forward for the effectiveness of the programme.

3.5 Population

In research study population is very important part to carry out any type of survey or interview to collect qualitative or quantitative data for the study. Population in research means any group of individuals, things or organism from the same group which has homogeneity in nature. A population is defined as a group of individuals with at least one common characteristic which distinguishes that group from other individuals (Best & Kahn, 2014, p. 13).

The population for the present study comprises of the head teachers, teachers teaching in secondary schools of Sikkim and students of those schools.

Table No. 3.1. Total number of population from secondary school of Sikkim

District	Block	Schools	Heads	Teachers	Students
East	10	38	38		Boys= 11748
West	9	36	36	•••	
North	4	11	11	2300	
South	8	36	36		Girls= 10556
Total No.	31	121	121	2300	22304

Source: UDISE Report (2018-19), HRDD Report (2017-18)

3.6 Sampling

Sampling is the process of selecting sufficient subset of the whole population which is needed for the purpose of the research study. "Sampling method is the process or method of drawing a definite number of individuals, cases or observation from a particular universe, selecting part of a total group for investigation" (Ramamurthy, 2015, p. 84).

There are various types of sampling designs through which researcher can proceed for the selection of sample. In this study, after the carefully going through various research evidence and theories researcher has used multistage sampling technique through which the population and nature of the study justified. Multistage sampling technique is used to collect the data when the sample is scattered in the large geographical area or group of people in state and national survey (Koul, 2014).

3.7 Sample

In order to achieve the objectives of the study, the multistage sampling technique was employed for the study study.

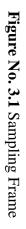
There are 121 government secondary schools in four (East, West, North and South) districts of Sikkim state till 2017 and total 31 blocks are there in these four districts. From the four (East, West, North and South) districts of Sikkim 30 percent blocks were selected from each district randomly. Further, the investigator selected 3 schools from the selected blocks by employing simple random sampling technique. The final sample comprised all the heads of the schools i.e. 30 heads from the earlier selected 30 schools, 120 teachers (4 teachers from each school) from the earlier selected 30 schools by employing the simple random sampling technique. Focus group discussion were done with the students of selected schools with 8 students from each schools. The detail of sample is given below:

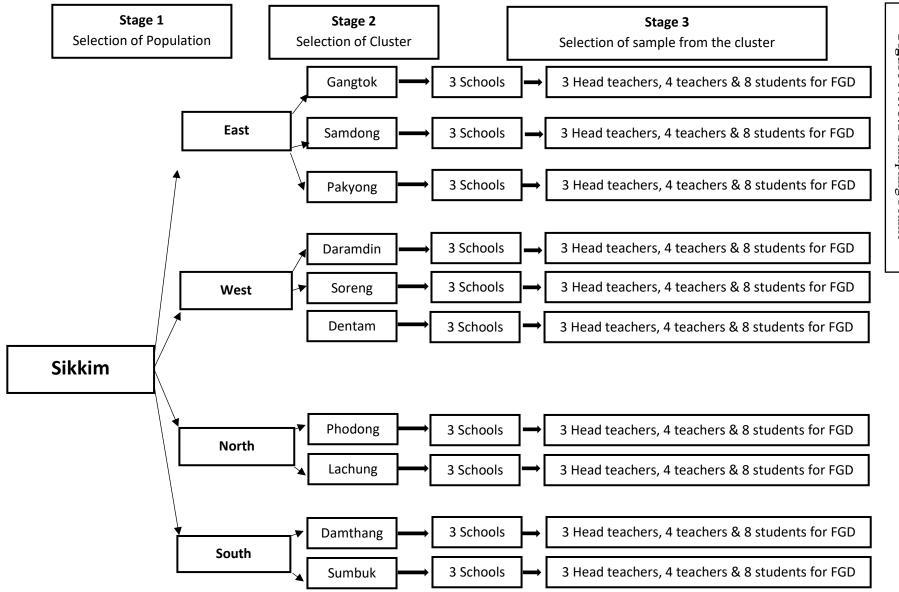
Table No. 3.2. Distribution of the sample for the study

S.	Name of	Total	Number	No. of	Head		Students for
No.	District	Number	of Blocks	Schools	Teachers	Teachers	focus group
		of Blocks					discussion
1	East	10	3	9	9	36	30 groups 8
2	West	9	3	9	9	36	students
3	North	4	2	6	6	24	from each
4	South	8	2	6	6	24	school
	4	31	10	30	30	120	240

In order to achieve the objective of the qualitative study the following sample were used for the collection of qualitative data:

The investigator drawn the sample of all together 30 heads teachers were taken as a sample to fulfil the objective of the study, 120 teachers were taken as a sample. The investigator also drawn the sample of 8 students from each selected schools for Focus Group Discussion (FGD).





3.8 Sources of Data

There are two types of data that are used by the researcher to collect relevant information for the study, i.e. Primary data and Secondary data. Primary data pertains to information gathered by the researcher for a specific study, acquired directly from respondents. Secondary data manifests in diverse forms, encompassing information derived from systematic reviews, documentary analysis, and findings from extensive surveys like the National Census or the Programme for International Student Assessment (Smith, 2013). In this study the researcher has used both the primary and secondary data to fulfil the need and significance of the study. The primary data was collected with the help of interview schedule and questionnaire from the head teachers, teachers and students. The secondary data was collected from the sources like UDISE report, Annual report from Education Department, Government of Sikkim, from the Ministry of Human Resource Development Department, and the RMSA portal of Government of India

3.9 Tools Used

Tools in the research means the medium of collecting relevant data and information from the various sources for the study. The researcher used the Interview Schedule, Questionnaire and Focus Group Discussion for the collection of the relevant data.

3.9.1 Interview Schedule

An interview schedule is a list containing a set of structured questions that have been prepared, to serve as a guide for interviewers, researchers and investigators in collecting information or data about a specific topic or issue (Luenendonk, 2019). In the process of qualitative interviewing, researchers pose broad, open-ended queries to one or more participants and document their responses. Subsequently, the collected data is transcribed and entered into a computer file for further analysis (Creswell, 2019).

Bailey (1994) said that interviews represent a distinctive form of social engagement involving two individuals, and therefore, they are governed by similar regulations and limitations observed in other forms of social interaction. In this research interview was carried out to the head teachers and teachers to collect the qualitative data for the requirement of the objective by using semi-structured interview. Semi structured interview has open-ended questions and probe or follow-up question is needed. To get answer accurately and fully from the respondent is the main function of probe (Bailey, 1994).

Rationale for using Interview Schedule

An interview schedule offers various benefits. Firstly, it simplifies the process of conducting interviews by utilizing pre-prepared questions, thereby enhancing efficiency. Secondly, it contributes to the accuracy of gathered data by prompting well-thought-out questions that result in more focused responses. Thirdly, it enables a deeper exploration of topics through the inclusion of follow-up questions, which yield more relevant and comprehensive information. Fourthly, by ensuring efficient questioning within defined time constraints, it encourages a higher response rate from participants. Lastly, an interview schedule provides flexibility as it can be tailored to suit different interview scenarios, making it a versatile tool (Creswell, 2019).

3.9.2 Questionnaire

A questionnaire is a device consisting of a series of questions dealing with some psychological, social, educational topic (Koul, 2014). A questionnaire is used when factual information is needed for the study (Best & Khan, 2014). In most cases, a questionnaire is distributed via mail or in person to the participant, who independently completes it without assistance from an interviewer. In this research, the investigator utilized a questionnaire to gather quantitative data from head teachers and teachers,

specifically relevant to the study's objectives (Bailey, 1994). In this research the investigator has used both the open ended and closed ended questionnaire to collect the data. Closed ended questionnaire was used for the head teachers to collect quantitative data and open ended questionnaire was used for the teachers to study the views of teachers on the implementation of RMSA in the school.

3.9.3 Focus Group Discussion

In educational research, focus groups serve various functions, such as collaboratively developing new knowledge, assessing viewpoints, appraising services, creating theories, deriving insights from experiences, comprehending everyday language use, deciphering cultures, reforming perspectives, initiating political action, and empowering marginalized groups (Cousin, 2009; Halcomb et al., 2007; Hopkins, 2007, as cited in Gibbs, 2013). The focus group method is commonly classified as qualitative rather than quantitative, typically producing results unsuitable for statistical analysis. Instead, these outcomes are subjectively interpreted. The data primarily comprise a transcript of the discussion, resembling field notes taken during observational field studies (Bailey, 1994). In this research, focus group discussion was carried out with the students of government secondary school students of Sikkim comprising both male and female students where 8 students were participated in each group. The main purpose of focus group discussion for the students was to know the facilities provided to the students under RMSA scheme by the state government in the schools.

3.10 Data Collection Procedure

In research tools is used for the collection of data to support the problems of the research and to get into the appropriate findings. Researcher mainly used two types of data which is known as Primary data and Secondary data.

The investigator personally visited all 30 secondary schools of Sikkim state. These 30 schools were situated under four districts namely East, West, North and South. During data collection the investigator approached with all the Heads and teachers of the schools and asked for their co-operation after explaining the purpose of the study. Data was also collected from the students with Focus Group Discussion (FGD).

3.11 Data Analysis

In the study the percentage was used by the researcher which is best to justify the objective of the study. Researcher has used the percentage to analyse the quantitative data and interpret the contribution of RMSA in the secondary schools of Sikkim with regard to the Access, Quality and Equity. The researcher has also used transcription of the qualitative data collected from interview schedule to supplement the quantitative data to enrich the information. Focus Group Discussion was analysed and interpreted based on the component of RMSA.

3.12 Ethical Consideration

In the course of this research endeavour, several crucial ethical considerations have been addressed by the researcher to safeguard the well-being and privacy of the participants. This encompassed a comprehensive assurance of anonymity, confidentiality, and the proactive prevention of any potential harm or deceitful practices.

Respecting the participants' autonomy and informed consent, a pivotal view of this research rested in ensuring that they were fully equipped to make well-considered decisions about their voluntary involvement. This was contingent upon their comprehensive comprehension of the research's objectives and its broader purpose within the academic area.

To foster transparency, participants were provided with clear explanations explaining the importance of their engagement, the associated advantages stemming from their participation, and the potential implications of the findings. In a bid to facilitate constructive reforms geared towards enhancing the quality of education, a robust and dependable database was methodically established.